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Infrastructure and Capital Investment Committee

Inquiry into freight transport in Scotland



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Infrastructure and Capital Investment Committee

To consider and report on infrastructure, capital investment, transport, Scottish Water and other matters falling within the responsibility of the Cabinet Secretary for Infrastructure, Investment and Cities, and matters relating to housing and digital infrastructure.



www.scottish.parliament.uk/infrastructure



ici.committee@scottish.parliament.uk



0131 348 5229



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Jim Eadie
Scottish National Party



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Adam Ingram
Scottish National Party



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Scottish National Party



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Mike MacKenzie
Scottish National Party



David Stewart
Scottish Labour

Introduction

1. Issues relating to freight transport have emerged in a number of areas of the Infrastructure and Capital Investment Committee's work over the past few years. The Committee therefore launched its inquiry into freight transport in November 2014 with the aim of identifying and understanding some of the challenges facing the freight transport industry in Scotland. This would examine both domestic and international links as well as the interconnectivity of rail, road air and sea freight services and to identify key areas for development, improvement and change.

Acknowledgements

2. The Committee wishes to thank all of the many individuals and organisations who gave their time and expertise to provide written and oral evidence to this inquiry. The Committee has found this evidence to be of huge value to its work and has helped shape the recommendations in this report. The Committee would also like to place on record its thanks to Dr Jason Monios, for the invaluable support he provided in his role as adviser to this inquiry. Dr Monios is Senior Research Fellow at the Transport Research Institute, Edinburgh Napier University.

Visits

3. To gain a better understanding of the freight transport sector in Scotland and its links to the rest of the UK and Europe, the Committee conducted a number of visits. These are listed in more detail below and are also referenced throughout the report.
4. The Committee would like to record its thanks to all the organisations who opened their doors to the Committee during this inquiry. The access to the sites and explanation of freight operations during the visits were of great benefit to the Committee's work.

Port of Grangemouth

5. At the beginning of its inquiry, the Committee held a joint visit with the Economy, Energy and Tourism (EET) Committee to the Port of Grangemouth, which is owned and operated by Forth Ports. As Scotland's biggest port, in 2013 it handled 261,000 TEU (twenty-foot equivalent units – the main measure of container traffic). The next largest container port in Scotland is Greenock with 76,000 TEU.
6. The Committee was keen to see at first hand the Port of Grangemouth's size and scale as well as hear more about the challenges it faced and the opportunities it might wish to exploit. The EET Committee was interested in its operations as part of its inquiry into internationalising Scottish business.

The Malcolm Group, Grangemouth

7. Immediately following the visit to the Port of Grangemouth, members of both committees visited the Malcolm Group's nearby facilities at the Grangemouth Rail Terminal. The committees were able to get a good understanding of the Malcolm Group's work in transporting freight via both road and rail, how it was continuing to develop the interrelation between two modes as well as its links to ports.

Freightliner Coatbridge

8. The Freightliner operated terminal at Coatbridge is Scotland's primary rail terminal, especially for port flows. It has daily services to and from the UK's main deepsea container ports at Felixstowe, Southampton, Liverpool and Tilbury. Scotland's container trade needing access to deepsea ports has the option of using either a feeder vessel via Grangemouth or rail via Coatbridge. The Committee was able to get a good understanding of how the terminal operates, who it serves and what its infrastructure needs might be in the future. This included an identified need to upgrade cranes which dated from the 1960s and a reconfiguration of the layout of the facility to increase capacity.



- Members of the Infrastructure and Capital Investment Committee, Jim Eadie MSP, Mike MacKenzie MSP and James Dornan MSP visit Freightliner Rail freight terminal in Coatbridge alongside Kate Wells, Commercial Freight Manager Scotland.

Port of Cairnryan

9. The Port of Cairnryan, owned by the P&O Ferries group, is the shortest commercial ferry crossing between Great Britain and Northern Ireland (Larne). It sits alongside a Stena Line ferry terminal which links Cairnryan to Belfast Harbour. Both terminals offer eight return sailings a day. As well as learning more about the

Port's operations, the Committee was able to see the new £15m linkspan which had recently been completed. The Committee also saw at first hand some of the difficulties which the single carriageway A75 and A77 trunk roads, which are the main routes between the two ports and Central Scotland and the North of England, present for freight traffic.

Aberdeen Harbour

10. As a trust port, Aberdeen Harbour is operated by a board on a not-for-profit basis. It specialises in handling supply vessels for the offshore industry, in addition to regular commercial traffic for the northeast of Scotland, and freight and passenger traffic for Orkney and Shetland. As well as learning about the work of the Harbour, the Committee was able to visit the proposed £410 development at Nigg Bay, which is one of 14 developments of strategic significance to Scotland's future in the Scottish Government's Third National Planning Framework (NPF3).

Daventry International Rail Freight Terminal

11. The Daventry International Rail Freight Terminal (DIRFT), near Rugby, is the UK's busiest intermodal terminal, handling around 200,000 containers per year. Inbound trains come from deepsea ports, containers are emptied and goods stored in large distribution centres housing many of the largest retailers and distributors, some, such as Tesco, with their own rail connections. Containers are then sent around the UK, mostly by road, but in recent years logistics operators like WH Malcolm and JG Russell, in partnership with DRS, have been successful in establishing rail services taking a proportion of these flows by rail to Scotland.
12. The Committee was keen to visit DIRFT to see at first hand the size and scale of the terminal compared to those seen in Scotland. The Committee also learnt more about its third phase expansion, approved in 2014, which will add an additional 8m sq. ft. of distribution space and achieve total rail capacity of 500,000 containers per annum. The Committee is again thankful to the Malcolm Group for explaining the work and role of the terminal, including some of the difficulties surrounding securing further investment in rail cargo.

Sweden – Falköping and the Port of Gothenburg

13. The Skaraborg Logistic Center in Falköping, Sweden, is an intermodal terminal providing direct rail links with the Port of Gothenburg. Much of its work relates to the transport of timber, as a major Swedish timber firm Stora Enso has opened a purpose-built terminal to bring in timber by rail from western Sweden for onward distribution to its paper mills in the middle of the country.
14. Given Scotland's timber operations, the Committee wanted to learn what innovative approaches to transport are used elsewhere in Europe. The container terminal at Falköping was developed by the local municipality who then ran a tender to appoint a private operator by concession. The municipality has worked closely with local shippers over many years to build up business for the terminal.

The encouragement of all of this economic activity, such as the location of new businesses, allows the municipality to benefit financially as its population increases. Overall EU funding around £700,000 was obtained over the life of the project.

15. The Port of Gothenburg is the largest port in Scandinavia, with over 11,000 vessels calling each year. In 2014 the Port handled 836,631 TEU containers and 548,801 RoRo (roll-on/roll-off) units. The publicly owned Gothenburg Port Authority owns the land and the infrastructure but allows international port operators to deal with the handling of freight.
16. Again, the Committee wanted to see how the Port linked with other transport modes, particularly rail. The Port has extensive rail links within Sweden and it has daily direct rail shuttles to around 25 inland destinations, including Falköping.

Netherlands – Binnenstadservice in Nijmegen and the Port of Rotterdam

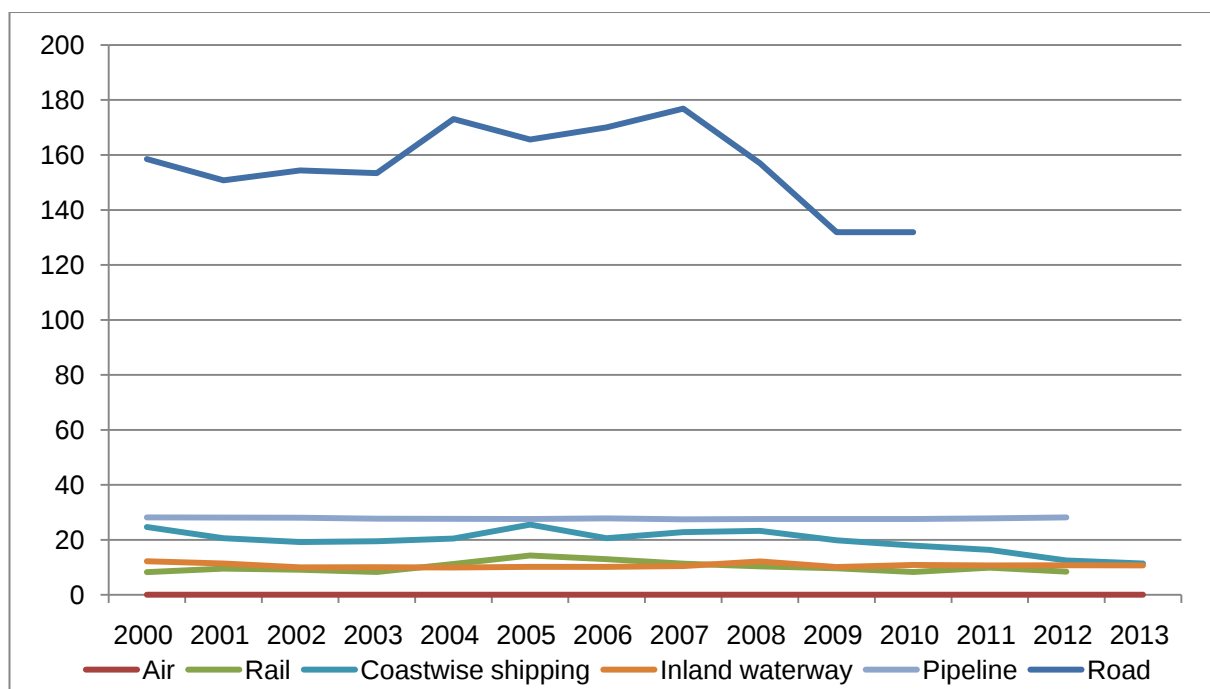
17. The Binnenstadservice has been running for five years on the outskirts of 10 cities in the Netherlands and consists of urban consolidation centres (logistics depot and distribution service) distributing to retailers and other organisations located in the cities. Goods destined for these retailers are delivered to this consolidation centre by freight operators and are bundled and delivered to shops in the city centre. Packaging can then be returned to the consolidation centre.
18. The Committee was keen to learn more about the Binnenstadservice's operations, particularly as the scheme has successfully reduced the number of freight movements within the cities which in turn have seen improvements in air quality, safety and accessibility.
19. The Committee also visited the Port of Rotterdam, which is the busiest container port in Europe and one of the biggest in the world. This helped the Committee to better understand the scale of its operations and its feeder links to Scottish ports.

Freight transport in Scotland

Introduction

20. The movement of freight is essential to the Scottish economy. The free flow of freight within Scotland, between Scotland and the rest of the UK and between Scotland and the rest of the world is of critical importance to the Scottish Government's target of sustainable economic growth. At the same time, the transition to a low carbon economy remains a key priority of the Scottish Government. Therefore, increasing the efficiency and cost effectiveness of freight transport and providing the infrastructure for unobstructed movement of goods are both cornerstones of this inquiry into freight transport in Scotland.

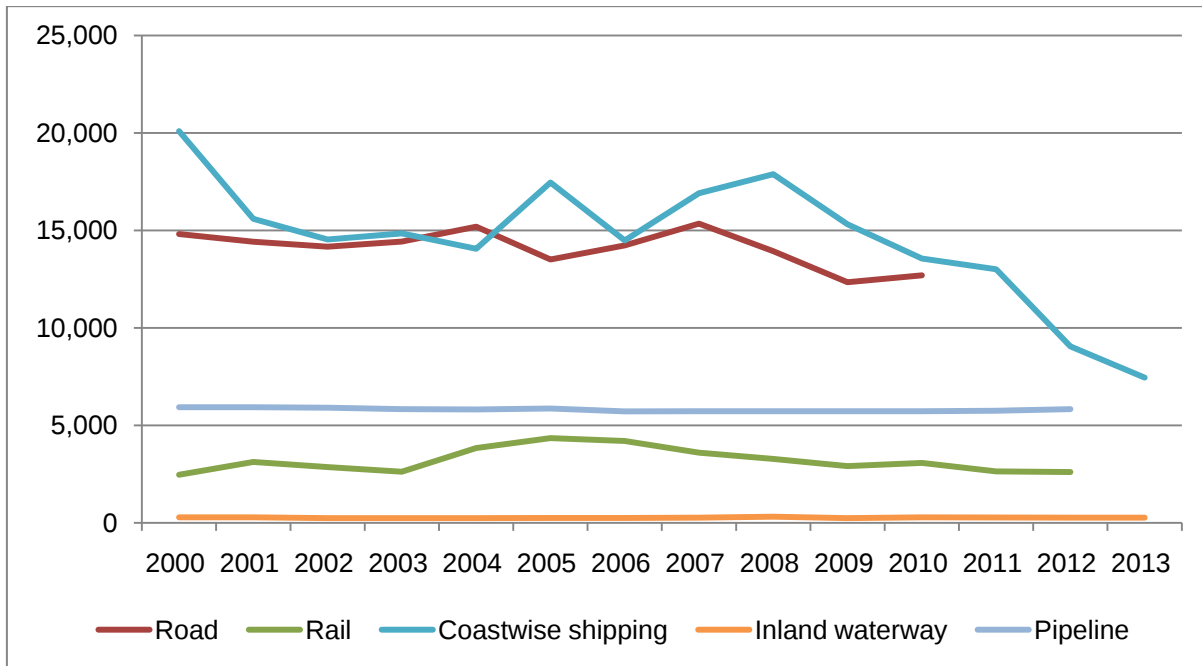
Figure 1: freight lifted in Scotland 2000-2013 (million tonnes) (Note: road freight statistics are currently only available until 2010)



Source: Scottish Transport Statistics

21. Road freight clearly dominates in terms of freight lifted, although an element of double counting is present as some of this freight will be moving to and from a port or rail terminal where it will also be included in statistics for those modes.

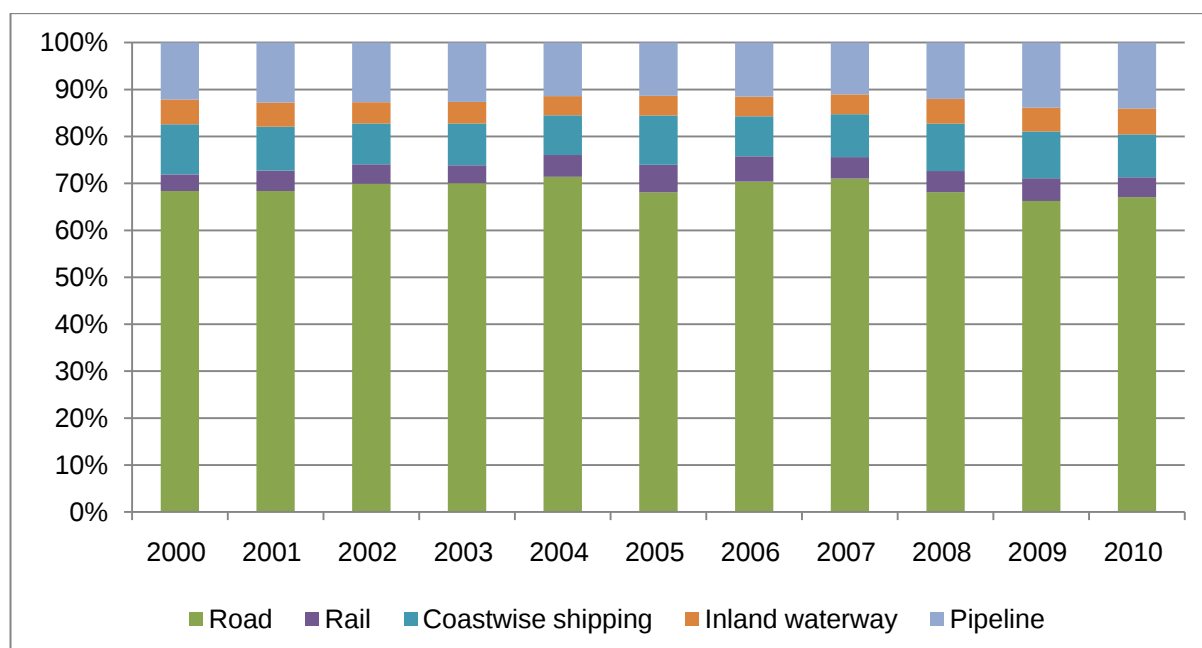
Figure 2: freight tonnes (by kilometres) within Scotland



Source: Transport Scotland

22. Figure 2 reveals the sharp decline of coastwise shipping, resulting mostly from a reduction in liquid bulk movements from the oil sector. Due to a lack of updated data on road freight since 2010, total freight statistics can only be given up to that year, in which a total of 196.8 million tonnes of freight were lifted in Scotland and 35.3 billion tonne kms (kilometres) were recorded.
23. For the same reasons, modal split can only be given up to 2010 (see Figure 1). The figure demonstrates a relatively stable modal split over the last decade.

Figure 3: Modal split of freight transport in Scotland (based on share of tonnes lifted)

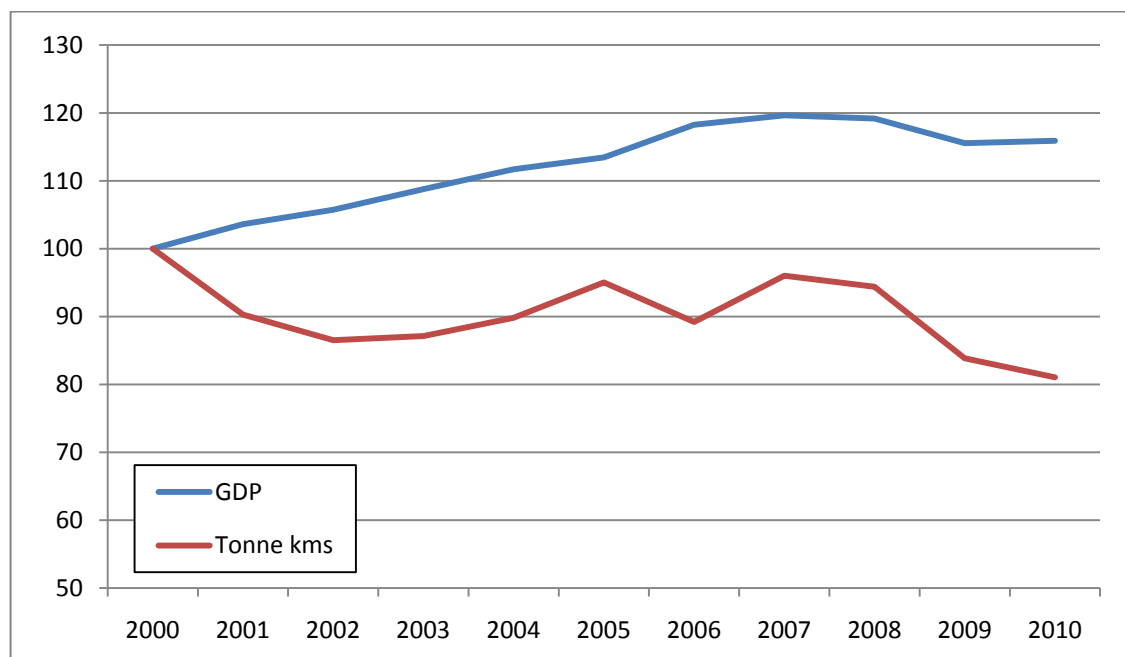


Source: Transport Scotland

24. Freight is transported by all modes: road, rail, water, air and pipeline. Each mode has its own strengths, and it is the aim of this inquiry to help maximise the ability of each mode to play to those strengths, resulting in a balanced usage of the appropriate mode for the appropriate journey. Figure 1 shows that the modal split of freight transport in Scotland has not changed appreciably in recent years, suggesting an in-built structure in the industry.
25. The structure of UK distribution is based on a strong tendency of centralisation in large distribution centres in the Midlands. Imports from around the world are moved through deepsea ports Felixstowe (primarily serving Asia), Southampton (primarily serving Asia and the Americas) and Liverpool (focusing mostly on the Americas). Containerised trade with Europe is concentrated on the east coast at ports such as Tilbury and Teesport whilst trucks use ferry services at a number of ports on the east coast, from Harwich to the Humber to Tees and Tyne and the sole continental ferry service with Scotland calling at Rosyth.
26. Much of this traffic is consolidated in the Midlands and then various UK destinations served from there, as it is cheaper for a large company to do this than to spread their cargo through many ports around the UK. In recent years, rail operators have been successful moving some of this (predominantly retail) flow on rail from DIRFT Daventry to terminals in the central belt of Scotland such as Coatbridge (Freightliner), Grangemouth (WH Malcolm) and Mossend (DB Schenker). In turn, some of this trade moves north from central belt terminals to Aberdeen and Inverness. The Committee heard of infrastructural limitations on these lines compared to mainlines linking the English deepsea ports with central belt Scottish terminals.

27. Figure 4 shows that freight transport, measured in tkms (tonnes per kilometre), is decoupling from economic growth in Scotland, meaning that economic growth need not result in increased transport of goods, and particularly that it need not result in increased emissions. This is considered in part due to the move to higher volume but lower weight of goods being transported combined with the finance and service sectors occupying a larger share of GDP.

Figure 4: Freight intensity of the Scottish economy (2000-2010)



Source: Scottish Transport Statistics, Scottish Government

28. The decreasing density of freight (due to consumer goods being increasingly constructed of lightweight materials as well as highly packaged), means that statistics based on tkms can be misleading. Therefore in some cases kms is more useful than tkms, and indeed the Committee heard from Professor Alan McKinnon that volumetric capacity would be a useful measure but that this data is not currently available.
29. The *Freight Action Plan*¹, published by the then Scottish Executive in 2006, was the last freight-dedicated policy published in Scotland, as an adjunct to the *National Transport Strategy*², also published in 2006. More recently, the Scottish Government has published NPF3, which establishes its planning priorities for the coming years. A related aim of this inquiry is to determine if the current challenges facing the industry, as well as its recent successes, remain adequately served by current policy and planning documents, or if there is a need for a new approach. The focus of any new approach, however, should be practical. The Committee seeks to understand the practical impediments to the free flow of freight in Scotland, whether they be physical constraints in the transport networks, the planning process for freight schemes, the targeting of public money or regulations that are seen to impede the ability of freight operators and users to obtain the best value for money.

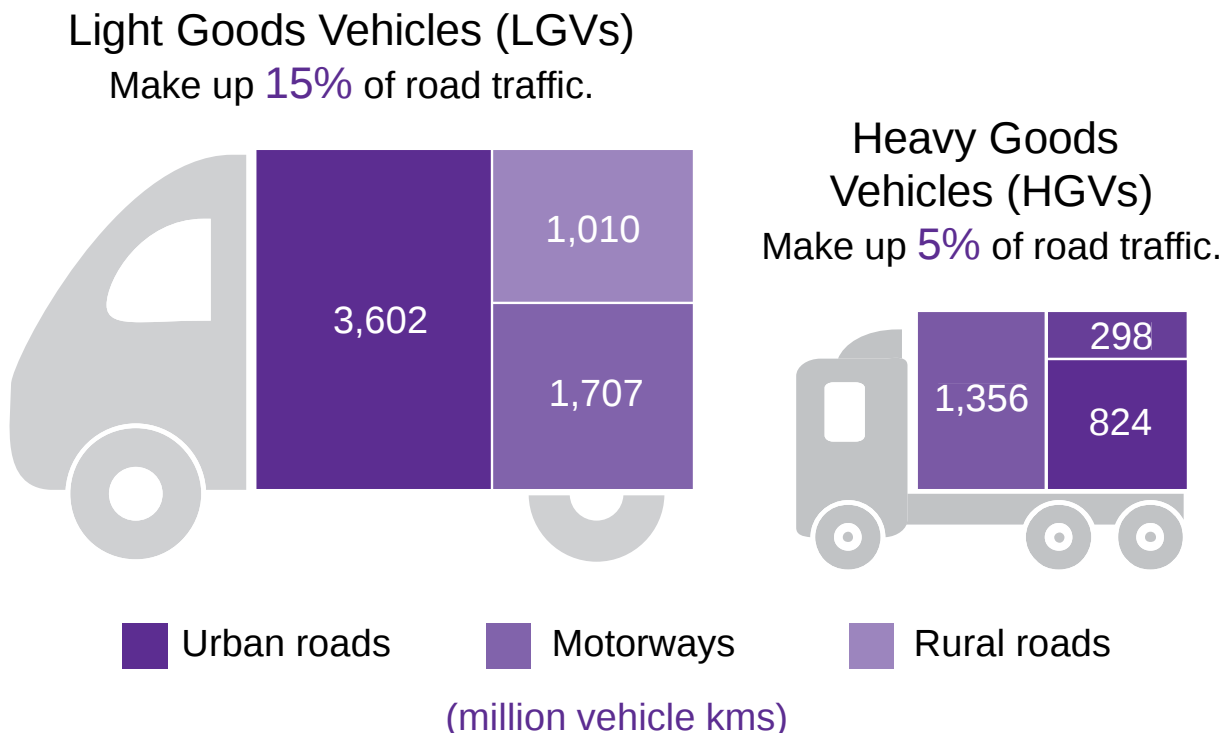
30. This report is structured in eight sections. The four key modes of road, rail, water and air each have their own section. These are followed by an analysis of the freight grants and funding system and then the specific needs of urban freight, a topic of increasing importance in recent years due to some fundamental changes in the way we live. The vital topic of the role of the freight sector in safeguarding the environment and reducing emissions is next, followed by a discussion of policy and planning in Scotland and what role a possible new freight transport policy could play in addressing any issues raised in this inquiry and thereby achieving the goals of the Scottish Government.

Road Freight

Introduction and Overview

31. Nearly all freight is transported by road at some point in the logistics chain, even where it is primarily transported by other modes. Figure 1 in the introduction showed that road haulage accounts for 67% of Scotland's freight tonnage, amounting to 131.9 million tonnes (2010 figure due to data limitations).
32. It should also be recalled that HGVs represent only a small portion of road traffic, as shown in the infographic below.

Infographic 1: Proportion of HGV and LGV journeys in Scotland compared against all road traffic in Scotland in 2013 (million vehicle kms)



Source: Scottish Transport Statistics

33. Market share of LGVs has risen from 12.1% in 2003 to 14.5% in 2013, indicating the importance of urban freight (see later section). The importance of rural roads to the Scottish freight transport network is also clear.
34. Figure 4 in the introduction revealed a decoupling of GDP and freight transport, which is good news for the Scottish Government's aim of sustainable economic growth. Similarly, road transport is becoming less polluting as a result of initiatives such as better driving practices and increasing Euro standards on lorry engines (from Euro I in 1992 up to Euro VI in 2013). Nevertheless, challenges face the industry in its ongoing efforts to increase efficiency and lower emissions. Empty running is a perennial problem, the Committee hearing that this accounts for approximately 30-33% of journeys, according to Martin Reid from the Road Haulage Association (RHA) (although official figures only exist at the UK rather than Scottish level).

Road Capacity and Upgrades

35. Respondents were supportive of completed upgrades (e.g. M74 extension) and welcomed currently committed projects such as the A9 and the A96, the Forth Replacement Crossing and the Aberdeen Western Peripheral Route. Mentions were made of potential upgrades of capacity and quality elsewhere that could be considered, such as:
- The routes to the Cairnryan ports via the A75 and A77 are "inadequate and outdated to cope with current traffic and freight volumes,"³ according to the RHA's written submission. The Committee's trip to the Port of Cairnryan via the A77 illustrated some of these concerns.
 - The A1 linking Scotland with England down the east coast requires dualling as the Department for Transport is planning to dual the section in England.
 - The A95 between Elgin and Aviemore connects Speyside whisky producers with the A9. According to Neil MacRae from HITRANS (The Highlands and Islands Transport Partnership), this route "takes an enormous amount of whisky freight every year and that has enormous export value to the Scottish economy. We had an example of a haulier who said that he had spent £20,000 on replacement wing-mirrors in the past year because of problems with that carriageway."⁴
 - The A83 (Rest and be Thankful) has frequent closures and the diversionary route adds significant delays to freight movement.
 - The A801 section in Avon Gorge cannot currently be used by HGVs, necessitating a costly diversion, so the bridge (which has already received planning approval) is required to provide an improved HGV connection between the M8 and M9 motorways

36. In addition to new upgrade schemes, ongoing maintenance of the road network is a considerable expense, and a significant backlog of repair work has been identified for Scotland's roads, costing approximately £1.5bn according to a 2013 report by Audit Scotland.⁵ This is particularly related to local roads, a topic raised repeatedly throughout the inquiry, from perspectives such as last-mile delivery and access to rural locations.
37. During evidence to the Committee Derek Mackay, Minister for Transport and Islands ("the Minister"), said that he would provide specific details on the capital spending commitments for the Avon Gorge to Grangemouth (A801), and the A75 and A77 to Cairnryan. In a subsequent letter, Mr Mackay wrote that these routes are all identified by the 2008 Strategic Transport Projects Review (STPR) as part of 29 transport improvement priorities over the period to 2032. The A801 is scheduled for delivery in 2021 and the letter also provided an outline of previous and future spend on the A75 and A77.⁶
38. The Committee welcomes the update on some of the freight routes highlighted by the Minister and recognises that budgets are limited and infrastructure schemes are very costly. The Committee also considers that having indicative dates of when works might be completed is helpful to freight operators and transport firms when looking to make future investments.
39. On the A801, given the strategic importance of this route to the Port of Grangemouth, the Committee is concerned that it will take a further 6 years for work to be completed. However, the Committee notes in the Minister's response that he has:

” ...advised that further funding contributions to the project will be decided on their fit with available budgets in future spending reviews.⁷

40. Whilst acknowledging the work done in the Strategic Transport Projects Review, the Committee recommends that the timelines associated with the 29 projects are reviewed to reflect current circumstances and priorities and the results published.
41. On the A801, the Committee supports the Minister in looking at available budgets in the next spending review to assess whether the completion date for this project might be brought forward. It recommends that the Minister update the Committee on this issue following the publication of the next spending review.
42. On the planned improvements on the A75 and A77, the Committee calls on the Scottish Government to provide an update on when this list of works is to be completed. Also, given the significance of these routes to the Loch Ryan ports, it requests that the potential for quicker delivery of these improvements be explored.

Timber Transport

43. Timber is a strategically important export for Scotland, with commercial forestry covering almost 14% of the country. According to the Timber Transport Forum, current production is around 7m tonnes and is set to rise to 10m tonnes by 2030, which will increase the already heavy strain placed on rural roads serving these commercial forests. In its written submission the TTF added:

” Most of the existing plantation forestry resource is in the uplands and served by weak, sometimes single track, public roads, ill-suited to timber haulage vehicles. Harbour and rail access infrastructure in rural areas is also dated, which restricts opportunities for intermodal transport of timber.⁸

44. As the key road transport routes for timber are managed by local authorities rather than Transport Scotland, budget limitations can restrict investment. The Scottish Government provides an annual £3m Strategic Timber Transport Fund (STTF) which is match funded and is well used and appreciated by the industry, although the match funding requirement can strain local authority budgets. The industry has also increased usage of management or technical solutions such as seasonal restrictions and tyre pressure controls.
45. Short distances challenge sea transport of timber, although a number of services do operate, some of which have benefited from freight grants in the past. Timber transport company Boyd Brothers was recently awarded a Waterborne Freight Grant of £959,773 to help transport sawn-timber produced at BSW Timber's sawmill at Corpach to Tilbury in the south-east of England. The STTF has also been used to support some shipping services, such as the Timberlink service shipping up to 100,000 tonnes per year from Argyll ports to processors in Ayrshire via Troon.
46. As timber traffic is strategically important for Scotland, the Committee heard that there could be an argument for considering a national approach to the difficulties in improving its efficiency. Indeed, the fact that some local roads are not maintained to the same standards as trunk roads was raised numerous times in evidence as a barrier to more efficient transport of all types of freight in Scotland. For example, Martin Reid of the RHA said:

” The state of repair of some of the roads that come under the auspices of local authorities tends not to match the standard of the trunk roads.⁹

47. The Committee was pleased to learn that a number of companies have been able to take advantage of freight grants and the Strategic Timber Transport Fund to help move timber off the road. The Committee is aware of the significance of the sector and asks the Scottish Government to provide details of how it will help to maximise the potential for moving timber by sea.

HGV Drivers

48. Concerns were expressed regarding a shortage of lorry drivers in future. The Committee heard of the difficulty in attracting young drivers into the industry, with the result that the average age of drivers is currently 40-50.
49. Penetration of foreign drivers into the Scottish market remains an issue, although it was only a minor issue raised in the responses compared to the previous inquiry in 2006. The Road User Levy introduced at the UK level appears to be working to address that difficulty.
50. The Committee also heard that the provision of facilities for lorry drivers is currently lacking and makes it difficult for drivers to comply with EU regulations on rest breaks. According to Martin Reid from the RHA:

” Many of those guys are treated as second-class citizens when they stop at petrol stations and try to use the wash facilities.¹⁰

51. As this was not an area which the Committee focused on during the inquiry, it simply notes the concerns raised in evidence of the difficulty of attracting young lorry drivers to the industry as well as a lack of provision of suitable rest facilities.

Speed Limits

52. Discussions took place regarding the increase of HGV speed limits in England and Wales to 50mph on single carriageways. In addition to decreasing delivery times and hence increasing the efficiency of the industry, it can also help to reduce emissions as around 52 mph has been identified as the optimal speed for engine usage. The Committee also heard that increasing the speed of HGVs improves the overall flow of traffic, which brings increased benefits. Concerns were expressed by the Freight Transport Association (FTA)¹¹ that, in addition to foregoing the potential benefits of such an increase, longer delivery times in Scotland would place the Scottish economy at a disadvantage, whilst an additional concern was raised by the Road Haulage Association (RHA)¹² regarding potential confusion when drivers cross the border (e.g. on the A1).
53. Currently, Transport Scotland is running a trial of 50mph HGV speed limits on part of the A9. Respondents were supportive of the trial and expressed hopes that if successful and safe the scheme will be expanded. Justin Kirkhope from the Cooperative Group said:

” We would like to see a review of what is happening south of the border in terms of increased speed limits for large goods vehicles to see whether Scotland could do something similar. We appreciate that a cautious approach has been taken on the A9 because road safety is key, but I think that there have been some significant improvements there.¹³

54. Given that many of Scotland's freight-carrying routes are single carriageway, the potential benefit of an increased speed limit could be even larger than has been the case for England and Wales.

55. Whilst acknowledging that the change to the A9 speed limit was only a few months into a 3 year trial, Martin Reid of the RHA said that drivers already considered the change to have had a positive effect on safety:

” The hauliers believe that the safety element has improved. Reducing the difference between the speed limits for cars and HGVs from 20mph to 10mph has meant that there has been a palpable drop in driver frustration.¹⁴

56. On the other hand, the Committee heard from the Minister of safety concerns that may prevent an expansion of this policy to other parts of the Scottish road network:

” Through the Department for Transport, the UK Government has increased speed limits for HGVs. It carried out a consultation and an appraisal. That decision south of the border will probably mean greater loss of life—more fatalities—and more injuries. That is not a price that I am willing to pay in Scotland for a blanket increase in HGV speed limits. It was appropriate on the A9 because of the package of measures there, but I do not propose a blanket increase in HGV speed limits.¹⁵

57. The impact assessment conducted by the Department of Transport on the changes to raising the national speed limit for HGVs greater than 7.5 tonnes on single carriageway roads in England and Wales, which the Minister appeared to reference in his evidence, said:

” There is little academic evidence about how a change in the HGV speed limit would affect road casualties. We commissioned a research report by TRL [Transport Research Laboratory] (2009) into the potential effect of an increase in HGV speed on single carriageway roads. Unfortunately, the final report was unable to reach any firm conclusions about the likely effects.¹⁶

58. The Minister did agree that, in cases where a suitable package of measures is in place, such as average speed cameras, increased speed limits may be possible on other roads.

59. The Committee agrees with the Minister that road safety should be at the centre of any move to change speed limits. The Committee, with this in mind, recommends that the Scottish Government commission studies into expanding the 50mph limit to other parts of the Scottish road network, particularly those in the immediate vicinity of the border with England. Any

such work should consider the full package of measures available, have safety as its core priority and be subject to proper testing. The work on the A9, although still at an early stage, shows the advantages of such considered action. The outcomes from the A9 trial should be used to inform any future expansion of the 50mph limit.

Decarbonising Road Transport

60. Due to the geography of the country and the structure of the industry, road transport will always remain the dominant mode for freight transport in Scotland. It is therefore imperative that the decarbonisation of road transport is part of any freight strategy. The Committee learned in oral evidence of previous work by Professor Alan McKinnon and Dr Maja Piecyk that identified the following five key ways to increase decarbonisation:

1. reducing the need for transport by restructuring the supply chain
2. modal shift to rail or water
3. more effective use of vehicle capacity
4. driving more fuel efficiently
5. switching to alternative fuels

61. Professor McKinnon, in summarising these five elements, said:

” Al Gore once said that, in dealing with climate change, we are looking not for a silver bullet but for silver buckshot. That is true, because we could apply a whole spread of things to decarbonise freight transport.¹⁷

62. Many of these options do not require infrastructure investment but derive from getting the best value from existing infrastructure and assets and the Committee heard how road hauliers, supported by the Freight Transport Association, are constantly seeking to increase efficiency. The Committee heard that driver training is a particularly effective and low-cost solution. However, whilst respondents were complimentary regarding the quality of available transport statistics in Scotland, data at the Scottish level on vehicle utilisation, fuel efficiency and the proportion of alternative fuel used could facilitate increased uptake of some of the above solutions.

63. The Minister highlighted in his follow-up letter to the Committee that the:

” ...reduction of emissions from the movement of freight will rely on the implementation of appropriate measures by the freight industry itself – such as the Freight Transport Association’s Low Carbon Reduction Scheme. For this reason government’s role is to continue to work closely with stakeholders to identify solutions that meet policy objectives, whilst also making good business sense for the freight industry.¹⁸

64. The Committee agrees with the Minister that the reduction in emissions from road freight must be sector led, and commends the work of the Freight Transport Association's Low Carbon Reduction Scheme and other such initiatives. However, if having accurate data which shows the tangible benefits for hauliers of how a more effective use of vehicle capacity or driving more fuel efficiently might have on their operations, this should be encouraged. Whilst covered later in this report, the Committee also considers that moving freight off the road and onto lower carbon modes such as rail and sea can bring the most sizeable benefits in reducing emissions.

65. The Committee recommends that the Scottish Government investigates whether data exists on vehicle utilisation, fuel efficiency and the proportion of alternative fuel used and whether this could be made available, or if not, could be collected.

Regulation

66. The Committee heard in evidence that the regulatory issues that might be addressed were (as raised in other sections) an increase in the speed limit for lorries, the potential for the Scottish Government to "call in" local roads of strategic importance and Road Equivalent Tariff for lorries (see section on ferries).
67. In "calling in" local roads of strategic importance, Chris MacRae of the Freight Transport Association, gave an example from south of the border:
- ” In England, with the recently published road investment strategy, a new policy development is that, where investment in last-mile infrastructure is required, central Government can take control of the funding and the delivery of such a project even though it is over a local authority network. In many cases, that is crucial for access to a container port, such as Teesport, in terms of port centric logistics and, in a Scottish context, access to a place such as the Freightliner intermodal terminal.¹⁹
68. In addition, there is potential to expand the trial of longer, heavier vehicles, which could also contribute to modal shift if used to feed intermodal terminals and ports. This change in regulation could be particularly relevant for transporting timber, as is seen in other countries such as Sweden. A ten-year trial is in place in the UK for 50ft containers on trailers with 1800 licenses having been granted to freight hauliers. WH Malcolm in Scotland is the haulier with the most licenses.
69. Sweden allows two trailers per road vehicle of 40ft and 20ft, and is currently investigating a trial of 2x40ft, if the truck follows pre-agreed routes to and from intermodal terminals, thus facilitating modal shift. Therefore, allowing longer, heavier vehicles does not just improve the economics of road freight, but in cases where it is allowed on specific routes feeding intermodal terminals, it acts as an incentive to modal shift.

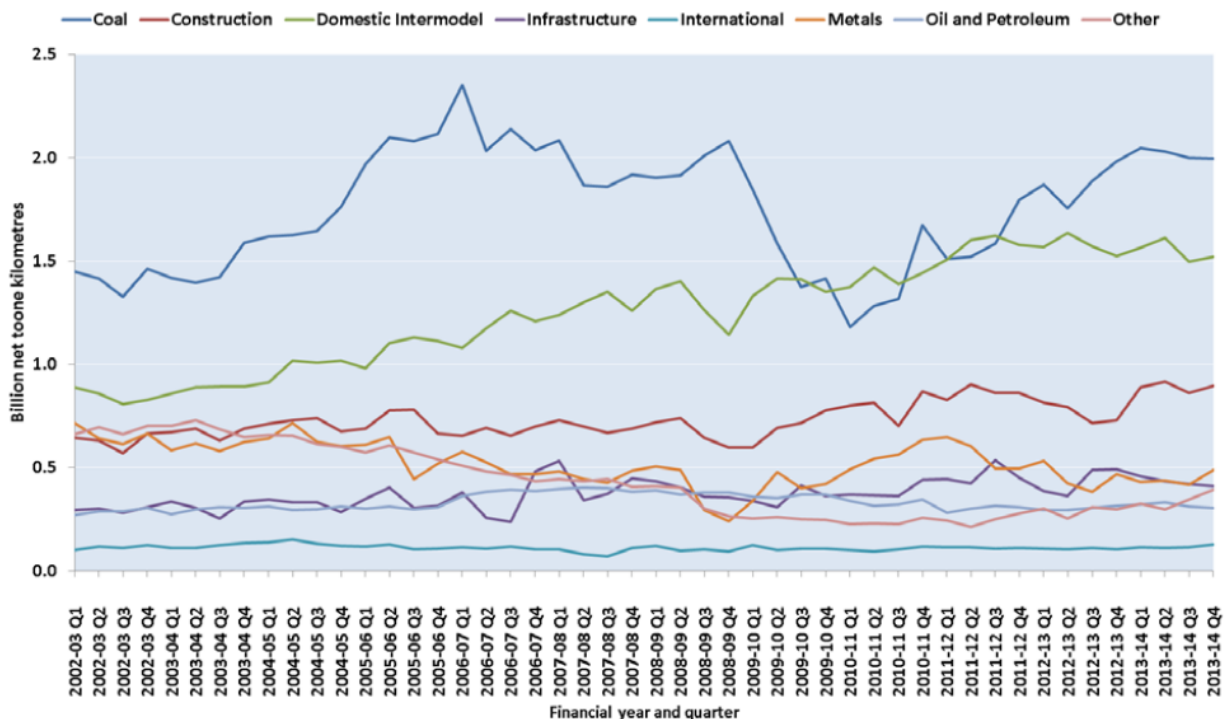
70. The Committee welcomes the current UK Department of Transport trial of using of longer vehicles, and recommends that the Scottish Government consider how it might work with the UK Government to explore how this might be expanded if the trials are successful.

Rail Freight

Introduction and Overview

71. Rail freight is particularly suited to the transport of heavy, bulk goods and long distance haulage, such as coal imports through the port of Hunterston that are then transported south by rail. Bulk goods also tend to have handling facilities built in to the production site and/or port, thus not requiring an interchange with road haulage which therefore lowers costs. As shown in Figure 5, the majority of rail freight in the UK has traditionally been bulk, until containers overtook coal for the first time in 2010-11. Coal has since reasserted its position but intermodal traffic is expected to remain a dominant source of rail freight traffic.

Figure 5: UK rail freight traffic by commodity type 2002-2014 (tonne kms)



Source: Office of Rail Regulation

72. Figure 3 in the introduction showed that rail occupies a 4.2% modal share of freight tonnes lifted in Scotland. As the majority of Scottish rail freight has origins or destinations in England, it may be misleading to separate them. According to Network Rail's written submission:

” 14 million tonnes of freight was transported by five freight operating companies to, from and within Scotland in 2013/14. 47% of the volume was exported, 14% imported and 39% of the volume moved internally within Scotland.²⁰

73. As noted earlier in the report, Professor Alan McKinnon suggested during oral evidence that tkms statistics can be skewed somewhat by the influence of heavy goods, whereas much unitised traffic is significantly lighter than coal freight. Rail freight in Scotland can be split into bulk and intermodal. Bulk flows are generally coal, oil, cement, industrial minerals and waste. There are three main types of intermodal traffic in Scotland: direct port services, Anglo-Scottish and intra-Scotland.
- **Direct port** inland container trains serving Scotland run between deepsea English ports Felixstowe, Southampton, Liverpool and Tilbury and the Freightliner Coatbridge terminal.
 - **Anglo-Scottish** container trains, bringing mostly retail goods from distribution centres in the Midlands to Scotland, operate between DIRFT Daventry and various terminals in the central belt, such as Mossend (operated by DB Schenker), the WH Malcolm terminal at Grangemouth and the Freightliner Coatbridge terminal.
 - **Intra-Scottish** container trains operate between central belt terminals and Aberdeen and Inverness, again carrying mostly retail goods northbound and Scottish goods southbound.
74. Intermodal transport first developed in Britain as a consequence of the maritime container revolution in the 1960s. Distribution centres (DCs) centralised in the Midlands became key cargo generators and attractors, and, as any port could service the same hinterland, maritime container flows concentrated in the large ports in the south-east of England. Port-hinterland container services have continued to grow in recent years.
75. Domestic intermodal traffic took longer than port flows to establish, remaining marginal in earlier years and utilised primarily for industrial products. Over the last decade this market has grown, primarily due to retail flows, with Asda first using rail in 2003 and Tesco following in 2006. These flows are on the Anglo-Scottish corridor (between terminals in the Midlands and central Scotland) and intra-Scottish (between central and northern Scotland, primarily representing continuations of the flows from the Midlands services). These developments were (and in some cases remain) subsidised by government grants (Mode Shift Revenue Support funding – see later section).
76. These flows have been primarily northbound secondary distribution of picked ambient grocery loads from retail DCs in the Midlands, back loaded with southbound flows from Scottish suppliers, such as soft drinks and spring water. Concentration of DCs and intermodal terminals in the Midlands and in central

Scotland, with suitable distance between them, underpins a high-density Anglo-Scottish corridor with a short 'last mile' between DC and intermodal terminal at either end.

77. The Committee heard in evidence about the competition between direct port rail services operated by Freightliner and coastal feeder services. Hubbing Scottish deepsea traffic via a continental port and then using a feeder vessel to/from Scotland is cheaper but slower than hubbing via Felixstowe or Southampton and using rail, but the latter option is faster and more reliable. The Committee recognises that both modes have a part to play in transporting Scotland's deepsea container cargo.
78. The Committee heard of the success of modal shift of Anglo-Scottish secondary distribution loads from Midlands distribution centres to Scotland, with JG Russell and WH Malcolm collaborating with the rail services of DRS transporting around 200 loads a day. These trains use DIRFT Daventry and a variety of terminals in Scotland, such as Coatbridge, Mossend and Grangemouth. Using Coatbridge for both port flows and Anglo-Scottish flows provides economies of scale and density.
79. Thus the Scottish rail freight sector is inescapably part of not only the rest of the UK rail network, but the international connections to ports and through the Channel Tunnel. Network Rail's written submission stressed that

” The majority of rail freight movements within Scotland should not and cannot be considered in isolation; inter-connection with the rest of the UK, the port network, and Europe is a crucial driver for growth potential and is essential to determine which routes will require investment to support and realise growth forecasts.²¹

80. The strong relationship between sea and rail transport is also a source of challenges to interoperability, resulting in conflicting container types and sizes, for instance the difficulty in matching deepsea maritime containers (20ft and 40ft long, 8ft wide) and the intra-European short sea and domestic “pallet-wide” containers (45ft long, 8ft2.4in wide). The Committee heard that if whisky exporters (southbound) and retail distributors (northbound) used the same container then the problem could be resolved, but commercial difficulties preclude such a result thus far.
81. The Committee saw this wide range of containers during the course of its visits and fully appreciates the difficulties involved in rationalising their usage. It also recognises that this issue cannot be solved in Scotland alone given the world-wide standardisation of containers.
82. Network Rail is the owner of the track infrastructure throughout the UK, and thus responsible for investment and maintenance. The freight (and passenger) operators pay Network Rail for using their track. The price and quality of this arrangement are overseen by the Office of Rail and Road (renamed in 2015 from the Office of Rail Regulation - ORR). In its most recent Freight Market Study,

Network Rail forecasts growth of Scottish rail freight from 14m tonnes to 26m tonnes by 2026. This is echoed by the operators, such as the comment from Ken Russell of the Russell Group:

” Between us [the Russell Group, Malcolm Group and Freightliner] we are scratching at the surface of the market. There is a huge opportunity. We are seeing a major change in how large organisations are procuring their logistic solutions.²²

83. This inquiry hopes to identify any obstacles to the realisation of this growth potential and recommend actions that may be taken by the Scottish Government, where appropriate, to mitigate these challenges.

Capacity on the Rail Network

84. Both written and oral evidence praised the work of Network Rail in upgrading key routes on the Scottish and wider UK rail network. It was acknowledged that improvements have been achieved in recent years (e.g. increased loading gauge on Anglo-Scottish routes) and others are underway (e.g. enhancement of the network in the Mossend area, electrification of the Edinburgh South Suburban line, gauge clearance works at Carmuir, and improvements between Elgin and Inverness). Network Rail is currently working on a Scotland Route Study, which will analyse all upgrades and investments needed for future growth. The consultation draft is expected by the end of 2016.
85. The Committee heard in oral evidence that capacity limitations exist mostly in England, on routes such as the East Coast Main Line, and that there are no absolutely pressing issues with capacity shortage for freight on the Scottish network whereby the upgrade of a particular line would unlock a large volume of frustrated demand. In oral evidence, Nigel Wunsch from Network Rail suggested that, whilst improvements are ongoing, significant expense is required to increase capacity that may then not be used:

” Unfortunately, we have a number of examples in which we have improved the network and the traffic has not come despite the predictions and the forecasts and appraisals that were done.²³

86. Respondents agreed that a combination of infrastructural and operational considerations would be required to increase uptake of rail freight.
87. However, written evidence suggested a number of possible improvements to capacity on the Scottish rail network for future consideration. Possibly the most important improvement is the need for longer passing loops (775m) to allow faster passenger trains to overtake slower freight trains. Freight trains must all be capable of fitting into the passing loops on their route, therefore a short passing loop will limit the possible train length thus increasing the cost per unit. Double tracking of a route would in most cases remove this need, but lengthening passing loops is more cost-effective. Routes in particular need of such consideration are

Perth-Inverness, Aberdeen-Inverness and the West Highland Line from Glasgow to Fort William. An example was given of the Tesco train from the central belt to Inverness, which currently transports 20 containers, but could carry 28 containers at only marginal extra cost if passing loops were sufficient (or if the line were double tracked). By comparison, retail trains on the Anglo-Scottish route carry 36 containers. Nigel Wunsch from Network Rail commented that work currently planned for the Highland mainline “will almost certainly include longer loops or longer sections of double track.”

88. The Committee heard in evidence that Saturday night services are a priority in order to achieve a complete 7 day service. These are currently constrained by Network Rail’s need for maintenance work, which is scheduled at this time. Whilst respondents understand the necessity of such work, it was suggested that greater provision of diversionary routes would help to overcome this difficulty.

89. The Committee recommends that the concerns raised in this inquiry in relation to the suitability of the rail network to facilitate increased freight capacity are highlighted by the Scottish Government in its dialogue with Network Rail to assist the latter’s ongoing planning work.

Loading Gauge

90. The written evidence suggested that loading gauge restrictions are a major source of concern in the sector. There is a need for minimum W10 gauge to take higher (9ft 6in or “high cube”, rather than the standard 8ft6in height) containers and ideally W12 to take higher and wider containers (including refrigerated containers).
91. The Committee heard that there is increasing demand for transport of refrigerated containers on rail routes to and from UK ports. These containers are 2.6m wide (as opposed to the standard width of 8ft or 2.44m or even the wider pallet-wide containers that are 8ft 2.4in or 2.5m), therefore their passage is constrained on some routes. This would require the W12 gauge.
92. Most of the network within Scotland is below this standard; these restrictions prevent the transport of higher containers unless low wagons are used. This issue exists primarily from the central belt to the north, but also between the central belt terminals (e.g. Coatbridge and Mossend) and the port of Grangemouth. In some cases it would be too cost prohibitive for an infrastructure solution (raising bridges and/or lowering the track bed) so low wagons can be used, but these are more costly both to purchase and maintain. Freight grants do not currently support the purchase of wagons (see section on funding for elaboration on this issue).
93. Loading gauge restrictions are also a concern on the main connecting routes between England and Scotland - the West Coast Mainline (WCML) and the East Coast Mainline (ECML) - but these are improving. The WCML has been upgraded to W10 and the ECML will be W12 by 2016. This also applies not just to the main

routes but the connections to central belt terminals and between them (see previous point).

94. Going beyond UK gauges, the Committee heard that what would be ideal would be to utilise the European (UIC) gauge, which allows road trailers to be carried on rail wagons (known as “piggyback”). Currently, such gauge profiles can come through the channel tunnel only as far as Barking. If such traffic could reach further into England and to Scotland, the Committee heard that this would unlock more potential UK-Continental traffic. Ken Russell suggested that the UK needs a freight-only UIC-gauge line connecting Scotland to the continent:

” We need to look at having a spine up the UK that has a European gauge capability for freight, rather than looking at how we can achieve other benefits for freight.²⁴

95. The Committee saw an example of a €4.7 billion freight only line from the Port of Rotterdam to the German border. Known as the Betuweroute, this double track electrified line is 160km long and currently handles 550 trains per week.

96. The Committee recognises the difficulties faced in upgrading the loading gauge on lines across Scotland. However, it also considers that a standardisation of gauges would go a long way to help move cargo from road to rail. It therefore looks forward to Network Rail’s report in how it plans to upgrade the routes over the coming years. It also encourages the Scottish Government to explore the potential for providing more flexibility to current grants. This might enable funding for innovative projects such as the purchase of lower wagons so that larger containers can be transported on lines not presently accessible.

Rail Terminals

97. The Committee visited some rail terminals during the course of its inquiry, in Scotland as well as in England and Sweden. The Committee recognises the vital role that such hubs play in the Scottish freight system, and supports the need to ensure suitable capacity and service quality in terminal provision.
98. The Committee heard in evidence that sufficient terminal provision is available within Scotland, although with some caveats regarding quality and capacity of individual terminals. The Committee heard that no rail freight facilities are currently available in the city of Dundee, and other gaps include Fife and Ayrshire, although it is questionable if sufficient demand exists for an operator to bring forward a development at such a location under current market conditions. The Committee also heard significant evidence regarding Scotland’s major rail freight terminal at Coatbridge. According to Chris MacRae of the FTA:

” The importance of Coatbridge as an inland freight terminal for Scotland cannot be overestimated.²⁵

99. The Coatbridge terminal operates with 45-year old cranes and requires new investment to upgrade the cranes and redesign the layout in order to improve capacity and service quality (Kay Walls from Freightliner provided an estimate of £8m).²⁶ The Committee learned that the current system of freight grants does not support this kind of investment, but that the short term nature of customer contracts in the rail business made it difficult for the terminal operator Freightliner to commit such investment themselves. Another major central belt terminal, Mossend, also needs extension of its rail siding lengths.
100. The Committee heard that increasing the efficiency of a terminal does not just lower handling costs, but lowers other costs for users who can access the terminal without needing to keep trains in other sidings or hold boxes for a specific time window. Road access to major terminals such as Coatbridge was also raised several times in evidence as a source of delay and congestion and hence cost. For example, Andrew Malcolm of the Malcolm Group said:

” A lot of investment is required in the terminals because they are expensive to run and to operate, but a lot also needs to be done on the road network in and out of the terminals to try to get traffic flowing more smoothly.²⁷

101. Whilst respondents felt that the overall number of terminals is sufficient, a need was recognised (see the Rail Policy and Planning section below) to identify and protect strategic freight sites so that they are not lost to other uses in future.
102. In his letter to the Committee of 28 May 2015, the Minister outlined the Scottish Government’s work in helping to provide infrastructure projects via the Glasgow and Clyde Valley City Deal. The Committee welcomes the indication from the Minister that this initiative includes—

” ...proposals for a new road from Gartcosh Business Park to Freightliner and Gartsherrie, with associated junction improvements to M73 Junction 2A, which the City Deal anticipates will support the development of a strategically integrated rail to road facility, removing HGV traffic from existing local roads and improve both air quality and road safety in the North Coatbridge area.²⁸

103. The Committee also heard concerns that the money invested in terminals in the 1990s, in anticipation of channel tunnel traffic, was not targeted as strategically as it could have been, therefore a national strategic approach may have been warranted. Respondents argued that this mistake should not be repeated, suggesting the need for a more holistic rail terminal strategy (see policy section below).

104. The Committee recommends that the Scottish Government explore potential ways for existing terminals to access grants to assist with investing in internal improvements such as new cranes and layout, and external improvements to the access roads (such as the proposed work via the Glasgow and Clyde Valley City Deal). Further investigation is needed into innovative ways this may be achieved, based on the Committee's experiences during visits to other countries in Europe. Potential solutions to explore could include modification of eligibility for existing grants, a loan mechanism or even a public shareholding.

Channel Tunnel

105. The Committee heard in evidence that the Channel Tunnel has still not yet fulfilled its promise. According to Ken Russell from JG Russell: "The capacity for freight in the Channel Tunnel is still massive. The take-up has been small."²⁹ Some respondents, such as the Rail Freight Group³⁰ and the Scottish Council for Development and Industry,³¹ suggested that pump-priming financial support may be required to establish a direct Scotland-continent freight train, but such an initiative remains uncostered.
106. Some cost issues regarding accessing the Channel Tunnel were raised by Ken Russell.³² Euro wagons are cheaper than UK wagons which would therefore make the train service more economic, but they are too wide for portions of the UK network, therefore they need to use HS1 to access the tunnel which has higher track access charges, thus reducing the economic benefit of using those wagons. Upgrading to UIC gauge on more of the UK network would allow such wagon configurations and hence reduce cost. In addition, HS1 is only available between 23.00 and 05.00, so using the UK network would allow more services. Whilst these issues derive from the English network, they impact on the ability of Scottish cargo to use the tunnel.
107. Weight restrictions in the tunnel are also a concern. Weight restrictions on HS1 are 1,600 tonnes whilst the tunnel accepts 1,800 tonnes. JG Russell is attempting to get this discrepancy resolved which would allow a significant increase in payload. Similarly, JG Russell is required to use two locomotives for haulage through the tunnel, whereas they believe that only one is required, thus saving cost. They are currently running trials in order to obtain approval for this procedure, but they indicated that such regulatory issues constraining operations could be examined and removed in a variety of instances, to achieve greater economic benefits for rail. As noted earlier, therefore, it is not only infrastructure upgrades that are required, but some improvements to regulatory and operational issues that can enable the best use to be derived from existing infrastructure.

108. Whilst the Committee recognises that matters pertaining to the Channel Tunnel are reserved, it nevertheless recommends that the Scottish Government consider afresh how to get the best use from the Channel Tunnel for Scotland-continent freight flows.

Timber by Rail

109. Timber does not currently move by rail due to issues of fragmentation of demand and a lack of rail-connected processing sites. The Committee heard evidence of the potential to use rail for transport of timber, particularly through innovations such as a “non-intrusive crossover”. According to David Spaven from the Rail Freight Group:

” An ability to put in a siding cheaply in the middle of a forest could be enormously beneficial in commercial, economic and environmental terms.³³

110. Whilst a number of technological improvements have been tried over the years such as specialist timber wagons, short distances, imbalance of flows and fragmented demand are serious challenges to unlocking the potential of timber by rail.

111. The Committee recommends that the Scottish Government explore ways in which it can trial innovative methods of transporting timber by rail.

Rail Access to Ports

112. The Committee heard that the rail line into the port of Grangemouth (Scotland’s primary container port) does not run to the main container terminal so delivering straight from a vessel to the train takes increased time and handling. The track there is also very short which limits train length and hence increases unit costs. Whilst a train has been run into the port in the past (operated by WH Malcolm and DRS), increased costs forced it to be discontinued. Gauge clearance on the route into the port is also constrained, prohibiting hi-cube containers.

113. The Guild Street terminal in the Aberdeen city centre was closed but the port operator has established their own rail head at the port, a decision welcomed by the Committee.

114. One of the main issues raised regarding ports was not the ports themselves but improved access to them, as discussed in earlier sections of this report. Some other potential improvements to road access to smaller ports were noted. Particularly the roads to Cairryan (A75 and A77) were raised as in need of major investment. Reopening the rail link could also be considered.

115. The Committee recommends that the Scottish Government conduct an appraisal of upgrading the road and/or rail links to the two ports in Cairnryan in order to determine the feasibility of such investment.

116. The use of the rail link to Hunterston for coal traffic means that if the port were developed as a container port then it would already have rail access for serving Scotland and the rest of the UK. Similarly, Greenock is rail connected and Freightliner used to run a service there many years ago, but the line has not been used in some time.

117. The Committee is concerned at the very limited use of rail transport into Scottish ports and recommends that the Scottish Government examine what needs to be done to ensure suitable facilities are in place to encourage and support use of these links.

Electrification

118. Electrification is a priority for as much of the network as possible in order to reduce emissions caused by diesel engines, which would make rail even more environmentally friendly. However, it is recognised that this will depend on the power source used to generate the electricity (e.g. coal-fired vs renewables). In addition, electric locomotives have faster acceleration so can exit passing loops quicker which will increase the efficiency of freight services.

119. Network Rail's work to electrify the rail network was commended in evidence. The Committee heard that Network Rail is currently conducting a UK wide study into the potential for electrification. The Committee heard that any electrification work, even for passenger trains, results in the enhancement of the loading gauge, therefore there is an associated benefit for freight trains using the same route. When questioned by the Committee on when the lines to Inverness and Aberdeen might be electrified, Nigel Wunsch from Network Rail said:

” The current control period asks us to electrify about 100 track kilometres per year. Looking forward, I believe that we would complete electrification to Aberdeen and Inverness by around 2030.³⁴

Funding and Grants

120. Whilst a separate section of this report on freight grants provides a full analysis of this topic, Freight Facility Grants (infrastructure) and Mode Shift Revenue Support (operational subsidy) grants have been very successful in shifting freight from road to rail. This is particularly the case on the Anglo-Scottish route, where JG Russell and WH Malcolm have worked with rail operator DRS and retailers such as Tesco, Sainsburys and the Cooperative Group to transport goods from

Midlands DCs to Scottish DCs and stores, as well as routes from the central belt to Aberdeen (for Asda) and Inverness (for Tesco).

121. The Committee heard that the FFG application itself is not difficult but the applicability of the grant is the issue. It was suggested that it is easier to get grant for a new terminal than for improvements to an existing one. Rail operators renew their contracts with customers frequently and cannot obtain a three year commitment from them, which is required for FFG. The grant structure works best for single user facilities with their own rail line (which was why they were introduced as, at that time, common user rail terminals were owned by British Rail). But the open user terminals in use in the present day are the ones that now need financial support.
122. The Committee also heard that the definition of infrastructure for the purposes of FFG could be widened. There is a need to consider a common pool of low rail wagons to overcome the loading gauge issues in Scotland. This solution has been proposed by industry for many years but as yet it has not been adopted by the government. Kay Walls of Freightliner said in evidence:

” A long time ago ... we looked at the cost, and decided that there was another way [to get the gauge increased on the route to Aberdeen] and that perhaps we could get special low-bed-height rail wagons and get a freight facilities grant: “If the mountain won’t come to Mohammed” we thought perhaps that we could get the money to build those special rail wagons, which would be in a pool for any operator to use.”³⁵

123. Whilst the Committee appreciates that freight grant schemes must have defined rules to ensure that public money is spent appropriately, throughout its inquiry the Committee heard that the current criteria to apply for grants was restrictive. This appears to have ruled out schemes that might have increased the take-up of intermodal transport.

124. Again, the Committee recommends that the Scottish Government explores innovative ways to expand access to the package of grants within the overall envelope of funding which might assist in delivering outcomes that can achieve modal shift, such as for open-user terminals and low wagons.

Rail Policy and Planning

125. There were some suggestions in written and oral evidence of a need for an updated rail freight strategy, including the identification and protection of strategic rail freight sites. This not only includes protecting an entire site, but protecting the possibility for rail. For example when a new site is built next to a rail line, even if a rail connection is not established, the layout of the site should only be approved if it is designed in such a way that if the user wanted to connect to the rail line in future, they could do so.

126. We also heard from witnesses on the need for a strategic overview to infrastructure schemes when private companies are leading on the work. Kay Walls of Freightliner said:

” I was dismayed that, when Eurocentral opened, no thought was given to a passenger train service. As such, the roads into Eurocentral are jammed by people trying to get to work. ... Rather than people having individual schemes that benefit individual companies, we need a more strategic overview and joined-up thinking. We need to look at what is good for Scotland. Ultimately, that will benefit everyone, because it will make it easier to get around, reduce cost and therefore encourage growth.³⁶

127. From the planning perspective, some concern was expressed that a lack of rail facilities in the NPF3 suggests that rail is not being treated as a major strategic mode in line with other modes. Whilst Coatbridge, Mossend and Grangemouth were mentioned as important sites, they were not included as national developments in the way that some port projects were. It was also suggested that the decision to refuse planning permission for Mossend International Railfreight Park could be reconsidered.

128. Concerns were also raised by the RFG and Transform Scotland that rail freight is not on a level playing field compared to road (e.g. large investment in the A9 without comparison of upgrading the equivalent rail line) and water (e.g. Rosyth-Zeebrugge ferry recently receiving subsidy without comparison with the equivalent rail route). The RFG suggested that such funding processes should be based on an analysis of the entire multimodal corridor to determine the best balance of all modes.

129. As noted in the section on regulation of road vehicles, the Scottish Government could consider what mechanisms are open to it for raising the weights and length of trucks feeding terminals (as done in Sweden), which would contribute towards modal shift.

130. The Committee heard in evidence that Transport Scotland is currently working with industry stakeholders on a refresh of the national rail freight strategy for Scotland. According to the Transport Scotland website:

” A key aim of the refreshed strategy will be to examine the structure of the rail freight industry in Scotland, its role in achieving the Scottish Government’s purpose and national outcomes, and the challenges and opportunities that exist. The strategy will also seek to ensure that synergies between passenger and freight services are fully exploited and that the right balance is struck in our investment decisions.³⁷

131. The Committee will be forwarding the results of this inquiry to Transport Scotland as input into their policy refresh process.

132. In their written submission, the FTA raised concerns about potentially increased track access charges in Scotland by the Office of Rail and Road. (previously Office of Rail Regulation):

” ...proposals that would introduce geographically differentiated freight Track Access Charges that would see rail freight in Scotland penalised by higher charges reflective of the cost of infrastructure maintenance related to the topography of the territory.³⁸

133. Given the mountainous regions of Scotland, the Committee would be very concerned to learn of any such moves to raise Track Access Charges access charges based on topography.

134. The Committee welcomes the development of a new rail freight policy and recommends that the results of this inquiry are taken into account as part of that process. Moreover, the Committee recommends that the rail freight policy be produced not in isolation but as part of a comprehensive freight transport policy for Scotland addressing all modes.

Water Freight

Introduction and Overview

135. Scotland has a vibrant and diverse ports sector covering all types of sea freight, from bulk (e.g. coal and oil) to unitised goods (trailers and containers) and general cargo (e.g. timber and fish). Some ports are fully privately owned and operated, some are trust ports, operated by an independent statutory body on a non-profit basis, and some are managed by local authorities.

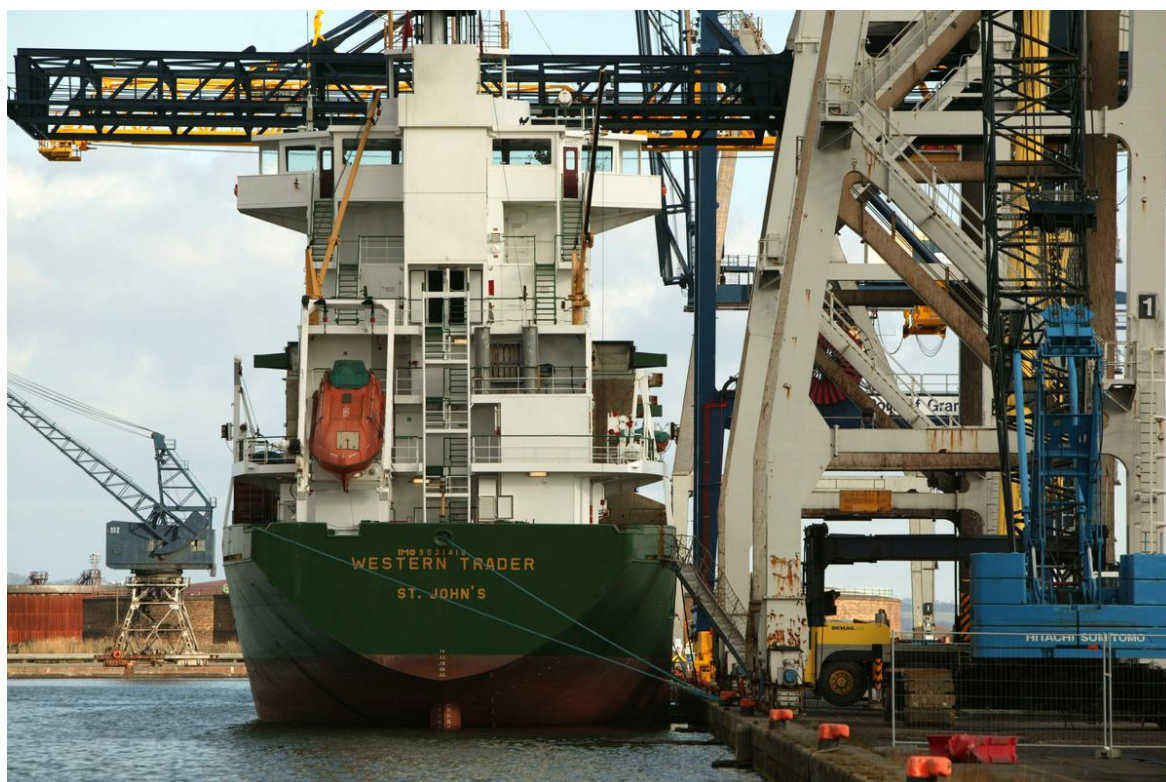
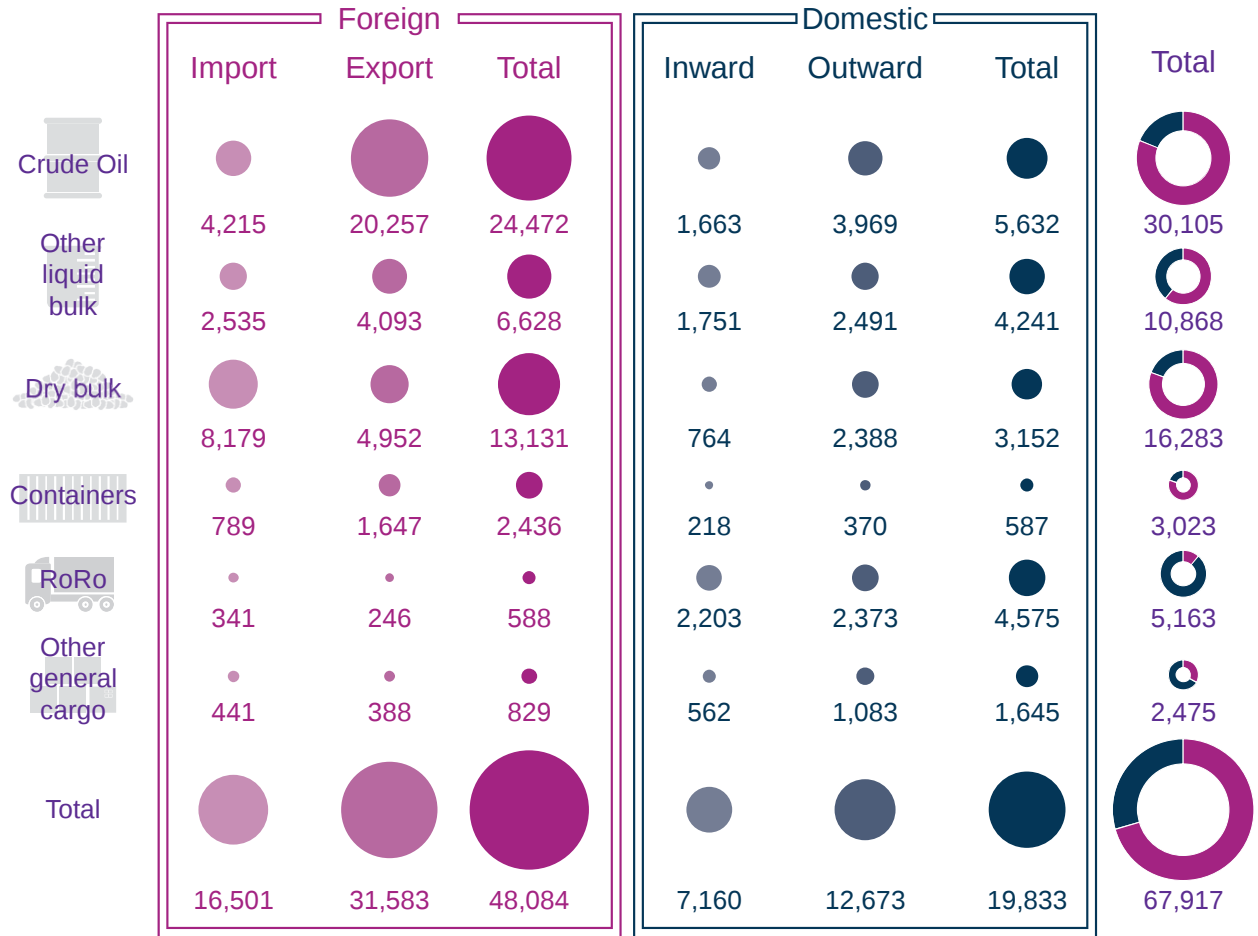


Image: Port of Grangemouth

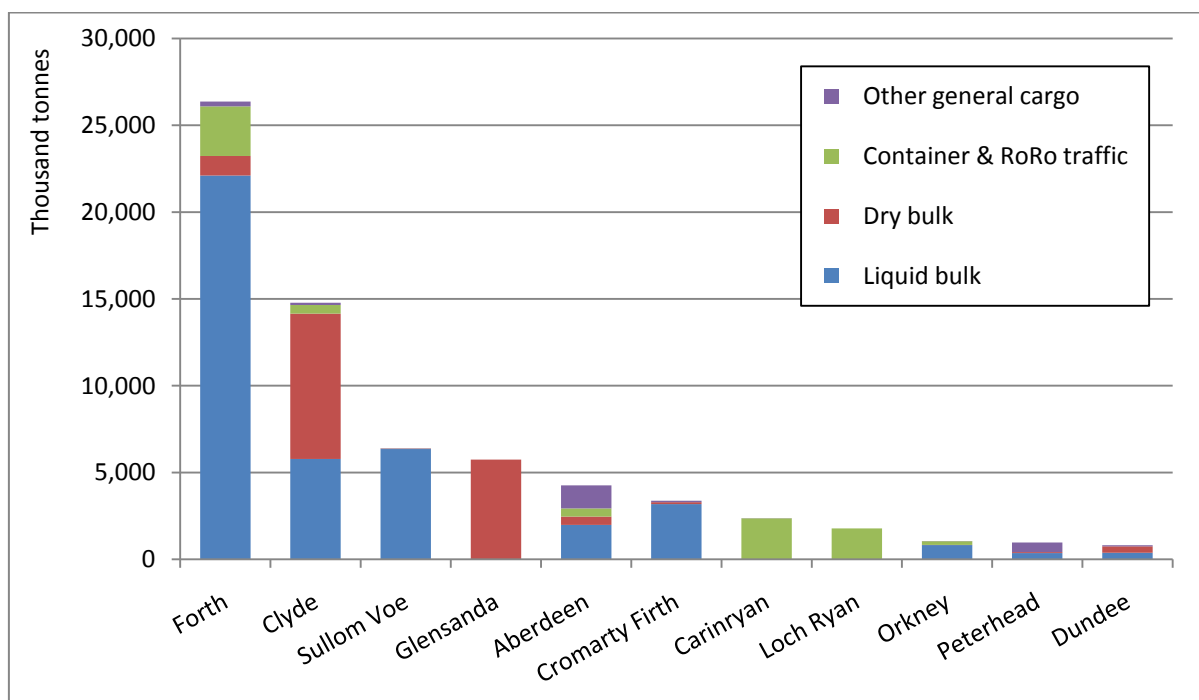
Infographic 2: Foreign and domestic tonnage (thousand tonnes) at Scottish ports by cargo type in 2013



Source: Scottish Transport Statistics

136. On a tonnage level, the main traffic through Scottish ports is liquid bulk due to the oil and gas sector, as well as dry bulk such as aggregates from Glensanda and coal at Hunterston.

Figure 6: Scottish major ports by tonnage 2013 (thousand tonnes)



Source: Scottish Transport Statistics

137. The figure shows that unitised cargo is dominant at Forth (containers at Grangemouth and RoRo at Rosyth) and Clyde Greenock (containers), with RoRo dominant at Cairnryan and Loch Ryan, with some RoRo also serving Aberdeen, Orkney and Shetland. General cargo is a major traffic type at Aberdeen, Peterhead and Dundee; this category covers a wide variety of cargo such as offshore supply vessels taking goods to rigs, timber and timber products, renewables work, fish, agricultural products, fertiliser and road salt. Liquid bulk from the petroleum industry is understandably dominant at Grangemouth, Sullom Voe, Aberdeen, Cromarty Firth, and Orkney. Dry bulk is concentrated at Clyde (due to the large coal import terminal at Hunterston) and Glensanda (aggregates mine). Other ports such as Inverness and Montrose handle cargoes such as fertiliser and agricultural feed.
138. Bulk cargo is commodity cargo that is transported unpackaged in large quantities. The physical characteristics of bulk commodities are such that they can be handled in volume easily, albeit with the use of specialised loading and unloading equipment. Ports have specialised terminals with automated equipment to fill cargo holds with bulk commodities such as crude oil or grain. The large quantities and low time sensitivity means that for transport to and from the port bulk commodities are well-suited to rail transport. There is often no “last mile”, because a railhead will be built at the mine, quarry, etc. at one end and in the port terminal at the other. General cargo commodities are those such as lumber or steel that can be transported loose or packed in bags or on pallets. Such products are often carried in smaller general-purpose vessels.

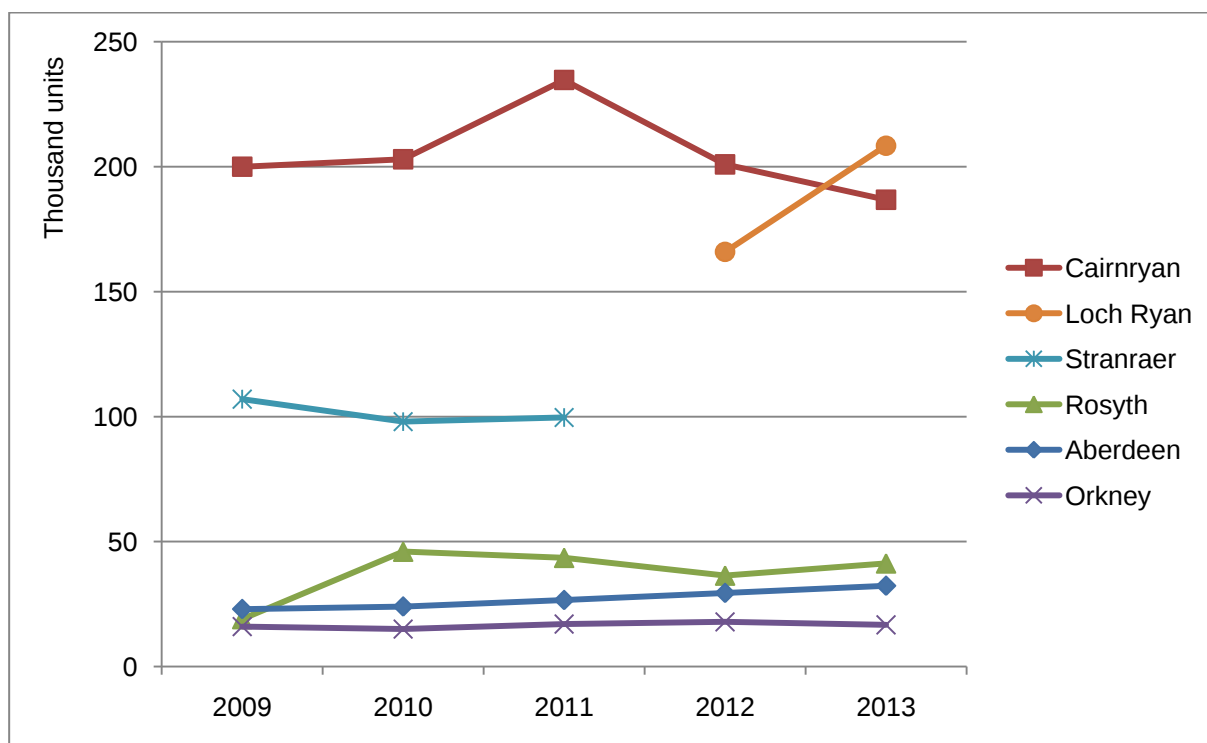
139. Unitised traffic refers to containerised cargo and road trailers moving by RoRo ferries. Unitised traffic is also the segment most integrated with the rest of the transport system, using road, rail and sea to transport, among other things, consumer goods that find their way into small vans delivering to stores on the high street.
140. Grangemouth, operated by Forth Ports, is Scotland's primary container port, due to its east coast location and proximity to the central belt. Greenock is the second busiest, operated by Clyde Ports. In 2013, Grangemouth handled 261,000 TEU whilst Greenock handled 76,000. Other container movements were at Aberdeen (40,000 TEU) and Orkney (12,000 TEU). Greenock has naturally deeper water and can handle larger ships, but the hub-and-spoke model of large shipping lines means that Grangemouth offers a shorter distance to feeder services to/from continental ports. There is a proposal for a new container port at Rosyth, which would offer deeper water than Grangemouth and no lock-restricted access, but its landside links are less desirable. It would, however, offer additional competition in the Forth.
141. Professor Alfred Baird, Professor of Maritime Business at Edinburgh Napier University's Transport Research Institute, Edinburgh Napier University, commented on Scotland's level of container traffic in evidence, saying that it:
- ” ...is grossly under-developed compared to developed nations of comparable population.³⁹
142. Professor Baird gave the example of the ports in Belfast and Dublin, which he said handled a combined trade value of around £90bn a year, which was 11 times that of Scotland. He added that Scotland's container trade is “comparable to Iceland in terms of total unitised cargo volume and value, yet Iceland's population is only 5% of Scotland's!”
143. The UK's deepsea container ports are all located in England, primarily because of the location on the main shipping routes and being closer to the centre of gravity for demand, thus enabling shipping lines to operate a hub-and-spoke service. Containerised imports for Scotland come on deepsea vessels e.g. from Asia to hub ports such as Rotterdam and Antwerp on the continent or Felixstowe and Southampton in England where they are transhipped to smaller feeder vessels that then come to Scotland's primary container port of Grangemouth (vice versa for exports). The same occurs on a smaller level on the west coast, linking continental ports, Irish ports, Liverpool and Greenock. As discussed in the rail section, Scotland also has direct rail links to the deepsea ports of Felixstowe, Southampton, Liverpool and Tilbury.
144. The UK as a whole experienced significant container port congestion during the 1990s due to under capacity and lost some traffic to continental ports. Since then, several major expansions have occurred (e.g. Felixstowe, Southampton, Liverpool, Teesport and an entirely new port at London Gateway). UK port

capacity as a whole can be considered more than sufficient, if not over capacity. Compared to some other countries, therefore, the UK is fortunate to escape some of the difficulties and costs of port congestion. In Scotland, total port capacity is considered sufficient in terms of total number of containers able to be handled. Professor Alan McKinnon commented on this during evidence:

“ We have more than enough port capacity to meet demand for the foreseeable future. Grangemouth reckons that it could handle up to 400,000 containers, which we are well short of at the moment.⁴⁰

145. However, questions exist regarding the size of vessels that can be handled at Scotland's feeder ports, due to changing use of vessels in the world market. Increased demand in terms of container numbers might be met by investing in better cranes so making the most out of existing space, whilst deeper vessels require dredging of the berth and approach channels. It was suggested in evidence that operating delays at Grangemouth and Rosyth, both operated by Forth Ports, increase costs and act as a disincentive to use water transport.
146. Whilst the Rosyth-Zeebrugge ferry is Scotland's primary ferry service to the continent, ferries also link Aberdeen twice weekly to Norway. A much larger amount of lorry traffic travels on RoRo ferry between Northern Ireland and the west coast ports of Cairnryan and Loch Ryan (the latter being a facility opened in 2012 just north of the town of Cairnryan as a replacement for the Stranraer service - in DfT statistics this new port is listed as Stranraer). Much of this is through traffic between the Republic of Ireland and either UK or continental Europe, though some is transport of retail goods from Scottish distribution centres to stores in Northern Ireland. In 2013, Loch Ryan handled 208,000 RoRo units whilst Cairnryan handled 187,000. In the same year the port of Rosyth handled 41,000 RoRo units, an improvement on 2012 but still down from its high of 46,000 units in 2010. This is partly due to the decrease in trade vehicles.

Figure 7: Major Scottish RoRo ports by units



Source: Scottish Transport Statistics

Port Capacity and Operations

147. Several of those who provided evidence welcomed the inclusion in the NPF3 of strategic port developments Aberdeen Harbour Expansion, Grangemouth Investment Zone and Additional Container Freight Capacity on the Forth.
148. The port at Aberdeen is congested and the proposed solution is expansion at Nigg Bay, which has been listed in the NPF3. The port is currently working on the feasibility study for the £410m expansion project, and hopes to make a decision in 2016. The Committee welcomes this work.
149. Some evidence identified challenges at Scotland's primary container Port of Grangemouth relating to restricted water depth that may mean the port cannot handle container feeder vessels, which are getting larger, without significant investment. Charles Hammond, Chief Executive Officer of Forth Ports, spoke of the planned investment at Grangemouth to ensure that it can handle larger feeder vessels:

“ At the moment, we are fine; there is no problem with the size of the feeder vessels that we currently handle. However, we expect those vessels to get larger in future, and as we move towards feeder sizes of about 1,800 to 2,000 20ft equivalent units, we will need to carry out the deepening work and improve capacity at Grangemouth. That is why we have included that work in our investment plans.⁴¹

150. Other issues relating to the Port of Grangemouth included the need for improved road access through the Avon Gorge and the need for flood defences.

151. In its recent [report on Internationalising Scottish Business](#), the Economy, Energy and Tourism Committee said:

” Following the visit to the Forth Ports facility at Grangemouth, we are concerned that investment in port infrastructure lags far behind that of continental container ports. In addition, the limited number of short sea shipping routes connecting Scotland with mainland Europe results in an unnecessary increase in lorry loads of goods travelling south for onward shipment from ports in England, adding extra time and expense to Scottish exporters.⁴²

152. The report invited the Infrastructure and Capital Investment Committee to consider the evidence received by both committees which suggested:

” ...a lack of investment in key infrastructure may act as a constraint on efforts to boost Scottish exports. A step change in the level of investment in key transport infrastructure is necessary if Scottish goods are to be delivered to overseas markets quickly, cost effectively and with minimal environmental impact.

153. The Infrastructure and Capital Investment Committee also sought the view of witnesses regarding whether Scotland needed a deepsea port. Councillor James Stockan of HITRANS spoke of the potential of a deep sea port in Scapa Flow to take advantage of the possible opening up of arctic shipping routes:

” That is a huge opportunity for Scotland, but if we do not grasp it, it will go to Norway, the Faroes or somewhere else. It actually represents one of the biggest modal shifts, and it would involve a major project with Government support under the Marco Polo and TEN-T programmes. It would be a complete game-changer. It would not involve pinching trade from someone else; it is all about changing the whole European dynamic, and we need to be prepared for it.⁴³

154. Kay Walls from freightliner commented on a previous scheme for a deep water port at Hunterston and that its concept was “that vessels would come from the States and the far east, meet each other and swap cargo.” Ms Walls said that containers could also be landed on the quay, adding:

” Why do something like 80 per cent of the goods that come into Southampton go north of Birmingham? The Hunterston scheme would have helped with that. I always suggest that the UK is like a football field with goalposts at one end. Why is everything going one way? Hunterston would have transformed rail.⁴⁴

155. Nevertheless, the general view was that Scotland does not have sufficient demand for such large vessels and therefore there is a risk that they may not call at Scottish ports even if such a facility were available. For example, Ken Russell of the Russell Group said:

” The consumption of goods in the UK is population based. When someone brings a load of toothpaste into the country, it goes into the midlands and is disseminated from there, with Scotland getting a pallet. People will not put a container of toothpaste into Scotland to service middle England.⁴⁵

156. The Minister informed the Committee that “What we will not do is build a big white elephant in the hope that somebody comes and occupies it, trades with us and uses it.” Moreover:

” The Scottish Government will do whatever we can to support the commercial propositions that may come forward at Hunterston, Rosyth or Scapa Flow. All are identified in the various strategic documents and our agencies would give whatever support is required to progress them as appropriate. We would not lose the opportunity ... but, crucially, such propositions have to be operator led and private sector led.⁴⁶

157. There was, however, agreement that, whilst Scotland will remain a feeder destination, the growing size of feeders suggests that Scottish ports should be deep enough to accommodate such vessels. Comparisons were made to Teesport, which has expanded its operations to be able to handle 3,500 TEU vessels, has good rail links and is attracting tenants to develop warehousing within the port. Stein van Est from DFDS commented:

” If you were to copy the model of Teesport and put it somewhere on the east coast of Scotland, you would come close to something that is suitable for Scottish trade.⁴⁷

158. The Committee is alarmed at the apparent low levels of investment at some Scottish ports and was particularly concerned about the status of the Port of Grangemouth, particularly as it is Scotland's largest port by some margin. Some of Scotland's facilities appear to be falling behind its European counterparts, such as the Port of Gothenburg in Sweden, which the Committee visited as part of its work.

159. The Committee echoes the findings of the Economy, Energy and Tourism Committee that this results in an unnecessary increase in lorry loads of goods travelling south for onward shipment from ports in England, adding extra time and expense to Scottish exporters. As a net exporter, this is a concern both in the cost of moving goods and for the opportunity to reduce carbon emissions from goods travelling south by road. Whilst the Committee acknowledges that this is a private sector port and developments have to be operator led, it is of strategic importance to Scottish freight.

160. The Committee is concerned that Scotland may lose connectivity to major shipping routes if its feeder ports are not developed sufficiently, and recommends that the Scottish Government works with the port operators to ensure that measures are in place to “future proof” Scotland’s strategic container shipping links. It considers that a wider freight transport policy covering all freight transport modes, as recommended above, could set out strategic objectives in this regard. This may also go some way to help meet Scotland’s climate change targets.

161. The Committee recognises the potential for the deepwater sites Scapa Flow and Hunterston but equally recognises that such developments should be market led and as yet no operator has chosen to develop the ports. The Committee therefore recommends that the potential for ports in these locations might be considered as part of any freight transport policy.

162. Lack of competition for container handling facilities in the Forth has been raised as a problem for shipping lines, with potentially little incentive existing for the primary port operator to innovate or invest. The Committee heard evidence that it does not necessarily matter whether a port is publicly or privately operated, but whether it has competition. These views were echoed by the Minister, who commented that:

“...ports are largely in the private sector, so simply throwing Government money at them would not be the right approach. Complete nationalisation would probably not be the right approach either, because it would not address the basic issue of commercial viability.”⁴⁸

163. Again, comparisons were made in evidence to Teesport, which was privatised but has competition from neighbouring ports such as the Port of Tyne.

164. As a result of this lack of competition in the Forth, witnesses discussed whether incumbent operator Forth Ports was sufficiently incentivised to provide a high level of service to customers.

165. Charles Hammond from Forth Ports said that:

“At present our customers are very happy with the service that we provide.”⁴⁹

166. Stein van Est from DFDS was nevertheless critical of the level of service provided at Rosyth that caused them frequently to miss their four hour turnaround window, commenting: “If there were an alternative, we would easily switch to someone else straight away.”⁵⁰ Paul Barker from Unifeeder, which uses the container port at Grangemouth, was in agreement:

“...the level of investment is relative to the appetite of Forth Ports to meet demand. Competition is non-existent. ... We see the level of investment not being comparable with investment in other terminals.”⁵¹

167. These comments echo the findings of the Economy, Energy and Tourism Committee's report on Internationalising Scottish Business, where it was noted that delays and increased costs at the ports of Grangemouth and Rosyth operated by Forth Ports act as a constraint on Scottish trade. Andrew Malcolm from WH Malcolm said that:

“...during peak trading, the road-haulage industry is charging all its customers a premium for delays at Forth Ports, because the site is too congested for what it is trying to put through.”⁵²

168. The Committee agrees with the concerns of the Economy, Energy and Tourism Committee regarding an apparent lack of investment in the ports of Grangemouth and Rosyth, and that this lack of investment might in time limit operations and therefore result in fewer options for freight transport.

169. The Committee recommends that the Scottish Government explores ways of working with port operators to help encourage appropriate private investment to ensure these strategic international gateways meet the high standards of service required by their customers.

170. Many smaller ports also play an important role in the freight transport network, and some upgrade requirements were raised in evidence, from such ports as Scrabster to Oban to Leith. Whilst smaller ports handle lower cargo flows, their important role in the local economy can mean that they are well placed to establish new services in conjunction with local users. Small ports are also involved in strategically important timber traffic in the West of Scotland.

Sulphur Emission Control Area Regulations

171. As of 1 January 2015, the introduction of a Sulphur Emission Control Area (SECA) covering the Baltic Sea, the North Sea and the English Channel means that all vessels are obliged to reduce emissions to 0.1% sulphur. This can be done either by using low sulphur fuel or by installing “scrubbers” which clean the exhaust before it is released into the atmosphere. Abiding by these regulations will increase the costs of shipping in the North Sea, although this is currently somewhat balanced by the lower price of fuel in early 2015. There are concerns that increased shipping costs may move some freight onto road, and/or increase the costs of Scottish trade.

172. This policy was brought in at the global level by the International Maritime Organisation, therefore it was noted in evidence that neither national nor EU level will be able to address it directly. However, there is a role for EU funding as DFDS were able to obtain TEN-T funding towards the cost of installing scrubbers. The Committee heard that such installation costs between €3-7m.

173. Respondents agreed that the policy was introduced for a good purpose, even though they fear that the overall result might be more emissions due to some shippers using road rather than ferry. This would be particularly so in Scotland's case with lorries driving down to English ferry ports if the Rosyth-Zeebrugge service were discontinued due to increased operating costs as a result of SECA regulations.

Rosyth-Zeebrugge Ferry

174. The Rosyth-Zeebrugge ferry is of major strategic importance to Scotland but its future is in doubt due to competition from English ports, the SECA directive and issues regarding access and storage at Rosyth. DFDS reported that the service has been loss making since it started in 2008.⁵³
175. Respondents praised the role of the Scottish Government in stepping in to safeguard the immediate future of this strategic link. The Memorandum of Understanding with the Scottish Government and Forth Ports has been welcomed by stakeholders and will secure some investment in the port to allow double stacking on the weather deck. Respondents discussed potential solutions and the best way forward for the Scottish Government with regard to the future of this route. Derek Halden suggested that the most important aspect is to remove any uncertainty for the road haulage industry as to whether the link will remain:

” That uncertainty is the fatal flaw. Governments are always going to be there and, if a ferry service were Government backed, it would be like having a Government-backed bond. The Government would be a stakeholder in the operation of that ferry service, as a partner that shares in the risks and rewards. I would see that type of partnership as much more progressive than just saying, “Here’s your £5 million—go away and do what you can.”⁵⁴

176. As referred to earlier, concerns were raised in evidence regarding the frequency and timetabling of the service, as well as the quality of the service provided by Forth Ports at Rosyth. According to DFDS, departing one hour later required the vessel to make up this time by increasing the speed which leads to approximately €5,000 in additional fuel costs. DFDS also mentioned in oral evidence that they were very close to moving their service to Teesport and they would certainly use an alternative RoRo berth in the Forth if one existed.⁵⁵

177. The Committee supports the Scottish Government's efforts to maintain this vital service, but recognises the concerns raised in evidence of operational constraints as well as the ongoing threat of the service being discontinued.
178. The Committee therefore recommends a study into how the service can be secured in the long term, perhaps through a tendered franchise⁵⁶ or public-private partnership. Again, this might form part of an updated freight transport policy.

Inter-Islands Ferries

179. Western Isles ferry services are essential for retail deliveries (see next point) and for whisky producers. The written submission of the Scotch Whisky Association noted that "members have raised serious concerns regarding capacity on the ferries serving the islands particularly during the holiday season" and requested "more responsive ferry and freight services to the islands, in particular for Islay."⁵⁷
180. Some concerns were raised that Road Equivalent Tariff (RET) favours small vehicles at the expense of commercial vehicles (RET currently provides for small commercial vehicles under 6 metres in length). Justin Kirkhope from the Co-operative Group commented that:

” Road equivalent tariff is a step in the right direction. However, if it could be applied to freight and larger goods vehicles, even on a gradual scale, we would see that as an advantage.⁵⁸

181. On the eve of publishing this report, the Minister for Transport and Islands wrote to the Committee⁵⁹ to inform it of the publication of a report entitled *Research and Analysis of Options for Ferry Freight Fares*.⁶⁰ The report examined the existing freight fares structures in place across Scotland and consulted on options for future structures. The Minister went on to say that Transport Scotland will undertake further analysis to consider the favoured options for future freight fare structures and the "potential impacts on economic development and future sustainability of the islands."

182. The Committee welcomes the Scottish Government's commitment to study the potential impacts on its work on the economic development and future sustainability of the islands. Within this work, the Committee recommends that that Scottish Government include in its consideration the application of RET to freight vehicles over 6 metres in length.

Decommissioning Oil Rigs

183. The Committee heard in evidence about the economic rewards of access to work decommissioning oil rigs in the North Sea. Colin Parker from the port of Aberdeen estimated the value as between £30-40bn:

” If ports on the east coast of Scotland do not invest in that area, the work will drift away to Norway or further south in the United Kingdom.⁶¹

184. Whilst outwith its remit, the Committee draws this evidence to the attention of the Economy, Energy and Tourism Committee for its future work

Port Policy

185. The Committee received mixed responses from port operators regarding the need for a new or refreshed ports policy. Yet deficiencies were noted by port users in some areas, particularly related to a lack of competition. Unless appropriate levels of competition can be introduced, other ways could be considered to stimulate investment from port operators. For example, the Scottish Government could consider putting modal split targets on the ports (as is done in Rotterdam) in exchange for investment.

186. As stated previously, the Committee recognises the complexities surrounding the mixture of ownership models across Scottish ports and understands the role of the private sector in providing port facilities in Scotland. Despite this difficult landscape, the Committee recommends that Scotland needs a clear port policy to ensure that suitable facilities, investment and operational levels are provided to port users. This port policy should be developed as part of a comprehensive freight transport policy for Scotland covering all modes.

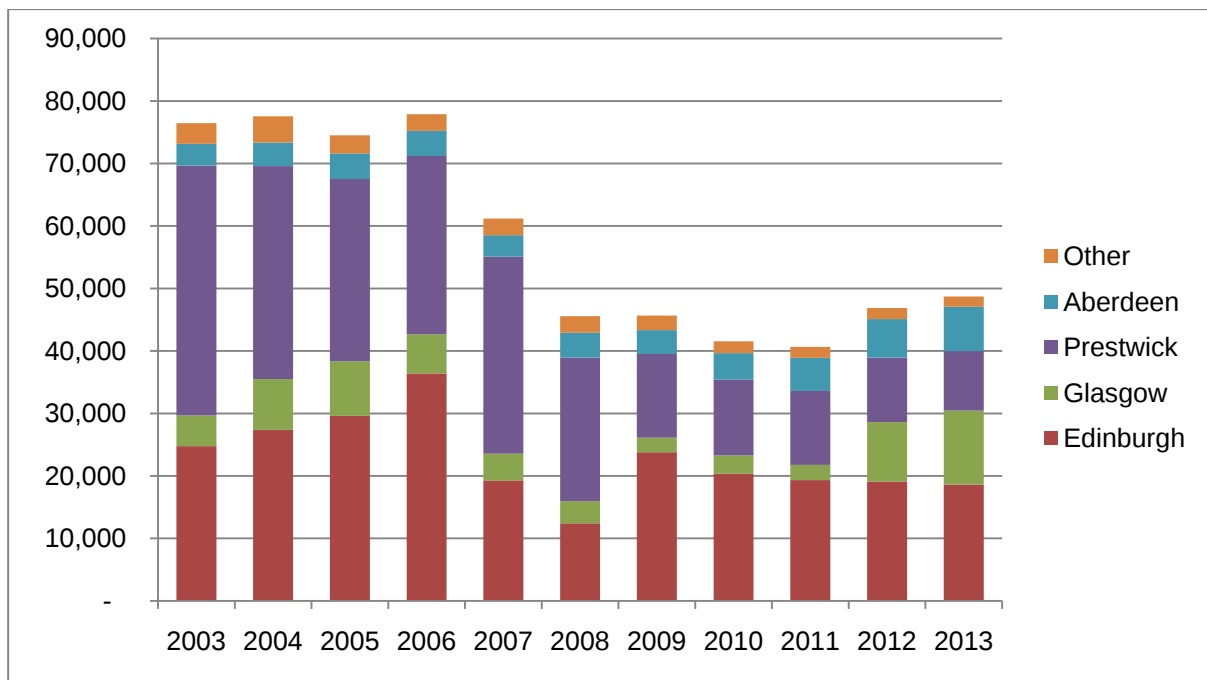
Air Freight

Introduction and Overview

187. Air freight is naturally suited to high value, low weight and time sensitive cargo. It is carried in dedicated freight aeroplanes as well as in the hold of passenger services.

188. In 2013, Scottish airports handled 48,712 tonnes of air cargo, a sharp drop in recent years. Figure 8 shows the share of each airport. The figure indicates the significant decline in the share of Prestwick in favour of Edinburgh, which is in large part due to the decline of the electronics sector as well as a rationalisation of provision in the industry and the rise of passenger services at Edinburgh airport.

Figure 8: Freight tonnage handled by Scottish airports 2013



Source: Civil Aviation Authority, 2014

Changes in Demand for Air Freight

189. Air freight received small coverage in the responses. The Committee heard that air freight in Scotland has dropped sharply, mainly as a result of the decline of the electronics sector. The remaining market has mostly moved from formerly dominant Prestwick to Edinburgh and Glasgow, as revealed in the statistics. The increased flows through Glasgow are in large part sustained by its twice-daily passenger service to Dubai.

190. Another significant change in the air freight market is the increased share of the mail category, which is another reason for the increased share taken by Edinburgh airport. Additionally, a significant share of Scotland's air freight goes by road to English airports and is thus not revealed in the statistics. According to the FTA's written submission: "Scotland's use of air freight is concentrated on road fed hub use of English air freight hub airports. Therefore the current deliberations over expanded airport capacity in the South East of England are as relevant to Scottish business as English."⁶²

191. Given the lack of response from the air freight sector to the enquiry, the Committee recommends that greater dialogue is needed with this sector to ensure that its needs are being met and that the Scottish Government can plan for its future needs and safeguard any strategic infrastructure required. It is suggested that such dialogue could be taken forward as part of the development of a wider freight transport policy.

Freight Grants and Funding

Introduction and Overview

192. Transport Scotland runs grant schemes to try to encourage the use of rail or water transport where appropriate. The three schemes, which help offset the extra costs associated with using sustainable rail and water transport to move goods, are:

- **Mode Shift Revenue Support Scheme:** Supports companies with the extra operating costs associated with moving freight by rail or inland waterways instead of road. £735,000 of awards (£715,000 for rail and £20,000 for inland waterways) were made by Transport Scotland in the last year. This funding is ongoing and is not based on a projected breakeven point.
- **Waterborne Freight Grant:** Assists companies with the extra operating costs associated with moving freight by water instead of road. The grant assists companies with coastal and short sea shipping costs for up to three years, at which point the route is expected to be economically feasible without subsidy. £960,000 was recently awarded to Boyd Brothers Haulage Ltd, Corpach, Fort William, to transport timber by sea and so remove approximately 6,300 HGV journeys.
- **Freight Facilities Grants:** Helps companies with the capital costs associated with moving freight by rail or water instead of road, by offsetting the extra costs of providing freight handling facilities. This funding is based on the identification of a specific road flow that will shift to rail or water as a result of the capital investment, and the amount of grant is linked to the environmental benefits achieved by the modal shift. No award has been made since 2011.

193. Awards made for freight traffic between England and Scotland are co-funded by Transport Scotland and the Department for Transport.

The application process

194. The Committee heard that freight operators remained enthusiastic about transferring freight flows from road to rail or water where they are the appropriate mode for a particular flow. In written and oral evidence, witnesses were pleased that modal shift grants were retained in Scotland (unlike England), but concerns were raised regarding the need to link funding to specific flows, as well as whether the operational realities of the sector (e.g. short contracts from customers) may explain why it remains underused (particularly Freight Facilities Grants). According to respondents, the application process is not in itself the cause of difficulty but it is the structure of the awards and eligibility that perhaps needs altering. John Paterson from the port of Montrose noted that they used a consultant in their application but the cost was worth it in order to secure the grant.⁶³

Reform of the grant system

195. It was felt that the current freight grants system is too inflexible to meet the operational realities of the sector, which is why it remains underused (particularly FFG). This is partly due to the inherent difficulties of the sector: long lead times, large upfront expenses, difficulty signing and maintaining contracts with shippers, etc. This relates also to the point raised in the rail section regarding the need for low wagons to overcome infrastructure limitations (lack of height clearance), but grants cannot support this because wagons are not considered as infrastructure for the purposes of current grant schemes. There would also apparently be a concern from funders that such wagons could also be used for other flows rather than the specific flow for which grant was secured. Operators have suggested that one option would be for the Scottish Government could to facilitate the purchase of wagons, link them to a specific route (e.g. Grangemouth to Aberdeen) and operate a pool whereby any operator with traffic on that route could lease the wagons.

196. Justin Kirkhope from the Co-operative Group, said on the merits of FFGs on moving freight from road to rail:

” We welcome anything that can make rail economical. We want to do the right thing and move freight on to rail but not at any expense, so anything that makes the playing field a little bit more level for road and rail must be welcomed. That may be facilities, but the definition of facilities is slightly too narrow, as it does not allow us to invest in things such as specialised containers and flat-bed skele trailers. The definition of facilities is a bit narrower than we would like.⁶⁴

197. Kay Walls from Freightliner commented on the relative merits of upgrading infrastructure on a gauge-restricted route compared to investing in a pool of low wagons:

” Some of the costs that were coming out from Network Rail to upgrade the route to W10 were huge. You have to consider whether sufficient business would be moved by rail on that route to justify the costs. That might well be the case in the future, but at that point it was not. It may be a better option to buy the special low-bed rail wagons and put them into a common pool for the use of any operator.⁶⁵

198. A second major limitation of the current FFG structure is that currently operating terminals needing investment cannot get grant unless they can identify a specific road flow that will shift to the terminal if a particular piece of infrastructure is provided. Ken Russell from JG Russell:

” Taking a case to Transport Scotland for a new terminal would be an easier process than going to it with a case to enhance a current terminal.⁶⁶

199. Open user terminals like Coatbridge require more broad investment that will benefit all users and lower times and costs and thus facilitate modal shift, rather than a specific flow.
200. In addition to modifying the existing grant system, some discussion took place during oral evidence of the potential to alter the system more radically. For example, public sector organisations (such as Local Authorities or Regional Transport Partnerships) could prepare and lead bids on behalf of a local project (e.g. in this case upgrading a common-user rail terminal) for specific pots of central funds on perhaps an annual basis. This system was used in recent years in the USA as part of their stimulus package (TIGER funding).

201. The Committee supports the grant scheme and believes that the Scottish Government was right to maintain it despite it being discontinued in England and Wales. However, the Committee recognises the difficulties raised in evidence, and recommends that the Scottish Government considers whether the current FFG system has already secured the “low hanging fruit” of capital spend for modal shift of specific flows, and examines the potential benefits of reforming the grant eligibility and application process to achieve benefits for the wider network.

Urban Freight

Introduction and Overview

202. Whilst urban freight does not constitute a mode in itself, its specific requirements and its increasing prominence in the industry agenda suggest the need for separate treatment in the inquiry report. The Committee heard that trends such as e-shopping, home delivery, the changing nature of high streets and the use of electric vehicles for urban deliveries are some new trends that can be expected to shape approaches to urban freight in future policy and planning decisions. The Committee heard from Dr Maja Piecyk of other challenges such as failed deliveries that need to be repeated and therefore increase the number of trips:

” That affects not only business-to-customer deliveries but business-to-business deliveries, including to retail units. There are also the consequences of the changing character of UK high streets.⁶⁷

203. The Committee also heard in evidence that urban HGV deliveries can be less efficient due to small stores and access constraints. A large store outside of town can take deliveries from a full container, whereas urban stores may need to be served by van, or even if it is served by lorries, ground level rather than bay access requires the use of lorries with tail lifts to bring each pallet down to ground level, adding additional time and hence cost.

Consolidation Centres

204. The topic of consolidation centres was raised numerous times throughout the written and oral evidence. The potential for reducing emissions in urban centres by consolidating deliveries there and delivering by (potentially electric) vans or bikes is recognised, but it appears that industry has been reluctant to come forward with a concrete proposal.

205. In Scotland, Regional Transport Partnership TACTRAN had a scheme ready to approve but they were unable to find an operator, partly due to difficulties getting private operators to collaborate. According to Michael Cairns from TACTRAN:

” Collaboration really has to be led by the public sector. Freight is a very competitive business. As we found from our experience of trying to develop consolidation centres in Perth and Dundee, the private sector is very protective of its own market. We have been through an exercise in which we went out to tender to try to identify a logistics operator to set up a consolidation centre in Perth, but that ultimately failed. That is not an uncommon experience.⁶⁸

206. The Committee was very interested in learning more about what might be involved in the development and operation of consolidation centres, which led it to visit the Binnenstadservice in the Netherlands. The Committee members who participated in the visit were very impressed by its founder, Birgit Hendriks, and how she developed the service in her home town of Nijmegen. However, it was only by expanding the service across the Netherlands which allowed her to set up agreements with the major freight carriers, who had previously been unwilling to provide a service to a smaller scale operator. The Binnenstadservice also received some start up subsidies from local and national governments.

207. The service has since successfully reduced the number of freight movements within the cities which in turn has seen improvements in air quality, safety and accessibility in the connected cities.



Image: David Stewart MSP, James Dornan MSP and Birgit Hendriks at the Binnenstadservice's facilities in Nijmegen

208. Professor Alan MacKinnon also mentioned in evidence planning difficulties in locating suitable properties to allow conversion into consolidation centres.⁶⁹
209. The Committee is aware that the development of consolidation centres is challenging, with considerable operational and planning barriers. However the Committee, seeing the Netherlands' example of how such centres can work and the associated financial, environmental and social benefits that can result from this, considers that there is merit in pursuing this work. Whilst appreciating that start-up funding is unlikely, the Committee sees the need for public sector involvement in establishing such schemes. This could, for example, involve the Scottish Government, local authorities or regional transport partners acting as 'honest brokers' in any discussions.

210. As well as following the work of TACTRAN with interest, the Committee recommends that the Scottish Government and its transport partners explore the potential for consolidation centres in Scottish cities and to identify what is needed to bring them about.

211. The Committee also heard about the use of electric vans and even cargo bicycles for last mile delivery of urban freight. According to Alex Macaulay of SEStran:

” It is a difficult nut to crack. Local authority policies have been very restrictive in relation to freight in urban areas, by quite rightly giving priority to pedestrians, cyclists and public transport. Freight is down the pecking order and ’twas ever thus. The last mile is difficult and local and regional authorities have the potential to take a much more proactive role in addressing the issue.⁷⁰

212. The Committee recommends that the Scottish Government explore opportunities for increasing the use of electric vans, cargo bikes and other forms of sustainable transport for last mile deliveries in Scottish towns and cities and to identify what is needed to encourage an increase in such vehicles.

Night Time Deliveries

213. The Committee heard of the success of night time deliveries that received special permission to operate during the Commonwealth Games in Glasgow. Martin Reid from the RHA commented that:

” The way in which everyone worked together and pulled together during the Commonwealth games meant that, during the entire period of the games, we did not take one negative phone call from a haulier saying that they could not get access, that they were stuck in traffic or that a road was closed. That was because of the joined-up nature of the organisation. Sadly, that was a one-off, rather than the norm.⁷¹

214. Chris MacRae from the FTA said that such a scheme “warrants being looked at further across the other Scottish cities.”⁷² As trucks are generally quieter now than in the past, some objections relating to noise may potentially be overcome, but changing zoning regulations may prove difficult.

215. Trials of such work have also taken place in other parts of the UK. Justin Kirkhope from the Co-operative Group, spoke of its work with local authorities in London to expand the number of hours available in which it can deliver to its stores. This followed the “relative success” of a trial during the London 2012 Olympics. Now operating in 66 stores across the Capital, it considered that a “positive and sustained dialogue with local authorities was key to the success of the initiative”. The Co-operative Group believe this change in timing has led to more reliable deliveries; reduced traffic congestion; and the ability to re-use its vehicle fleet leading to improved efficiency.⁷³

216. Given the success around the Commonwealth Games, the Committee recommends that the Scottish Government explore the opportunities and challenges of allowing night time deliveries in more urban areas.

Environment and Emissions

Introduction and Overview

217. The Scottish Government has set very challenging emissions reduction targets. The Committee recognises that the freight transport sector has a significant role to play in contributing towards the country meeting those targets. The Committee are pleased to learn that the freight transport intensity of the Scottish economy (the relation between GDP and freight kms) is falling, indicating a decoupling of economic growth and transport requirement. Whilst a decrease in the overall tonne-km of freight transport is one way to reduce emissions, the Scottish Government remains committed to encouraging modal shift from road to rail and water where appropriate, as well as to decreasing the emissions of all sectors.

Industry Structure

218. Imbalance of freight flows into and out of Scotland means there will always be a significant amount of empty running of lorries (around 30-33% according to Martin Reid from the FHA⁷⁴). The movement of empty maritime containers caused by the use of deepsea containers for Scottish whisky exports by rail and water as well as the use of different equipment (lorries or domestic containers) for import flows overland into Scotland also causes an imbalance. In research by Monios and Wang (2014),⁷⁵ it was found that between 2006 and 2011, loaded containers inbound to Grangemouth fell by almost 43,000 TEU, whilst the number of empty containers inbound rose by an almost equivalent 40,000 TEU. Thus a reduction in containerised imports has resulted in a lack of empty containers for exporters to use.
219. During its various visits the Committee learned that a lack of containers can be particularly prevalent during particular times of year. For example, whisky exports in the months leading up to Christmas and the export of seed potatoes during the main harvesting months.

Modal Shift

220. The oral evidence supported the need to recognise the strengths and contributions of all modes and to select the appropriate mode for each journey rather than privilege one mode over another.
221. The Committee heard in evidence that modal shift to achieve environmental benefit is difficult due to the inherent structure of the industry (e.g. short distances, need for interchange, need for primary and secondary distribution and part loads). As a consequence, there is a limit to how much freight can be shifted from road to other modes, as reflected in the relatively stable modal split statistics. In the meantime, decarbonising road freight should remain an ongoing priority, as discussed in the road freight section.

222. The Committee heard that the FTA runs the Logistics Carbon Reduction Scheme to support members working to reduce their emissions, including annual awards for fuel-efficient operators.⁷⁶ Professor Alan McKinnon noted in evidence that the UK was possibly the first country in the world to develop a freight best practice scheme (developed in the 1990s) but government support was discontinued (it is now maintained by the FTA through their Mode Shift Centre).⁷⁷
223. Revision of the freight grants system (as discussed in other sections) is another way to move beyond the existing modal shift achievements and unlock new flows.

Technology

224. Whilst modal shift is necessary and to be encouraged, the Committee heard in evidence that technology has a large role to play in reducing emissions, in rail and water but also on road, which will always handle the majority of freight in Scotland. During its recent scrutiny of the draft budget, the Committee heard evidence about how new technology, such as electric vehicles and innovative transport information systems, might help to reduce Scotland's carbon footprint.
225. The written evidence suggested that electrification of more rail routes is required to reduce the use of diesel-powered locomotives and hence reduce emissions from the rail freight sector. The committee also discussed the use of 50 foot containers as part of the government's 10-year trial of LSTs (longer semi-trailers) on the road (as opposed to 45 foot). These containers can also fit on existing rail wagons, thus increasing the efficiency of both modes.
226. The road haulage industry has been upgrading vehicles in line with Euro standards to be less polluting and quieter.

227. Given the need to reduce greenhouse emissions, it is clear that a combination of modal shift and the development of new technology is essential in minimising carbon emissions. Whilst the Committee acknowledges the need for all those involved in freight transport to contribute to this reduction in emissions, it recommends that this should be a prevailing theme in an updated freight transport policy.

Government Support, Policy and Planning

Introduction and Overview

228. The *Freight Action Plan*, published by the then Scottish Executive in 2006, was the last freight-dedicated policy published in Scotland, as an adjunct to the *National Transport Strategy*, also published in 2006. The aims of the freight policy were broken down into five elements:

To enhance Scotland's Competitiveness:

- Balancing freight and non-freight requirements in transport investment
- Minimising the negative impact of rising transport costs
- Continued business developments in the freight and logistics sector

To support the development of the freight Industry in Scotland:

- Enhancing the skills and professional image in freight and logistics
- Enabling the Scottish freight industry to compete effectively in the European market

To maintain and improve the Accessibility of rural and remote areas:

- Targeting improvements to road and rail infrastructure
- Integrating freight considerations into the provision of lifeline ferry and air services
- Addressing the transport needs of rural businesses and industry

To minimise the adverse impact of freight movements on the Environment in particular through the reduction in emissions and noise:

- Promoting modal shift to rail and shipping
- Improving efficiency and sustainability of road transport

To ensure freight transport policy Integration:

- Co-ordinating with other policy areas - such as energy policy, land use, waste disposal, and regional transport strategies - and between public agencies
- Co-ordinating freight policy with other UK regions

229. The findings of the inquiry clearly indicate that many of these challenges are ongoing. Therefore, whilst in some cases no specific change in policy is required, there are some areas where policy instruments could be updated to reflect changing trends and needs across the industry.

Need for a new freight transport policy

230. Some respondents suggested a need for a new updated freight policy for Scotland (it being nine years since the last one). The rail sector demonstrated high interest in a new rail freight strategy, which should include the safeguarding of strategic terminal sites. David Spaven of the Rail Freight Group said:

” I think that an update is needed because the industry is very dynamic, as you have heard, and there have been changing external factors. A new rail freight strategy is being developed in conjunction with Transport Scotland, so that should be part of that wider holistic perspective. It is terribly important that everything is looked at in a fair and equal way that recognises the strengths and weaknesses of the different modes and how they could work holistically.⁷⁸

231. As noted by David Spaven above, the Committee is aware that Transport Scotland is already engaging with stakeholders and moving towards a refresh of their rail freight policy, for which this inquiry report will serve as an input.
232. The Minister also noted his intention to refresh the National Transport Strategy, if not the full national policy:

” I talked about refreshing the national transport strategy and the rail freight policy because some elements have changed. ... I am not convinced that we need a new overarching policy, although we may require further refinement, perhaps along the lines of what the committee recommends.⁷⁹

233. It is clear from the variety of issues raised during the inquiry that the freight transport sector could benefit from clear guidance to enable future planning, even whilst recognising the appropriate role for the Scottish Government within the mix of public and private organisations that together constitute the freight sector. Whilst there may be an argument that a full transport policy is not required and simply a refresh of the strategies to achieve those policies would be sufficient, the Committee believes that a clear and up-to-date policy statement underpins any strategic planning.
234. The Committee heard in evidence that the Scottish Government maintains strong links with industry through fora such as the Scottish Freight and Logistics Advisory Group (ScotFLAG).⁸⁰ A multi-modal sub-group of ScotFLAG has been set up to examine the relationships between freight and strategic planning. Therefore, enthusiasm for a refreshed freight transport policy does not derive from concerns that the Scottish Government has not engaged with the freight sector. Rather, the changing needs of the sector suggest that some policy instruments require

adjustments to keep pace with these trends. This inquiry has sought to identify these trends as a precursor to suggesting appropriate actions for addressing them.

235. One particular industry trend that needs to be addressed in any new policy, the Committee heard, was the topic of resilience in the face of a variety of threats to the transport system, such as extreme weather events, accidents or terrorism. If a major transport hub such as a port or rail terminal were shut down for days or weeks, the impact on the Scottish logistics sector and hence economy could be significant.
236. The Committee also heard that freight transport is not sufficient as a focus; the Scottish Government should focus on logistics. Analysing logistics in Scotland would take a broader view and provide a more holistic approach to the wider issues and trends that drive demand for freight transport. Professor Alan McKinnon said:

” We could consider ways in which we could promote logistics as an industry sector. Because it is so diffuse and so many companies are engaged in logistics, we do not think of it as an industry in its own right. There are now several countries that produce a state of logistics report every year—the US, for example—looking at the state of the logistics sector and what can be done to support it.⁸¹

237. According to the 2014 Logistics Performance Index produced by the World Bank, the UK ranks 4th out of 160 countries (up from 10th in 2012) but figures do not exist for Scotland.⁸²
238. On freight policy, the Committee is pleased that regular dialogue is maintained between Scottish Government agencies and the freight sector, yet recognises the need for clear policy statements that give clarity and allow long-term planning and investment decisions to be made in the sector.

239. The Committee, therefore, recommends that a new freight transport policy for Scotland is developed and produced that addresses all modes, incorporating a strategy for delivery of the policy goals.

Use of the Planning System for Freight Transport

240. The Committee heard that the NPF3 was welcomed as a statement of the Scottish Government's strategic plans, yet some concerns were raised. The Committee heard in evidence that the lack of rail projects in the NPF3 is a source of concern to the sector and also relates to the wider unease regarding whether rail is treated as a major strategic mode in line with other modes. This is particularly notable since rail was mentioned even less in earlier iterations of the NPF3 document, but due to lobbying from industry and the support of this Committee, rail was

eventually included in the final document, albeit not as named national development sites. According to Anne MacKenzie from Network Rail:

” It mentioned the strategic importance of Grangemouth, Coatbridge and Mossend, but there were no specific projects to take the strategy forward. That is a missed opportunity for rail freight.⁸³

241. The Committee received requests in evidence that rail terminals be specifically included as national developments in the NPF4. For example, the Scottish Council for Development and Industry’s written submission stated:

” SCDI believes that, following appropriate analysis, NPF4 should recognise major rail freight developments including terminals as National Developments, as NPF3 has done with ports and harbours, in order to support these necessary developments, enable export growth and catalyse other investment.⁸⁴

242. Nevertheless, whilst respondents see the value in the NPF, the direct link between projects having been listed in the NPF1-3 (e.g. port developments) and the development actually going ahead are not always clear. There is some evidence that a clear mechanism to get a project developed might be required. Alex Macaulay from SEStran, whilst complimentary of the drive in Scotland for clear planning frameworks, suggested that greater efforts towards implementation are required.

243. The Committee recommends that the next NPF ensures that rail freight is treated as being of major strategic importance and that strategic rail hubs are given appropriate priority.

Financial Support from Government

244. As noted in previous sections, the Committee heard in evidence some suggestions for how the Freight Facilities Grant may be modified to meet current needs of the freight sector, particularly rail.

245. One issue raised in the oral evidence was a lack of information in the market, and the potential that government funding could be used for such a purpose. The Rail Freight Group noted in their written submission that:

” Much of the Scottish trunk rail network is designated part of the TEN-T (Trans European Network – Transport) network, but in practical terms this has facilitated very few rail infrastructure enhancement projects in Scotland.⁸⁵

246. There was also a feeling that Scotland could do more to assist Scottish organisations (both public and private) to obtain more EU funding, as other countries seem to be more successful than Scotland in doing so. This can cover

both specific infrastructure funds such as TEN-T and CEF or time-limited European initiatives (e.g. Interreg and Horizon 2020) funding research and demonstration projects. European projects sometimes require match funding, therefore there may be a case for the Scottish Government providing a fund for this purpose for which Scottish organisations could bid. According to Neil MacRae from HITRANS:

” It would be good to know that, as a practical mechanism, there was a pot of EU funding that people could apply to when the opportunity arose. Opportunities can arise at any time. We need that flexibility. We have been able to bring in significant external funding and we would like to do that in the future if possible.⁸⁶

247. Whilst the Committee appreciates restrictions around state aid, it calls on the Scottish Government to help maximise the drawdown of all available EU funding for freight transport projects.

248. A new policy development in England was raised in evidence, whereby the central government can “call in” control over local roads if they are considered last-mile connections to strategic ports or rail terminals. According to Chris MacRae of the FTA:

” A new policy development is that, where investment in last-mile infrastructure is required, central Government can take control of the funding and the delivery of such a project even though it is over a local authority network. In many cases, that is crucial for access to a container port, such as Teesport, in terms of port centric logistics and, in a Scottish context, access to a place such as the Freightliner intermodal terminal.⁸⁷

249. The FTA proposed that the Committee could investigate the potential of such a policy in Scotland to address some of the connecting road constraints raised during this inquiry.

250. The Committee recommends that the Scottish Government conduct research into the potential for applying a similar process in Scotland to allow local roads around freight facilities that are considered to be of strategic importance to benefit from improvements.

251. The introduction of an innovation fund was also raised in evidence. This could be used to develop new technology, particularly solutions to rail constraints that may facilitate modal shift such as the Non-Intrusive Crossover System (NICS) and the Freight Multiple Unit (FMU).

252. The Committee recommends that the Scottish Government, via ScotFLAG, explore the potential for such a fund.

Conclusion

253. Throughout the course of this inquiry, the Committee has heard of the vital importance of freight transport to the Scottish economy. The aim of this inquiry was to identify any obstacles to the continued sustainable growth of this strategic sector and to make recommendations to the Scottish Government to seek solutions for any of these constraints. The Committee, however, agrees with the Minister that:

” Many of the freight challenges identified by the inquiry cannot be addressed by Government investment in infrastructure alone. We have to recognise the commercial nature of the freight industry and the competition both within and across modes.⁸⁸

254. Future trends are also important, such as the rise of 3D printing and the trend towards “reshoring” of production away from the Far East. Such developments could potentially reshape global distribution and hence freight flows within Europe. Nevertheless, these trends are unlikely to affect the needs of the Scottish freight transport system, which will continue to require high quality links by all modes within Scotland, to and from the rest of the UK and connecting with the rest of the world.
255. Some specific infrastructure obstacles to the free flow of freight in Scotland were identified during the course of the inquiry..
256. From the road perspective, although respondents were very welcoming of the Scottish Government’s commitment of investment to several key programmes, a number of other strategic trunk roads were identified as in need of upgrades, although respondents understand that these projects are very expensive and need to be prioritised. The second key issue is local roads, which are the responsibility of local authorities who do not always prioritise the investment of significant sums, particularly in rural areas where a considerable network of basic, single-track roads, can constrain the efficiency of exports such as timber. Scotland’s high proportion of single track and rural roads remains a constraint on road freight. Finally, road access in the vicinity of key port and rail hubs was also raised as a significant issue limiting the freight system.
257. As regards rail, respondents stated that Scotland’s key rail routes linking shippers with deepsea English ports and Midlands DCs had been and are being upgraded, although not to the full W12 gauge as might be hoped, for instance to take wider refrigerated containers. The Committee heard that the UK, including Scotland, requires full European gauge, which would allow transport of all container types as

well as direct piggyback trains to the continent. Within Scotland, loading gauge restrictions exist from the central belt terminals to the Port of Grangemouth and from the central belt to the north. Similarly, more and longer passing loops or double track on sections of routes to the north of Scotland would increase the economic viability of these routes which are currently limited by the inability to run full length trains. The loading gauge issue already has a potential solution, by the funding of a pool of low wagons, but the freight grant system would need to be revised for this outcome to be achieved.

258. Terminal supply was considered sufficient, but some upgrades are required, particularly for the key hub at Coatbridge which needs a new layout and new cranes, and Mossend which needs longer tracks. Using rail into ports was also an issue, with the line into Grangemouth needing expansion and redesign and the potential to reopen the rail line to Cairnryan. Wider electrification is desirable but is an ongoing matter for Network Rail.
259. The Committee heard evidence that port capacity in Scotland in total is considered sufficient. Respondents generally agreed that Grangemouth and Greenock will remain feeder ports, but Grangemouth will need deepening to keep pace with the increase in feeder vessel depth, as well as requiring investment to modernise handling equipment. Deepsea ports in Scotland are unlikely to be used due to the centre of gravity for hub and spoke services being in the English Channel, but respondents agreed that the sites should be safeguarded. In non-unitised freight, expansion plans at the port of Aberdeen into neighbouring Nigg Bay is a major development, whilst offshore and decommissioning work remain future opportunities for Scottish ports. It is desirable to have competition in the Forth but the way to achieve this is unclear. A competing container port at Rosyth is on the drawing board, but it is up to the private sector to bring forward such a proposal if it is deemed commercially viable.
260. Policy and regulatory obstacles were also identified in the inquiry. Regarding road, regulatory issues relate to an increase in the speed limit for lorries and potential to expand the trial of longer heavier vehicles, which could also contribute to modal shift if used to feed intermodal terminals and ports. The potential for the Scottish Government to “call in” local roads of strategic importance could also be considered. Considering night time deliveries in urban areas might be a way forward, as well as potential support for public sector led consolidation centres. RET for lorries may be another area of interest. In rail, regulatory issues derive from the potentially increasing access charge from the ORR, whilst policy actions could relate to the need for a new rail freight policy, which the Committee understands is being developed by Transport Scotland.
261. Changes to FFG grants could also be considered to allow investment in a pool of low wagons and also to unlock investment for the open user terminal at Coatbridge which is Scotland’s key hub. Other funding may be necessary to pump prime a Scotland-continent channel tunnel service. Weight limits on the tunnel and on access routes could also be examined, although these may not be within the

remit of the Scottish Government. For ports, a way should be sought to incentivise better performance by Forth Ports in both container handling at Grangemouth and servicing Scotland's only continental ferry link at Rosyth. On a more general note, innovation funding for new technology or trials of new applications would be welcomed.

262. A key recommendation of the Committee is for the Scottish Government to consider the need for an urgently updated freight transport policy taking account of changing trends in the freight transport and wider logistics sectors, addressing all modes and considering transport within its wider logistics context. It is hoped that the results of this inquiry will provide both an impetus and an input to this endeavour.

263. During the process of developing its freight transport policy, the Committee asks that the Scottish Government give particular consideration to the specific road, rail and water freight issues highlighted in this report.

¹ Scottish Executive. (2006) [*The Freight Action Plan for Scotland. Preparing For Tomorrow, Delivering Today: Freight.*](#)

² Scottish Executive. (2006) [*Scotland's National Transport Strategy.*](#)

³ Road Haulage Association. Written submission.

⁴ [Infrastructure and Capital Investment Committee. Official Report, 22 April 2015, Col 11.](#)

⁵ Audit Scotland. (2013) [*Maintaining Scotland's roads: an audit update on councils' progress.*](#)

⁶ Minister for Transport and Islands. Written submission, 28 May 2015.

⁷ Minister for Transport and Islands. Written submission, 28 May 2015.

⁸ The Timber Transport Forum. Written submission.

⁹ [Infrastructure and Capital Investment Committee. Official Report, 4 February 2015, Col 8.](#)

¹⁰ [Infrastructure and Capital Investment Committee. Official Report, 4 February 2015, Col 45.](#)

¹¹ [Infrastructure and Capital Investment Committee. Official Report, 4 February 2015, Col 15.](#)

¹² [Infrastructure and Capital Investment Committee. Official Report, 4 February 2015, Col 15.](#)

¹³ [Infrastructure and Capital Investment Committee. Official Report, 1 April 2015, Col 6.](#)

¹⁴ [Infrastructure and Capital Investment Committee. Official Report, 4 February 2015, Col 16.](#)

¹⁵ [Infrastructure and Capital Investment Committee. Official Report, 29 April 2015, Col 9.](#)

¹⁶ Department of Transport. (2014) [*Impact Assessment: Raising the national speed limit for HGVs > 7.5t on single carriageway roads in England and Wales.*](#)

¹⁷ [Infrastructure and Capital Investment Committee. Official Report, 18 March 2015, Col 32.](#)

¹⁸ Minister for Transport and Islands. Written submission, 28 May 2015.

¹⁹ [Infrastructure and Capital Investment Committee. Official Report, 4 February 2015, Col 20.](#)

²⁰ Network Rail. Written submission.

²¹ Network Rail. Written submission.

²² [Infrastructure and Capital Investment Committee. Official Report, 1 April 2015, Cols 16-17.](#)

²³ [Infrastructure and Capital Investment Committee. Official Report, 22 April 2015, Col 33.](#)

²⁴ [Infrastructure and Capital Investment Committee. Official Report, 4 March 2015, Col 20.](#)

²⁵ [Infrastructure and Capital Investment Committee. Official Report, 4 February 2015, Col 20.](#)

²⁶ [Infrastructure and Capital Investment Committee. Official Report, 4 March 2015, Col 28.](#)

²⁷ [Infrastructure and Capital Investment Committee. Official Report, 4 March 2015, Col 12.](#)

²⁸ Minister for Transport and Islands. Written submission, 28 May 2015.

²⁹ [Infrastructure and Capital Investment Committee. Official Report, 4 March 2015, Col 19.](#)

³⁰ [Infrastructure and Capital Investment Committee. Official Report, 4 February 2015, Col 28.](#)

³¹ Scottish Council for Development and Industry. Written submission.

³² [Infrastructure and Capital Investment Committee. Official Report, 4 March 2015, Col 19.](#)

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- 33 [Infrastructure and Capital Investment Committee. *Official Report*, 4 February 2015, Col 21.](#)
- 34 [Infrastructure and Capital Investment Committee. *Official Report*, 22 April 2015, Cols 37-38.](#)
- 35 [Infrastructure and Capital Investment Committee. *Official Report*, 4 March 2015, Cols 25-26.](#)
- 36 [Infrastructure and Capital Investment Committee. *Official Report*, 4 March 2015, Col 11.](#)
- 37 [Transport Scotland. \(2015\) *Rail freight strategy refresh*.](#)
- 38 [Freight Transport Association. Written submission.](#)
- 39 [Professor Alfred Baird. Written submission.](#)
- 40 [Infrastructure and Capital Investment Committee. *Official Report*, 18 March 2015, Col 28.](#)
- 41 [Infrastructure and Capital Investment Committee. *Official Report*, 25 February 2015, Col 19.](#)
- 42 [Economy, Energy and Tourism Committee. 5th Report, 2015 \(Session 4\). *Report on Internationalising Scottish Business* \(SP Paper 719\).](#)
- 43 [Infrastructure and Capital Investment Committee. *Official Report*, 22 April 2015, Col 21.](#)
- 44 [Infrastructure and Capital Investment Committee. *Official Report*, 4 March 2015, Col 38.](#)
- 45 [Infrastructure and Capital Investment Committee. *Official Report*, 4 March 2015, Col 39.](#)
- 46 [Infrastructure and Capital Investment Committee. *Official Report*, 29 April 2015, Col 19.](#)
- 47 [Infrastructure and Capital Investment Committee. *Official Report*, 1 April 2015, Col 20.](#)
- 48 [Infrastructure and Capital Investment Committee. *Official Report*, 29 April 2015, Col 20.](#)
- 49 [Infrastructure and Capital Investment Committee. *Official Report*, 25 February 2015, Col 12.](#)
- 50 [Infrastructure and Capital Investment Committee. *Official Report*, 1 April 2015, Col 8.](#)
- 51 [Infrastructure and Capital Investment Committee. *Official Report*, 1 April 2015, Col 8.](#)
- 52 [Infrastructure and Capital Investment Committee. *Official Report*, 4 March 2015, Cols 28-29.](#)
- 53 [Infrastructure and Capital Investment Committee. *Official Report*, 1 April 2015, Col 21.](#)
- 54 [Infrastructure and Capital Investment Committee. *Official Report*, 18 March 2015, Col 28.](#)
- 55 [Infrastructure and Capital Investment Committee. *Official Report*, 1 April 2015, Col 17.](#)
- 56 A tendered franchise might work in a similar fashion to a passenger rail franchise, whereby the Scottish Government specifies conditions such as vessel type, capacity, minimum frequency and timetable then runs a tender inviting bids from operators to provide this service, specifying how much it will cost. The amount of the subsidy required will be the difference between the revenue generated and the payment to the operator. Different revenue models may be considered, for example where increased revenues from good performance not only decrease the subsidy required but also benefit the operator.
- 57 [Scotch Whisky Association. Written submission.](#)
- 58 [Infrastructure and Capital Investment Committee. *Official Report*, 1 April 2015, Col 15.](#)
- 59 [Minister for Transport and Islands. Written submission, 22 June 2015.](#)
- 60 [Transport Scotland. \(2015\) *Research and Analysis of Options for Ferry Freight Fares*.](#)
- 61 [Infrastructure and Capital Investment Committee. *Official Report*, 25 February 2015, Col 16.](#)
- 62 [Freight Transport Association. Written submission.](#)
- 63 [Infrastructure and Capital Investment Committee. *Official Report*, 25 February 2015, Cols 28-29.](#)
- 64 [Infrastructure and Capital Investment Committee. *Official Report*, 1 April 2015, Col 26.](#)
- 65 [Infrastructure and Capital Investment Committee. *Official Report*, 4 March 2015, Col 26.](#)
- 66 [Infrastructure and Capital Investment Committee. *Official Report*, 4 March 2015, Col 28.](#)
- 67 [Infrastructure and Capital Investment Committee. *Official Report*, 18 March 2015, Col 12.](#)
- 68 [Infrastructure and Capital Investment Committee. *Official Report*, 22 April 2015, Cols 18-19.](#)
- 69 [Infrastructure and Capital Investment Committee. *Official Report*, 18 March 2015, Col 38.](#)
- 70 [Infrastructure and Capital Investment Committee. *Official Report*, 22 April 2015, Col 8.](#)
- 71 [Infrastructure and Capital Investment Committee. *Official Report*, 4 February 2015, Col 11.](#)
- 72 [Infrastructure and Capital Investment Committee. *Official Report*, 4 February 2015, Col 11.](#)
- 73 [The Co-operative Group. Supplementary written submission.](#)
- 74 [Infrastructure and Capital Investment Committee. *Official Report*, 4 February 2015, Col 35.](#)
- 75 [Monios, J and Wang, Y. \(2014\) *Empty container repositioning for Scottish shippers*.](#)
- 76 [Infrastructure and Capital Investment Committee. *Official Report*, 4 February 2015, Col 34.](#)
- 77 [Infrastructure and Capital Investment Committee. *Official Report*, 18 March 2015, Cols 20-21.](#)
- 78 [Infrastructure and Capital Investment Committee. *Official Report*, 4 February 2015, Col 38.](#)
- 79 [Infrastructure and Capital Investment Committee. *Official Report*, 29 April 2015, Col 27.](#)
- 80 [Infrastructure and Capital Investment Committee. *Official Report*, 29 April 2015, Col 8.](#)
- 81 [Infrastructure and Capital Investment Committee. *Official Report*, 18 March 2015, Col 40.](#)
- 82 [World Bank. \(2014\) *Connecting to Compete: Trade Logistics in the Global Economy*.](#)
- 83 [Infrastructure and Capital Investment Committee. *Official Report*, 22 April 2015, Col 38.](#)

⁸⁴ [Scottish Council for Development and Industry. Written submission.](#)

⁸⁵ [Rail Freight Group. Written submission.](#)

⁸⁶ [Infrastructure and Capital Investment Committee. *Official Report*, 22 April 2015, Col 16.](#)

⁸⁷ [Infrastructure and Capital Investment Committee. *Official Report*, 4 February 2015, Col 20.](#)

⁸⁸ [Infrastructure and Capital Investment Committee. *Official Report*, 29 April 2015, Col 8.](#)

Annexe A

Extracts from the minutes of the Infrastructure and Capital Investment Committee

26th Meeting, 2014 (Session 4), Wednesday 12 November 2014

1. Decision on taking business in private: The Committee agreed to take items 4 and 5 in private.

5. Freight transport in Scotland (in private): The Committee agreed its approach to the inquiry.

27th Meeting, 2014 (Session 4), Wednesday 26 November 2014

1. Decision on taking business in private: The Committee agreed to take items 3 and 4 in private.

3. Freight transport in Scotland (in private): The Committee considered and agreed a candidate for the post of inquiry adviser.

3rd Meeting, 2015 (Session 4), Wednesday 4 February 2015

Inquiry into freight transport in Scotland: The Committee took evidence from—

David Whitehead, Director, British Ports Association;
Chris MacRae, Head of Policy - Scotland, Freight Transport Association;
David Spaven, Scottish Representative, Rail Freight Group;
Martin Reid, Director - Scotland and Northern Ireland, Road Haulage Association.

5th Meeting, 2015 (Session 4), Wednesday 25 February 2015

Inquiry into freight transport in Scotland: The Committee took evidence from—

Charles Hammond, Chief Executive Officer, Forth Ports;
David McGinley, Director of Commercial Marine, Babcock International Group;
Colin Parker, Chief Executive, Aberdeen Harbour;
John Paterson, Chief Executive, Montrose Port Authority.

6th Meeting, 2015 (Session 4), Wednesday 4 March 2015

Inquiry into freight transport in Scotland: The Committee took evidence from—

Andrew Malcolm, Chief Executive Officer, The Malcolm Group;
Ken Russell, Strategy Director, The Russell Group;
Kay Walls, Commercial Manager Scotland, Freightliner.

7th Meeting, 2015 (Session 4), Wednesday 18 March 2015

Inquiry into freight transport in Scotland: The Committee took evidence from—

Derek Halden, Derek Halden Consultancy;
Professor Dr Alan McKinnon, Head of Logistics, Kühne Logistics University (Hamburg, Germany);
Dr Maja Piecyk, Deputy Director, Centre for Sustainable Road Freight, Heriot-Watt University.

8th Meeting, 2015 (Session 4), Wednesday 1 April 2015

Inquiry into freight transport in Scotland: The Committee took evidence from—

Paul Barker, Country Manager, Unifeeder;
Stein van Est, Managing Director, DFDS Seaways;
Justin Kirkhope, National Transport Support Manager, The Co-operative Group.

9th Meeting, 2015 (Session 4), Wednesday 22 April 2015

Inquiry into freight transport in Scotland: The Committee took evidence from—

Michael Cairns, Strategy Manager, Tactran;
Alex Macaulay, Director, SEStran;
Cllr James Stockan, Chair, and Neil MacRae, Partnership Manager, HITRANS;
Phil Matthews, Chair, Transform Scotland;
Anne MacKenzie, Senior Route Freight Manager, and Nigel Wunsch, Head of Strategy and Planning Scotland, Network Rail.

10th Meeting, 2015 (Session 4), Wednesday 29 April 2015

Inquiry into freight transport in Scotland: The Committee took evidence from—

Derek Mackay, Minister for Transport and Islands, Margaret Horn, Branch Head, Freight Policy and Inland Waterways, Steven McMahon, Head of Rail Strategy & Funding, and Chris Wilcock, Head of Ports and Harbours, Transport Scotland, Scottish Government.

11th Meeting, 2015 (Session 4), Wednesday 20 May 2015

Decision on taking business in private: The Committee agreed to consider its Stage 1 report on the Harbours (Scotland) Bill and its report on freight transport in Scotland, in private, at future meetings.

13th Meeting, 2015 (Session 4), Wednesday 10 June 2015

Inquiry into freight transport in Scotland (in private): The Committee considered a draft report on its inquiry into freight transport in Scotland and agreed to continue its consideration at its next meeting.

14th Meeting, 2015 (Session 4), Tuesday 16 June 2015

Inquiry into freight transport in Scotland (in private): The Committee considered a draft report on its inquiry into freight transport in Scotland. Various changes were suggested and the Committee agreed to consider a revised draft at its meeting on Wednesday 24 June.

16th Meeting, 2015 (Session 4), Wednesday 24 June 2015

Inquiry into freight transport in Scotland (in private): The Committee considered a revised draft report on its inquiry into freight transport in Scotland. Various changes were agreed to, and the report was agreed for publication.

Annexe B

List of written evidence

-  [Alfred Baird, Professor](#)
-  [Alfred Baird, Professor – Supplementary Submission](#)
-  [Ayrshire Roads Alliance](#)
-  [British Ports Association – Scottish Ports Committee](#)
-  [Chartered Institute of Logistics and Transport](#)
-  [Chartered Institution of Highways and Transportation](#)
-  [Citizens Advice Scotland](#)
-  [The Co-operative Group](#)
-  [The Co-operative Group – Supplementary Submission](#)
-  [Cycling Scotland](#)
-  [Derek Halden Consultancy](#)
-  [Dumfries and Galloway Council and the South West of Scotland Transport Partnership](#)
-  [Falkirk Council](#)
-  [Forth Ports Limited](#)
-  [Freight Transport Association](#)
-  [Friends of the Far North Line](#)
-  [Highlands and Islands Transport Partnership](#)
-  [Joint Regional Transport Partnership Chairs Forum](#)
-  [Network Rail](#)
-  [North Ayrshire Council](#)
-  [North East of Scotland Partnership](#)
-  [Rail Freight Group](#)
-  [Rail Freight Group – Supplementary Submission](#)
-  [Road Haulage Association](#)
-  [Samskip](#)
-  [Scotch Whisky Association](#)
-  [Scottish Council for Development and Industry](#)
-  [Scottish Government](#)
-  [SEStran](#)
-  [South Lanarkshire Council](#)
-  [Spokes](#)
-  [Strathclyde Partnership for Transport](#)
-  [Tim Lowry](#)
-  [Timber Transport Forum](#)
-  [WH Malcolm](#)

