Port Freight Statistics

Statistical Release

September 2013

FURTHER INFORMATION

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Port Freight Statistics: 2012 Final Figures

The importance of shipping and trade to the economy of the UK, an island nation, has resulted in the establishment of a large number of ports around the coast, which are very diverse in terms of size and type of cargo handled.

This statistical release provides information on trends and patterns in the handling of freight traffic at UK sea ports. It summarises the final 2012 figures, updating provisional figures which were published in June.

The key findings for 2012 are:

Port Freight Traffic (tonnage)

- **Total freight traffic fell** by 4 per cent to 500.9 million tonnes, returning to the same level seen after the economic downturn despite the growth in traffic seen between 2009 and 2011.
- The fall in UK major port traffic was mainly as a result of the decline in liquid bulk subcategories- **liquefied gases and crude oil** which, when combined, **fell by 16.2 million tonnes**.
- **Domestic traffic** (coastwise and one-port traffic) within all UK ports **fell for the seventh consecutive year** to 107.8 million tonnes, the lowest level on record.

Unitised Traffic at Major Ports

- **Unitised traffic** handled by UK major ports fell for the second consecutive year to **20.8 million units**.
- The number of **main freight units** handled by UK major ports fell for the second consecutive year to **11.6 million units** (56 per cent of all unitised traffic).
- The number of **trade vehicles continued to grow**, with 3.5 million units handled at UK major ports.

Section 1: Port Freight Traffic (tonnage)

1. All UK Ports

1.1 Summary

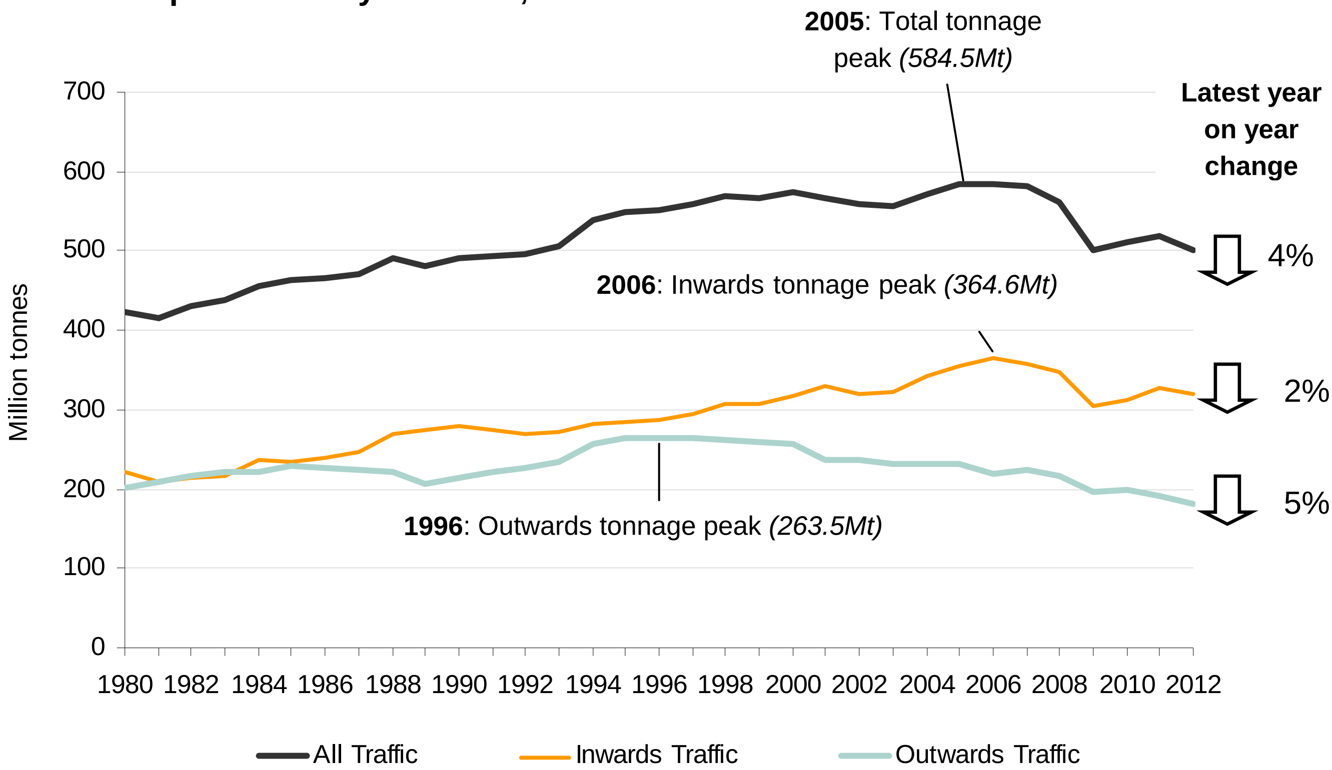
Between the early 1980s and 2000 the **total amount of freight traffic** steadily increased, rising by 35 per cent over this period. The **2008 recession** resulted in the **largest year on year decline** seen in the last 30 years, falling by 11 per cent from 2008 to 2009. Total freight traffic fell by 4 per cent to **500.9 million tonnes in 2012**, returning to the **same level seen after the economic downturn** despite the growth in traffic seen between 2009 and 2011.

1.2 Inwards/ Outwards Tonnage

Inwards traffic fell to **319.5 million tonnes**, 64 per cent of all traffic in 2012. Although inwards traffic has consistently held a majority of all traffic, the **share has grown in recent years** as a result of the increase in imports and decrease in exports.

The amount of **outwards freight traffic** grew in the early 1990s, with a 23 per cent increase between 1990 and 1996 and remained stable until 1998. Since 1998 outwards traffic has steadily declined, with the **lowest level** of outward traffic in the **last 30 years** seen in 2012 (181.4 million tonnes).

Chart 1: UK port traffic by direction, 1980 – 2012



1.3 Freight Tonnage by Port

Grimsby & Immingham, the UK's busiest port in terms of tonnage, handled **12 per cent of the total** tonnage in 2012. Grimsby & Immingham overtook London as the busiest port in 2000 and has remained in this position since.

Figure 1: Top 10 busiest ports in 2012

Million tonnes

Port	2011	2012	*Percentage change*
Grimsby & Immingham	57.2	60.1	↑ *5%*
London	48.8	43.7	↓ *10%*
Milford Haven	48.7	39.8	↓ *18%*
Southampton	37.9	38.1	↑ *1%*
Tees and Hartlepool	35.2	34.0	↓ *3%*
Liverpool	32.7	32.9	↑ *1%*
Felixstowe	26.8	26.3	↓ *2%*
Forth	27.9	25.3	↓ *9%*
Dover	24.3	22.9	↓ *6%*
Clyde	13.4	15.4	↑ *15%*
Belfast	13.6	15.2	↑ *12%*

2. Freight Tonnage by Cargo Type (Major Ports)

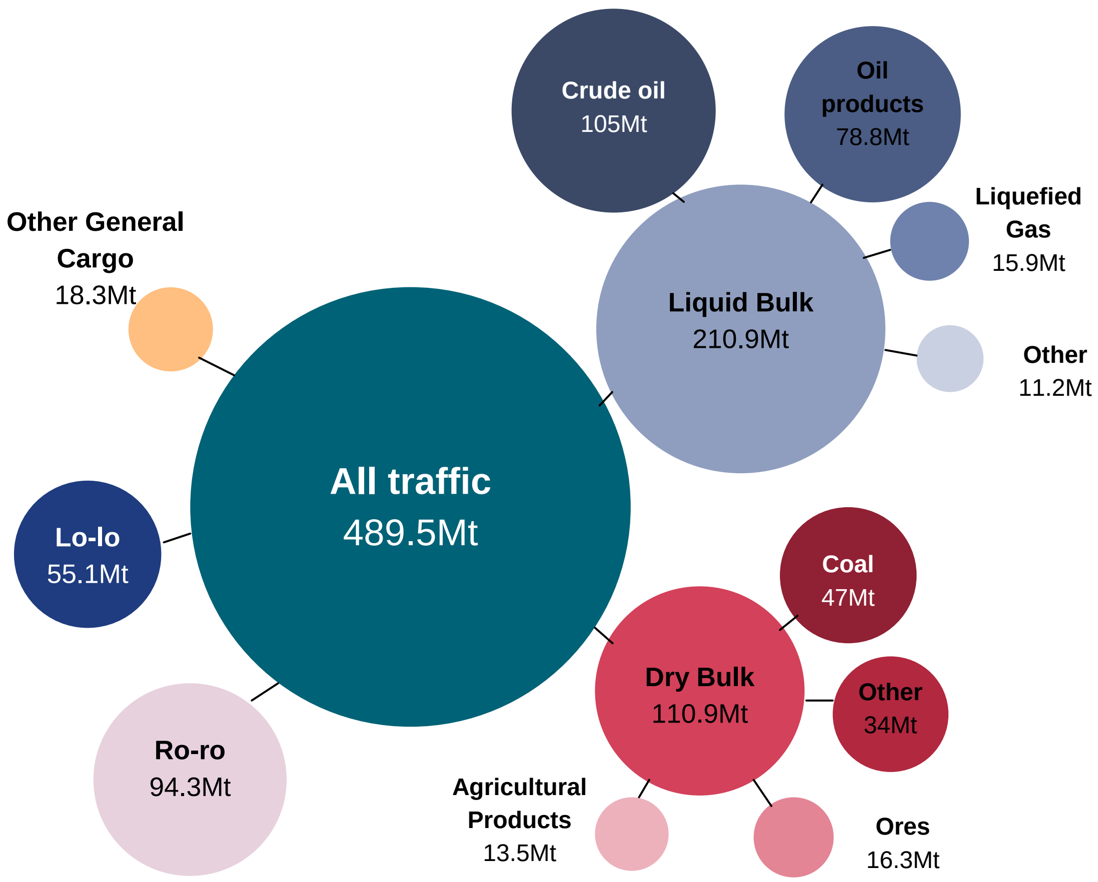
In 2012 there were 110 active commercial ports in the UK. However the 51 active **major** ports handled **98 per cent** of the overall traffic, and it is for these major ports that we have a breakdown of cargo information.

2.1 Cargo Type Summary

In 2012, 489.5 million tonnes of traffic was handled at UK major ports. This can be broken down into **5 main cargo categories**; liquid bulk, dry bulk, ro-ro traffic, lo-lo traffic and other general cargo. **Liquid bulk** was the largest cargo category, accounting for 43 per cent of all traffic. The main categories are then divided into subcategories, with **crude oil the largest subcategory** of liquid bulk and coal the largest subcategory of dry bulk.

Chart 2: UK major port traffic by cargo type, 2012

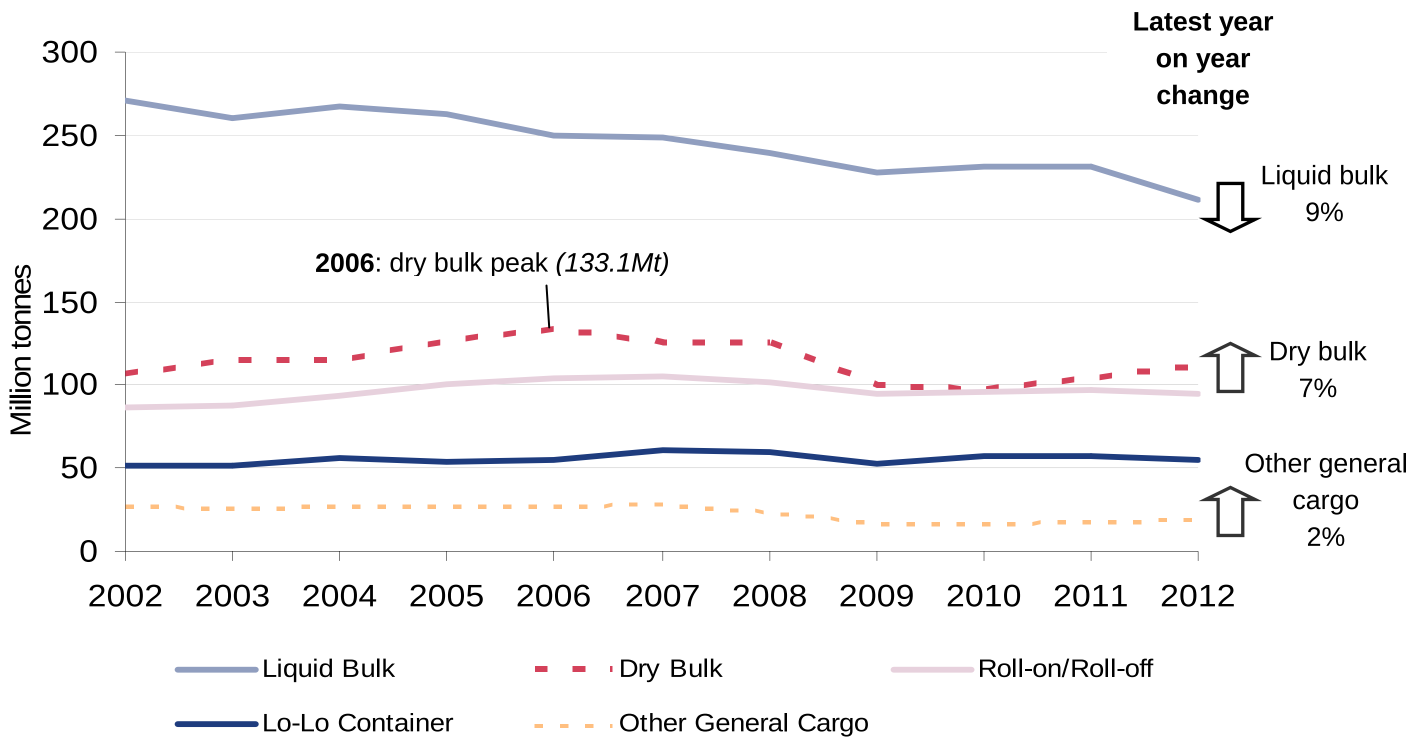
Mt – Million tonnes



2.2 Cargo Category Trend

Although liquid bulk remained the most common commodity handled at the UK's major ports, the proportion of liquid bulk has been falling over the last decade, with levels now 22 per cent lower than in 2002. The **fall in UK major port traffic** was as a result of the decline in liquid bulk subcategories- **liquefied gases and crude oil** which, when combined, **fell by 16.2 million tonnes**. Therefore, despite an increase of 10.1 million tonnes in the dry bulk subcategory coal, total UK major port traffic fell by 17.5 million tonnes.

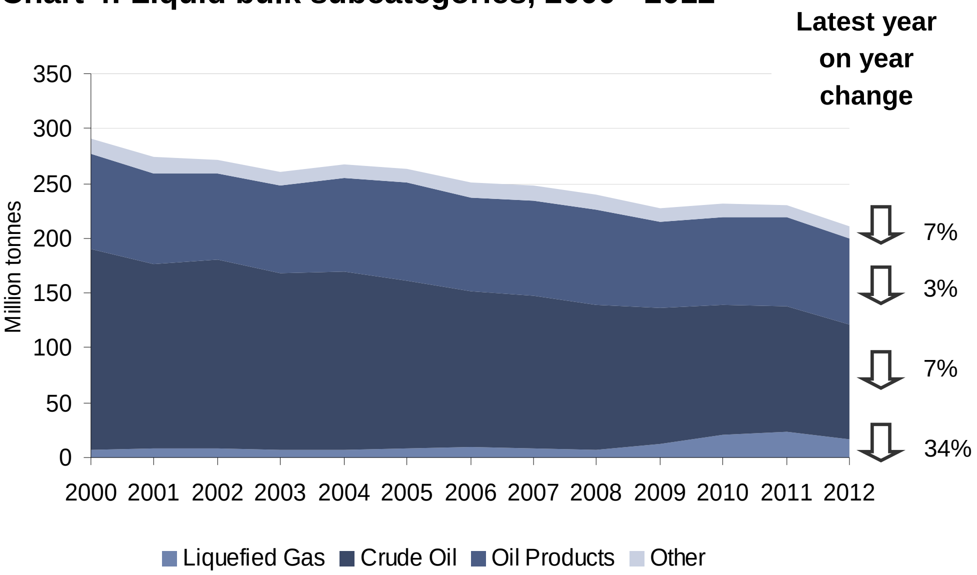
Chart 3: Major port traffic by cargo type (tonnage), 2002 to 2012



2.3 Cargo Subcategories Trend

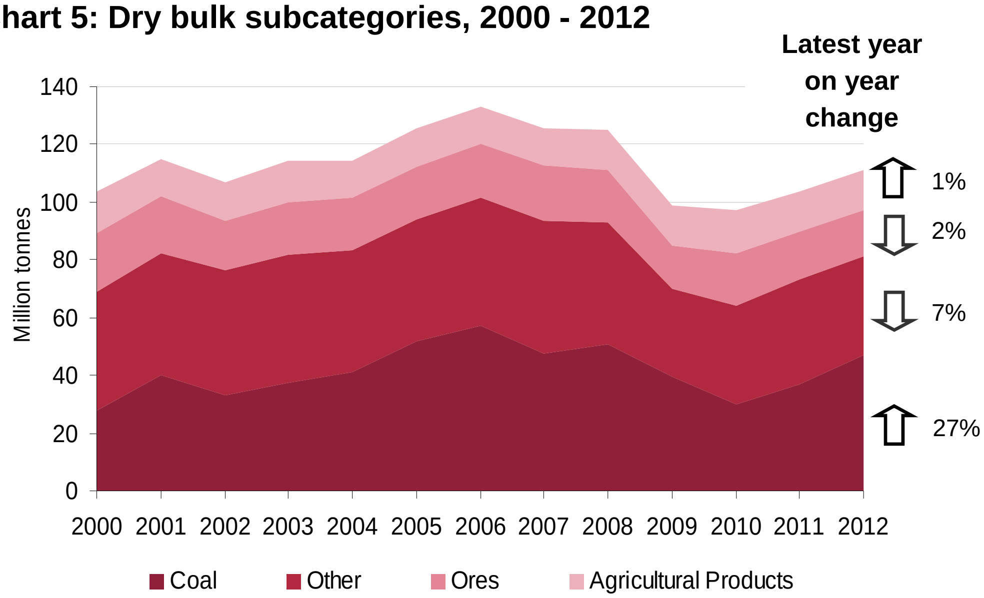
Despite the **27 per cent increase in coal** in 2012, bulk fuels as a total (liquid and dry bulk) fell by 9 per cent as a result of the reduction in liquefied gas and crude oil.

Chart 4: Liquid bulk subcategories, 2000 - 2012



Liquefied gas saw the **largest year on year decline** of any cargo subcategory, falling by 8.2 million tonnes. Crude oil followed with a loss of 8 million tonnes.

Chart 5: Dry bulk subcategories, 2000 - 2012



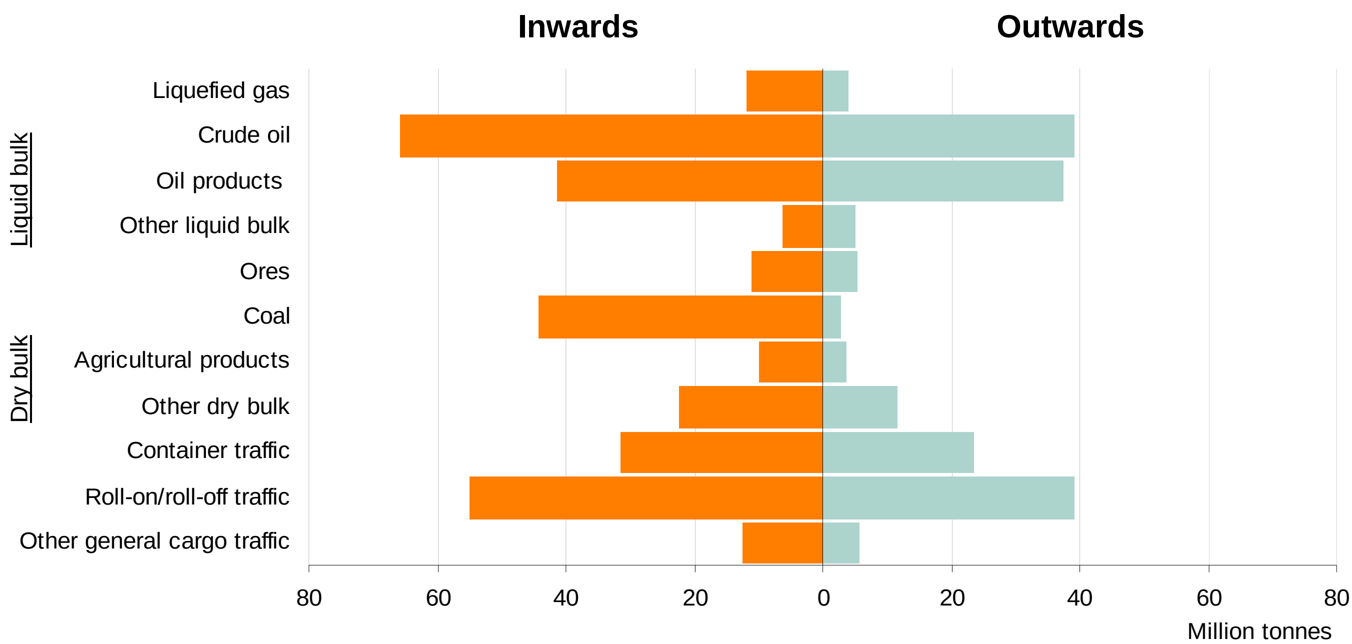
Between 2010 and 2011 coal traffic increased by 24 per cent, and overtook other dry bulk as the largest subcategory. This growth continued in 2012, with **47 million tonnes of coal** handled.

2.4 Cargo Type by Direction

In each direction broadly equal amounts of oil products were handled by UK major ports in 2012, with 41.4 million tonnes travelling in to UK ports compared to 37.4 million tonnes travelling outwards from UK ports. This is in comparison to **coal**, where the majority at **94 per cent** (44.3 million tonnes) travelled **inwards** (see Chart 6).

Transportation of **crude oil out of** UK major ports has seen a **58 per cent decline over the last decade** and, in 2012, outwards crude oil traffic declined for the fifth consecutive year to 39.2 million tonnes.

Chart 6: Cargo subcategory by direction, 2012



2.5 Port by Cargo Type

Milford Haven overtook Tees & Hartlepool as the busiest port for liquid bulk traffic in 2007 and has remained in this position since, handling 19 per cent of liquid bulk traffic in 2012.

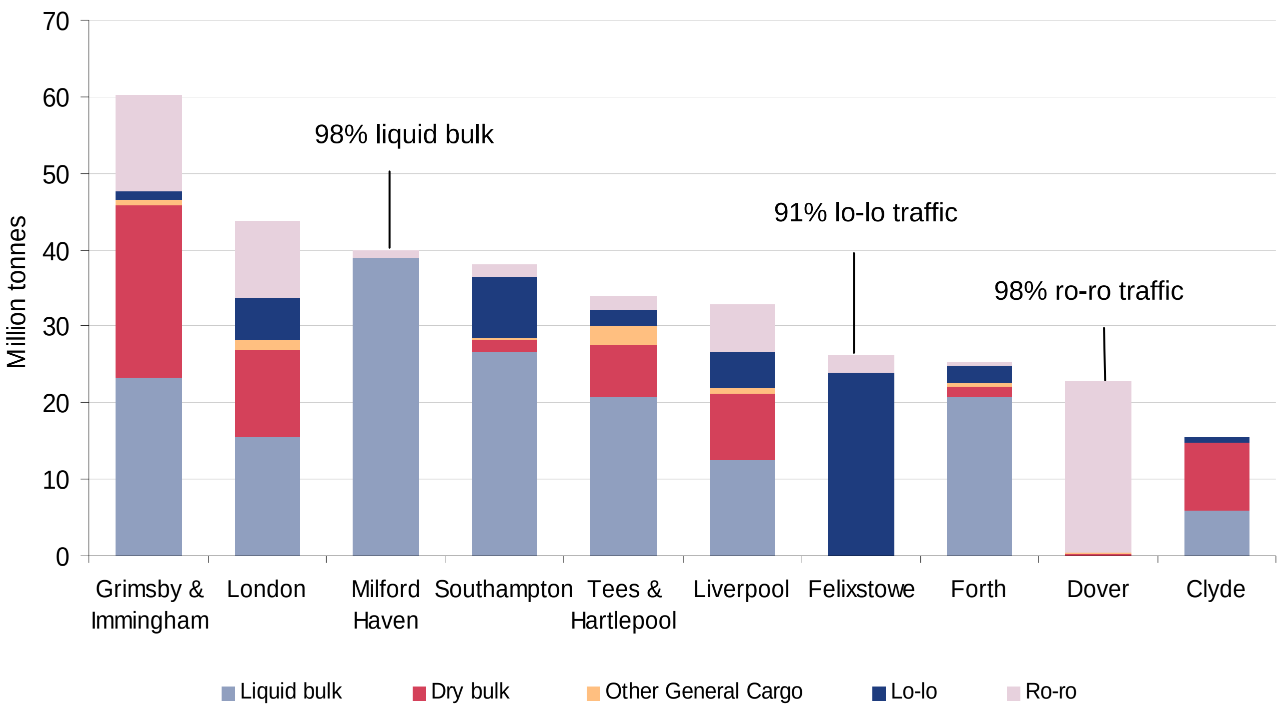
Figure 2: Busiest ports by main cargo type, 2012

Million tonnes/*percentage share of cargo's tonnage*

Liquid Bulk			Dry Bulk			Lo-lo Containers			Roll-on/Roll-off		
Milford Haven	39.1	*19%*	Grimsby & Immingham	22.5	*20%*	Felixstowe	23.9	*43%*	Dover	22.4	*24%*
Southampton	26.6	*13%*	London	11.4	*10%*	Southampton	8.0	*15%*	Grimsby & Immingham	12.4	*13%*
Grimsby & Immingham	23.3	*11%*	Clyde	8.8	*8%*	London	5.4	*10%*	London	10.1	*11%*
Tees & Hartlepool	20.8	*10%*	Liverpool	8.7	*8%*	Liverpool	4.7	*8%*	Liverpool	6.3	*7%*
Forth	20.7	*10%*	Bristol	7.3	*7%*	Forth	2.3	*4%*	Belfast	6.3	*7%*

Many of the **UK major ports** are **specialised** in the cargo categories they handle, as seen with Milford Haven, Felixstowe and Dover.

Chart 7: Top 10 busiest ports by main cargo categories transported, 2012



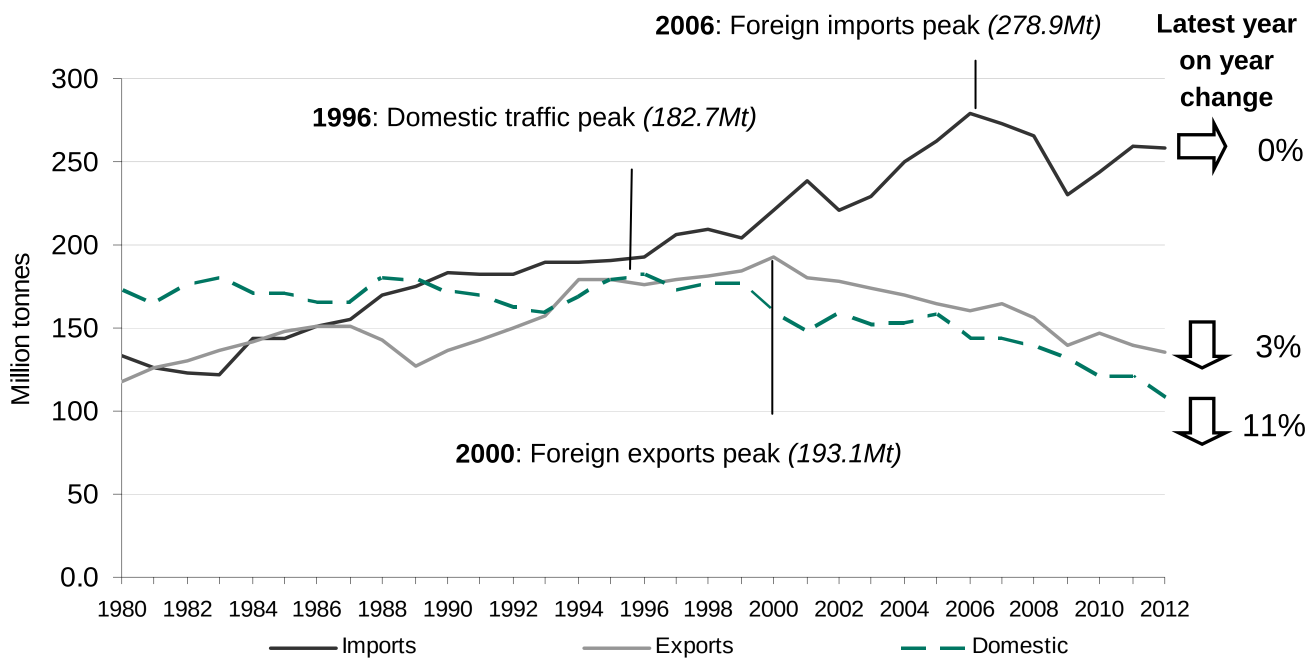
3. Trade Routes

3.1 All UK Ports Summary

Domestic traffic (coastwise and one-port traffic) within all UK ports **fell** for the seventh consecutive year in 2012 to 107.8 million tonnes, the **lowest level on record** and 32 per cent lower than prior to the decline in 2005.

In 2012, **over three quarters of freight** handled at UK ports was going to or coming from **foreign ports** (393 million tonnes). In 2009 foreign freight traffic was 16 per cent lower than 2006. Although there was growth in 2010 and 2011, levels fell in 2012 and traffic remains 11 per cent lower than the peak in 2006. Of the foreign freight traffic, 66 per cent was imported. Foreign imports have been larger than foreign exports since 1987.

Chart 8: All UK ports imports, exports and domestic traffic: 2002 - 2012



3.2 UK Major Foreign Traffic by Port

Grimsby and Immingham handled the largest proportion of traffic travelling between UK major ports and the EU at 28.3 million tonnes (14 per cent of all **EU traffic**).

Southampton was the busiest port for traffic travelling on **non-EU short sea journeys**. The port handled 18 per cent (12.6 million tonnes) of traffic travelling between UK major port traffic and non-EU and Mediterranean countries.

The largest proportion of **Milford Haven**'s traffic (43 per cent) travelled on deep sea routes, making it the busiest port for UK major port **deep sea traffic**, contributing 15 per cent of the total.

3.3 Foreign Traffic by Destination/Route

In 2012, 198.8 million tonnes of traffic travelled between the UK major ports and EU countries (41 per cent of major port traffic). Of this, 53.7 million tonnes of freight passed to and from the Netherlands, making the **Netherlands the busiest trading partner with the UK**. This may be in part due to cargo initially travelling to Rotterdam and continuing on to other countries. The Netherlands has remained the largest trading partner since 2002 (see Figure 3), though it's proportion of traffic has fallen from 11 per cent to 9 per cent over the 10 years.

Ten years previously **in 2002**, 7 per cent of the UK major port traffic travelled to or from the **USA** making it the **4th busiest trading partner**. However, by **2012**, the proportion of traffic travelling between the UK major ports and the USA fell to 5 per cent taking it down to 6th place, with more traffic travelling between the **UK and Norway and Belgium than the USA.**

The proportion of traffic travelling **domestically** has **decreased over the last decade**. In 2002, 28 per cent of all UK major port traffic travelled domestically. However, in 2012 this fell to 21 per cent.

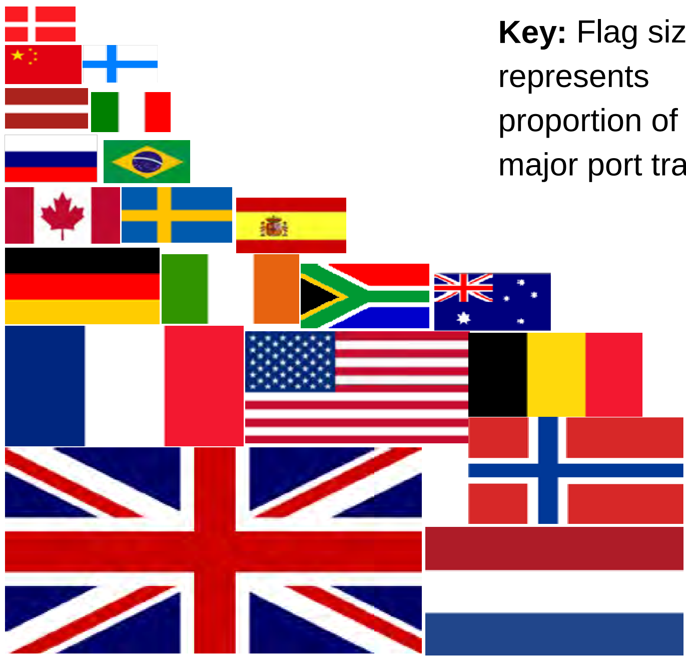
Figure 3: UK Major ports largest trade partners, 2012 versus 2002

2012

Total 489.5Mt

2002

Total 542.1Mt



Key: Flag size represents proportion of UK major port traffic

Top 10 countries, proportion of traffic, 2012

21%	Domestic
11%	Netherlands
8%	France
6%	Norway
5%	Belgium
5%	USA
5%	Russia
3%	Germany
3%	Irish Republic
3%	Sweden
30%	Other

Top 10 countries, proportion of traffic, 2002

28%	Domestic
9%	Netherlands
8%	France
7%	USA
6%	Norway
5%	Belgium
4%	Germany
3%	Irish Republic
3%	South Africa
2%	Australia
25%	Other

Liquid bulk traffic and dry bulk dominated the busiest trading routes, with **41 per cent of foreign trade** resulting from **liquid bulk traffic** and 23 per cent dry bulk. **Imports of liquid bulk from Norway** amounted to 22.6 million tonnes in 2012, making it the **busiest trading route**.

In 2012, 17.7 million tonnes of liquid bulk traffic was exported to the Netherlands, 8 per cent of all liquid bulk traffic, and was the largest exporting trade route.

Figure 4: Top 15 busiest trade routes with UK major ports, by cargo category and direction, 2012

Thousand tonnes

Country	Cargo Category	Direction	Tonnage
Norway	Liquid Bulk	In	22,637
Netherlands	Liquid Bulk	Out	17,674
France	Ro-ro	In	15,264
Russia	Dry Bulk	In	11,260
USA	Dry Bulk	In	10,731
Netherlands	Ro-ro	In	10,326
Colombia	Dry Bulk	In	10,318
Qatar	Liquid Bulk	In	10,295
France	Ro-ro	Out	10,249
Russia	Liquid Bulk	In	9,743
Belgium	Ro-ro	In	8,776
Netherlands	Liquid Bulk	In	7,857
Germany	Liquid Bulk	Out	7,203
USA	Liquid Bulk	Out	7,134
Brazil	Dry Bulk	In	6,425

Detailed statistics on freight traffic (tonnage) can be found in the statistical data set, port01.

Section 2: Unitised Traffic through UK Major Ports

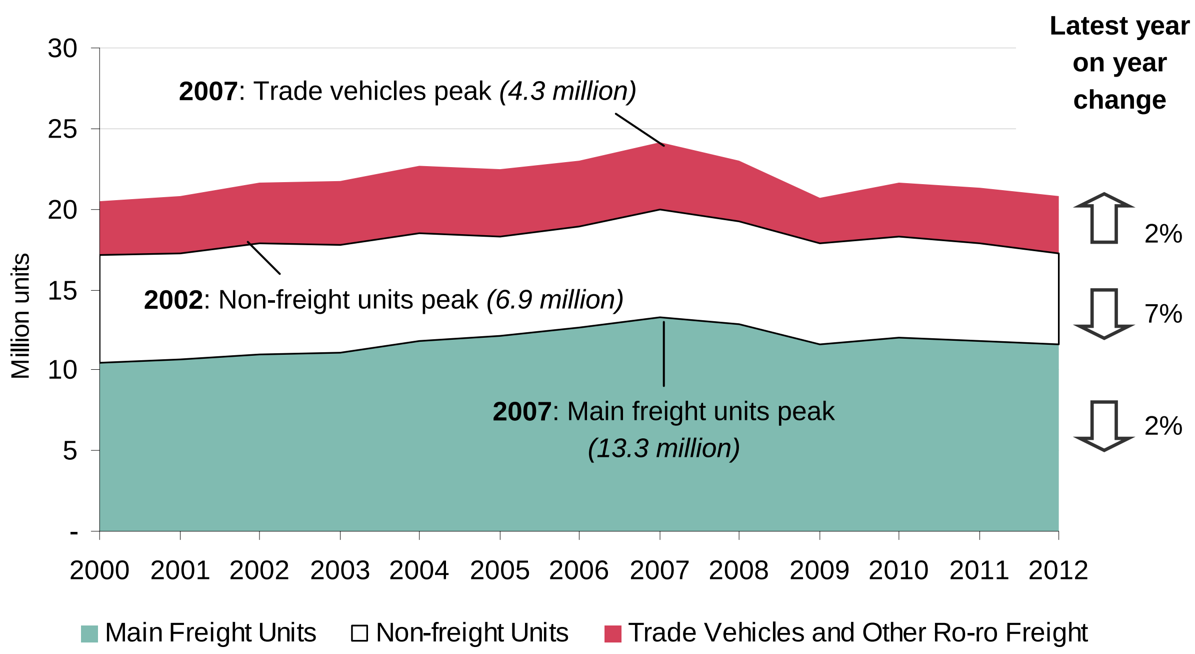
Unitised traffic (lifted or rolled onto a ship inside a container or vehicle from which it is not unpacked) is measured in terms of the number of units, as well as the weight of the goods they contain. **Unitised traffic** can initially be broken down into **freight units** (those units which are used for trade) and **non-freight units** (e.g. passenger cars). Freight units can be further subdivided into **main freight units** (units which contain cargo) and **trade vehicles and other ro-ro freight** (e.g. cars to be sold).

1. All Unitised Traffic the UK Major Ports

1.1 Summary

In 2012, following a second year of decline, **20.8 million units** were handled at **UK major ports**. Between 2000 and 2007, traffic increased by 18 per cent. However, in 2009, the number of units handled fell to 14 per cent lower than the peak.

Chart 9: Unitised traffic through UK major ports, freight and non-freight units, 2000 - 2012



The number **of main freight units** handled by **UK major ports** fell for the second consecutive year in 2012 to 11.6 million units (**56 per cent of all unitised traffic**). Throughout the 1990s and in the early half of 2000s main freight units travelling through UK major ports saw continuous growth, with numbers 87 per cent higher in 2007 than in 1992. However, in 2009, traffic fell to 11.6 million units.

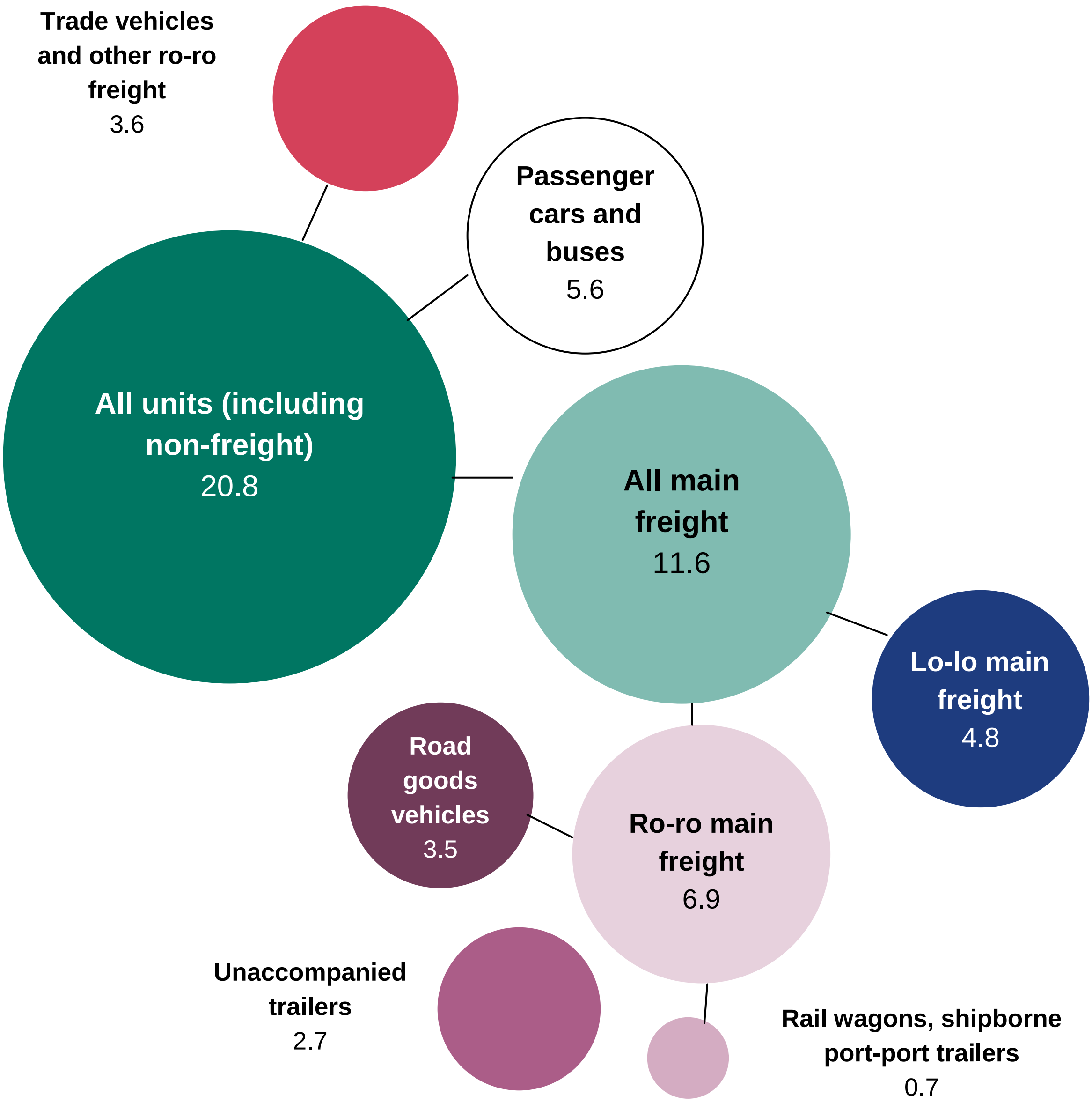
Between 2008 and 2009, the number of **trade vehicles and other ro-ro freight** declined by 22 per cent, falling to 2.9 million units. However, due to a 16 per cent increase in 2010, and continued growth since, in 2012 levels were **23 per cent higher than in 2009** at 3.6 million units.

1.2 UK Major Ports Unitised Cargo Summary

Over a quarter of the units handled by UK major ports in 2012 were **non-freight units** in the form of passenger cars and buses (**5.6 million units**). Of the 20.8 million units handled, 3.6 million units were trade vehicles and other ro-ro freight and 11.6 million units were main freight. Of the main freight units, **41 per cent were lo-lo containers**, the remaining 6.9 million units were ro-ro main freight, weighing 88.8 million tonnes. Just over half of these were in the form of road goods vehicles.

Figure 5: Breakdown of UK major port's unitised traffic by cargo category, 2012

Million units

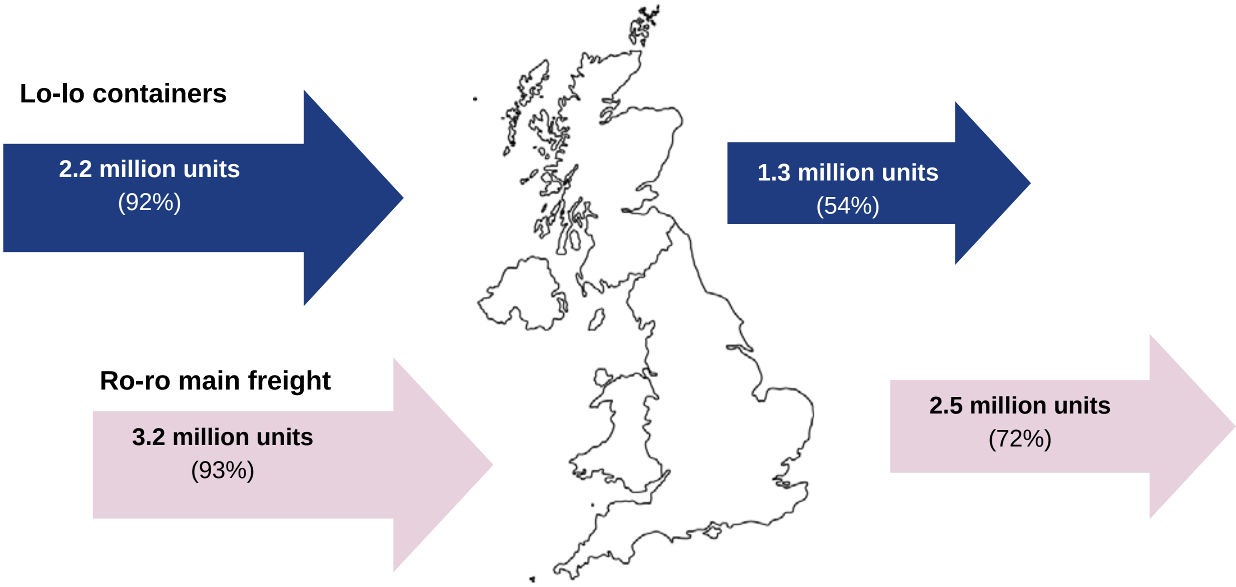


1.3 Loaded Units

The UK major ports handled 4.8 million lo-lo containers in 2012, (8.0 million TEUs, weighing 55.1 million tonnes). Container traffic has a similar inbound/outbound proportions when considering number of units. However, over **90 per cent of the inbound containers were loaded** whereas only **54 per cent of lo-lo containers leaving** UK major ports were **loaded**.

In 2012, **3.2 million ro-ro main freight units** travelling **in to** UK major ports **were loaded**, 92 per cent of all ro-ro main freight units. Comparatively, **2.5 million** units travelling **out of** UK major ports were **loaded** (72 per cent of the total of outbound units).

Figure 6: Percentage of loaded lo-lo units and lo-lo main freight by direction, 2012



1.4 Unitised Traffic by Main Goods Cargo Type and Major Port

Felixstowe overtook Dover as the busiest unitised main freight port in 2010 and, in 2012, handled **19 per cent** of the UK's major port unitised main freight traffic. Felixstowe moved 2.2 million main freight units weighing 26.2 million tonnes, 93 per cent of which were lo-lo containers. However, **Dover** continued to handle the largest proportion of **ro-ro main freight traffic** (2 million units, contributing 29 per cent of the ro-ro main freight traffic).

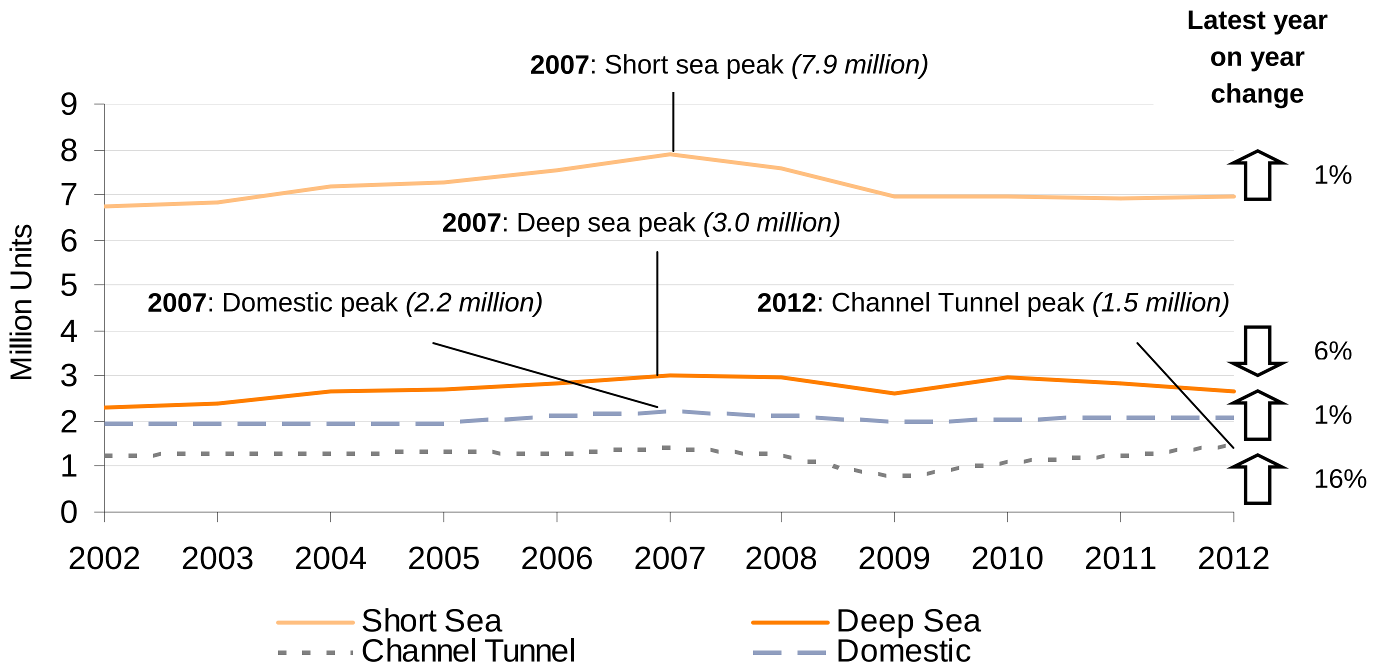
2. Trade Routes

2.1 Summary (All UK Ports)

In 2012, **coastwise main freight units** through all UK ports **grew for the third consecutive year** to 2.1 million units (18 per cent of the total traffic). Levels started to recover after the recession, with a 4 per cent growth between 2009 and 2010 and are now 6 per cent lower than the peak in 2007.

Main freight units travelling between all UK ports and **foreign ports** (deep sea and short sea on chart 10) **declined for the second year** to 9.6 million units, similar to the 2009 level.

Chart 10: All UK ports, main freight units by direction, 2002 – 2012



The number of **main freight units** travelling through the **Channel Tunnel peaked in 2012** after three years of continuous growth. However, there were 770 thousand more units travelling between UK major ports and France than through the Channel Tunnel.

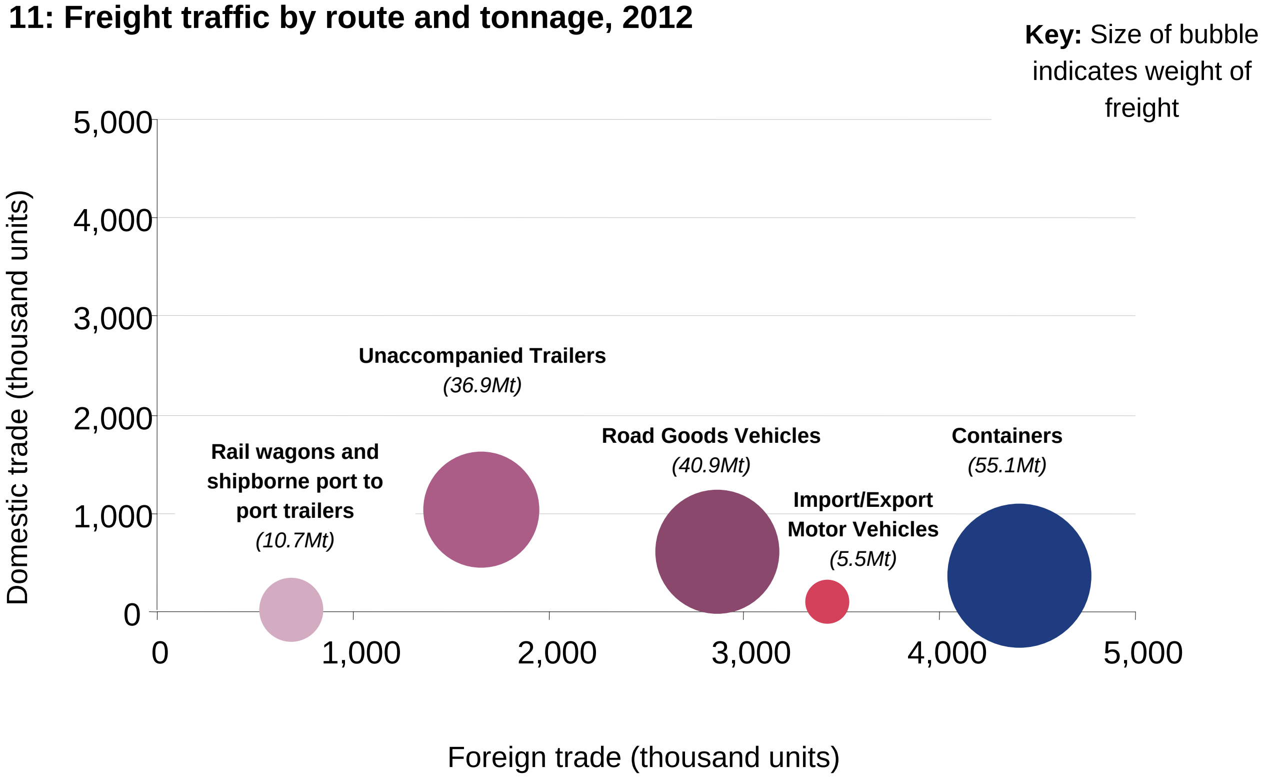
2.2 Trade Routes by Cargo Category

The majority of **lo-lo containers** were travelling between **UK major ports and foreign countries**. In 2012, 4.4 million lo-lo units (7.4 TEUs) travelled between UK major ports and foreign ports, with a total weight of 51.6 million tonnes.

Although **import/export motor vehicles** were the second most common unitised freight commodity they were the **smallest in terms of tonnage** (see chart 11). There were 3.4 million trade vehicles transported on foreign routes in 2012, weighing only 5.4 million tonnes. This is in comparison to the 2.9 million road goods vehicles travelling to foreign destinations, with cargo weighing 33.4 million tonnes.

The most common unitised commodity travelling **domestically** was **passenger vehicles**, of which there were 1.3 million units. **Freight units** accounted for the remaining **62 per cent of traffic** of which unaccompanied road good trailers were the majority, accounting for 30 per cent of domestic unitised freight traffic and weighing 13.5 million tonnes.

Chart 11: Freight traffic by route and tonnage, 2012

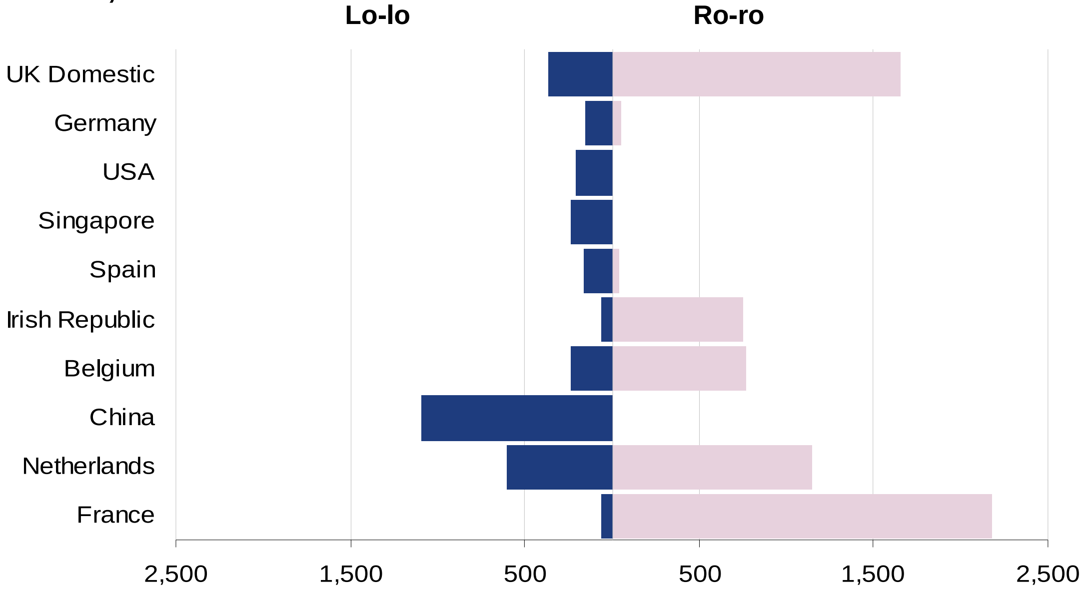


2.3 Trade Destination

Very few trading routes saw both lo-lo and ro-ro container traffic, as seen in Chart 12. Transporting units through **roll-on/roll-off** was the primary method of transporting units between the **UK major ports and Europe**, with 75 per cent of main freight units being ro-ro units.

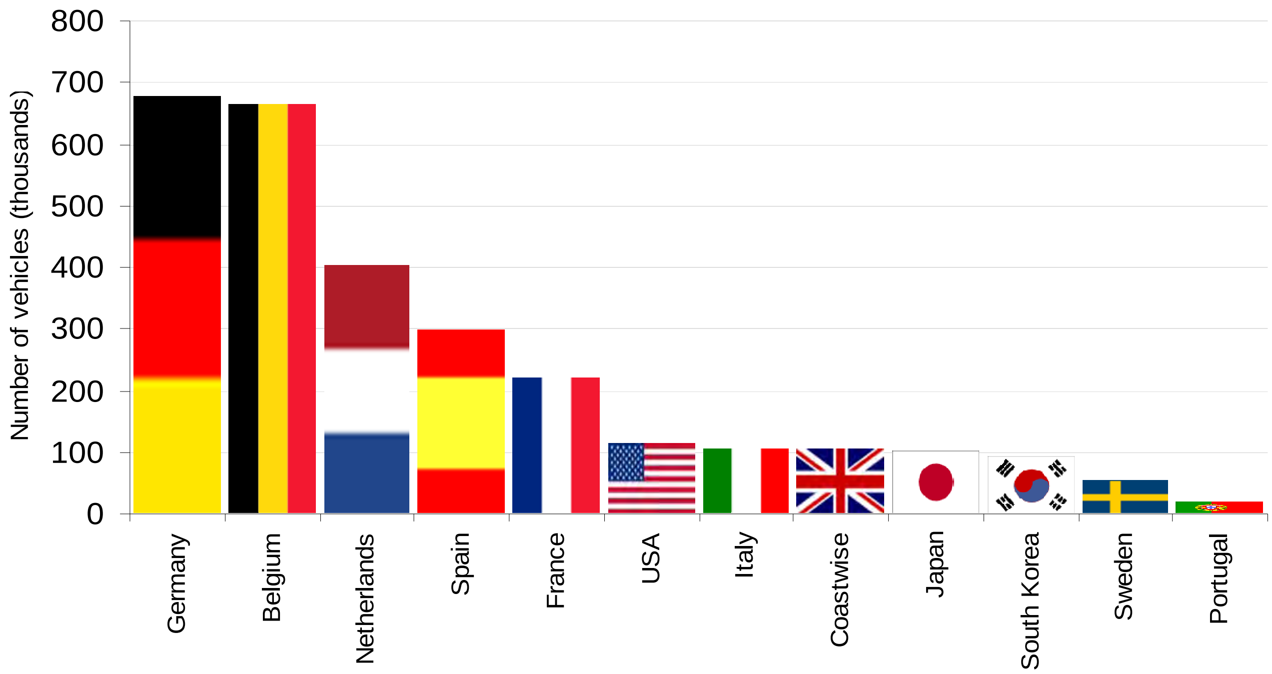
Of the traffic travelling on **deep sea journeys**, **99.7 per cent were lo-lo containers**. Containers travelling between the UK and China made up 41 per cent of all deep sea main freight traffic.

Chart 12: Number of main freight units travelling between UK's top 10 unitised traffic trading partners, 2012



Of the 3.5 million **trade vehicles** moved in 2012, traffic between **Germany** and the UK major ports accounted for **19 per cent** (675 thousand units), **89 per cent of which were imports**.

Chart 13: Import/export trade vehicle routes, 2012



Detailed statistics (tables) on unitised traffic can be found in the statistical data set, port02.

3. Strengths and weaknesses of the data

- The port freight statistics relate to traffic to and from ports in the United Kingdom, unless otherwise stated, and do not cover ports in the Isle of Man or the Channel Islands.
- Provisional annual results are published approximately 6 months after the end of the calendar year to which they relate (Provisional 2012 port freight statistics). A subset of the port freight statistics tables is provisionally updated at this stage. These statistics are based on the annual returns from major ports and minor ports provided at the end of the year. A split into broad cargo type is available for each major port. Some additional quality checks will have been possible, compared with the earlier quarterly data from UK major ports. However, full checks of data from ports against data from shipping agents, and grossing of the final data will not have been completed, so the data remain provisional at this stage. However, past experience is that the figures for the vast majority of ports do not change between the publication of provisional and final annual results.
- Final detailed port freight statistics are published about 9 months after the year end. At this stage a full reconciliation of port and shipping agent data will have been carried out, and the grossing procedures described in the Technical Note are completed and checked. The detailed results in this release are based on the grossed data and the full range of analyses, including those by route and vessel type are then available.

4. Glossary

- Major ports: Ports handling over one million tonnes per year, and a small number of other key ports, together accounting for over 98% of UK port traffic. More detailed statistics are collected from these ports.
- Minor ports: All other ports handling freight traffic. Only total weight of goods loaded and unloaded is collected from these ports.
- Tonnage: The weight of goods transported, including crates and other packaging, but excluding the unloaded weight of any shipping containers, road goods vehicles, trailers and other items of transport equipment where these are used.
- Lo-lo (lift-on lift-off) containers: standard shipping containers that are lifted on or off ships. Containers can also be carried on ro-ro (roll-on roll-off) services, usually on port-to-port trailers, road goods vehicles or unaccompanied trailers, in which case they will be treated as ro-ro traffic.
- Units: Includes all roll-on roll-off (ro-ro) units whether carrying freight or not (road goods vehicles, unaccompanied trailers, shipborne port-to-port trailers, passenger vehicles, trade vehicles, and other ro-ro units), as well as lift-on lift-off (lo-lo) containers. In most port statistics outputs, freight-carrying roll-on roll-off units are normally reported separately from others, but this detail is not available at the time of publication of the quarterly statistics, in which combined totals are given.

- Main freight units: all lo-lo containers and those ro-ro units intended mainly for carrying freight - road goods vehicles, unaccompanied trailers, rail wagons, shipborne port to port trailers and shipborne barges.

5. Users and uses of the data

These statistics are collected to provide information on trends and patterns in the handling of freight traffic at UK sea ports. Users of the data include central government, the devolved administrations and local government, the maritime industry, transport consultants and academics, and international organisations. Uses, both inside and outside government, include:

- To provide general background to sector trends, and to inform the development and evaluation of policy, and to inform decision making
- In the development or testing of transport and environmental models and forecasts
- In market analysis by transport consultants and businesses.
- To respond to requests for information from Parliament, members of the public and international organisations, including Eurostat's compilation of maritime statistics for the EU

We continuously review the content of these statistics to ensure that they provide the most useful information whilst minimising burdens on data providers. We welcome any feedback on these statistics by email to maritime.stats@dft.gsi.gov.uk.

6. Background notes

- The web tables and charts give further detail of the key results presented in this statistical release. They are available here: Ports statistics - Department for Transport - Inside Government - GOV.UK
- Full guidance on the methods used to compile these statistics can be found here: Transport Statistics notes and guidance: Ports - Detailed guidance - GOV.UK
- National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure they meet customer needs. Code of Practice
- Details of Ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/68882/pre-release-access-for-port-freight-statistics-annual-and-quarterly_releases.pdf
- The next update in this series will be published in June 2014. It will contain provisional figures for 2013.
- Provisional summary quarterly statistics on freight handled by UK major ports are also updated quarterly. The latest tables can be found here: Ports statistics - Department for Transport - GOV.UK