Statistical Release 1 September 2017

Department for Transport

UK Port Freight Statistics: 2016 (revised)

Revisions: Chart 18 has been subject to a minor amendment following the discovery of an error since this release was first published on 1 September 2017. This change is small and the impact has been minimal.

About this release

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.

In this publication

Overall total freight tonnage handled by UK ports declined by 3% in 2016. This decline is attributable to a large reduction in demand for coal imports. Despite this, steady growth has been experienced in unitised traffic, which saw its fourth consecutive year of growth in 2016.

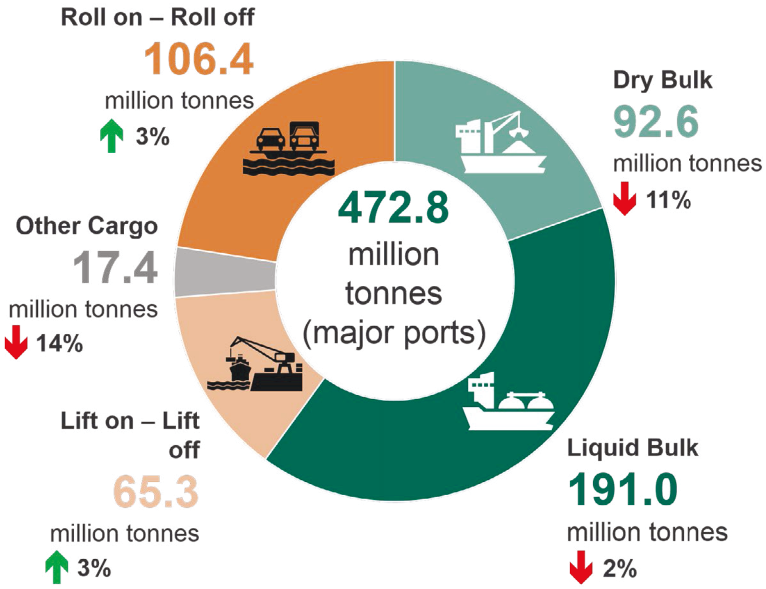
Port Freight Traffic (tonnage)

484.0 million tonnes were handled by UK ports in 2016, down 3% from 2015. The vast majority of this freight, 472.8 million tonnes, was through major ports. Major port coal tonnage handled fell 53% from 2015, to 12.0 million tonnes in 2016, reflecting reduced demand.

Unitised Traffic

24.1 million units of traffic passed through UK ports in 2016, a rise of 2%. Container traffic rose by 3% to 5.9 million units (or 10.2 million twenty-foot equivalent units, TEUs) - a record high - and roll on - roll off cargo rose by 1% to 18.2 million units passing through UK ports in 2016.

Chart 1: UK major port tonnage by cargo category 2016, and change since 2015



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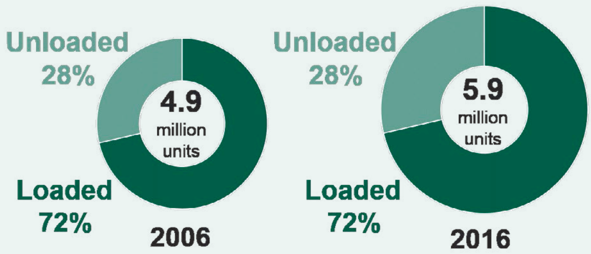
UK Port Freight Statistics: 2016

484.0 (million tonnes) ↓ **3% (compared to 2015)**

24.1 million units ↑ **2% (compared to 2015)**

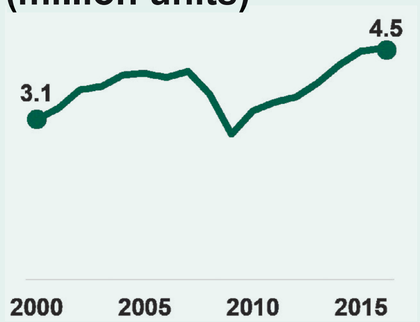
The main drivers in the growth of unitised traffic at major ports was...

Container trade



Although containerised traffic has increased in the last decade, the proportion of loaded units has remained relatively stable.

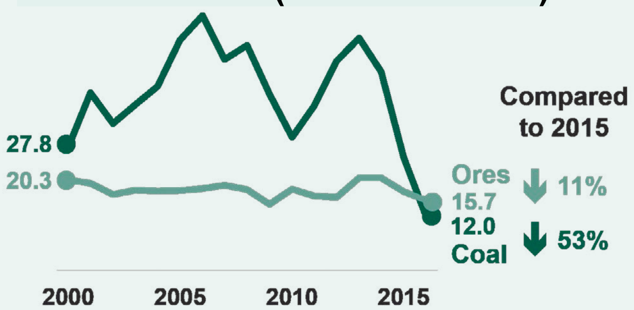
Import/ export motor vehicle trade (million units)



Import/ export motor vehicle trade has increased over the years, despite the fall following the recession in 2008/9.

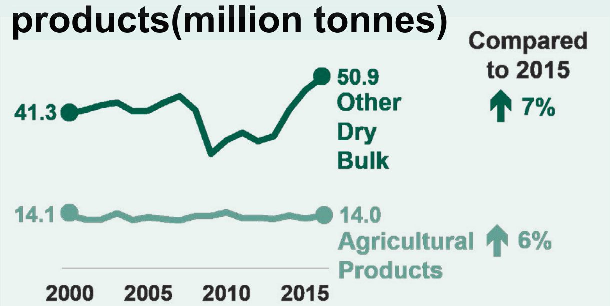
Key areas driving the slight fall in tonnage included...

Coal and ores (million tonnes)



However, there has been positive growth in other sectors...

Other dry bulk and agricultural products(million tonnes)



Domestic trade decreased slightly following two years of growth

Top UK domestic trade routes (million tonnes)

Rank	From	Million tonnes	To
1	Grimsby & Immingham	5.9	Tees & Hartlepool
2	Cairnryan	5.5	Larne
3	Belfast	4.9	Liverpool
4	Rivers Hull & Humber	3.6	Tees & Hartlepool

The UK imports more international goods than it exports.

Top UK international trade (million tonnes)

Imports		Rank	Exports	
Netherlands	31.5	1	29.7	Netherlands
Norway	29.1	2	15.9	France
France	20.8	3	11.4	China
Belgium	14.7	4	11.4	Belgium
USA	11.5	5	9.6	Irish Republic

About these statistics

The statistics presented here on port freight in the United Kingdom (UK) provide information on trends and patterns in the handling of freight traffic at UK sea ports. Ports are essential to the UK economy, with around 95% of all imports and exports being transported by sea.

Port freight statistics are based on a combination of data reported to the DfT by port authorities and shipping lines, or their agents. Ports are split into major ports and minor ports. Major ports are those with cargo volumes of at least 1 million tonnes annually, and more detailed data is collected for major ports, such as breakdown by cargo type.

Uses and users

Users of the data include central government, the devolved administrations and local government, the maritime industry, transport consultants and academics, and international organisations.

1. Port Freight Traffic

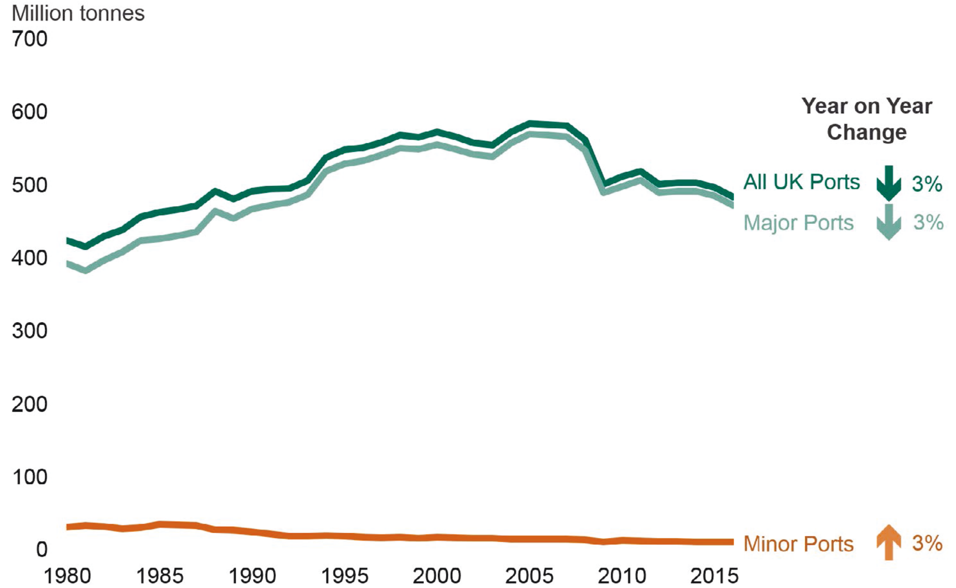
In 2016, major port tonnage fell whilst minor port tonnage increased

There are 51 major ports in the UK. UK major port tonnage fell by 3% in 2016 to 472.8 million tonnes. The major port share of UK port tonnage has remained stable at 98% since 2005. Minor port tonnage increased to 11.3 million tonnes, an increase of 3% on the previous year.

UK port tonnage long term trend shows lowest figure since 1990

Between the early 1980s and 2000 the total amount of freight tonnage handled by UK ports increased by 35%. The 2008 recession resulted in the largest year on year decline seen in the last 30 years, when port freight fell by 11% between 2008 and 2009. Total tonnage levels stabilised in recent years at around half a billion tonnes. However, total freight tonnage traffic decreased by 3% in 2016 to 484.0 million tonnes, the lowest level observed since 1990.

Chart 2: Tonnage handled by UK ports since 1980, by port type



Total tonnage can be broken down into types of cargo; bulk freight, unitised freight and other general cargo. These categories are defined by how cargo is transported on the ship and handled by the ports.

Bulk freight fell in 2016, due to decline in coal imports

Bulk freight, including liquid bulk and dry bulk, accounts for the majority of tonnage. Bulk freight has been declined over the past 10 years and fell by 5% overall in 2016. The main reason for the recent fall was a decline in dry bulk, mainly coal imports, linked to reduction in use of coal associated with the move to more sustainable means of energy generation (see page 13 for further information).

Unitised traffic increased for the fourth consecutive year

Unitised traffic handled at UK major ports continued to grow in 2016, accounting for 36% of total tonnage (compared with 21% two decades earlier). Unitised tonnage grew 3% in 2016 and was 15% higher than in 2012, following four years of growth.

Unitised traffic can also be measured in terms of number of units handled - 24.1 million units in 2016, 2% higher than the previous year.

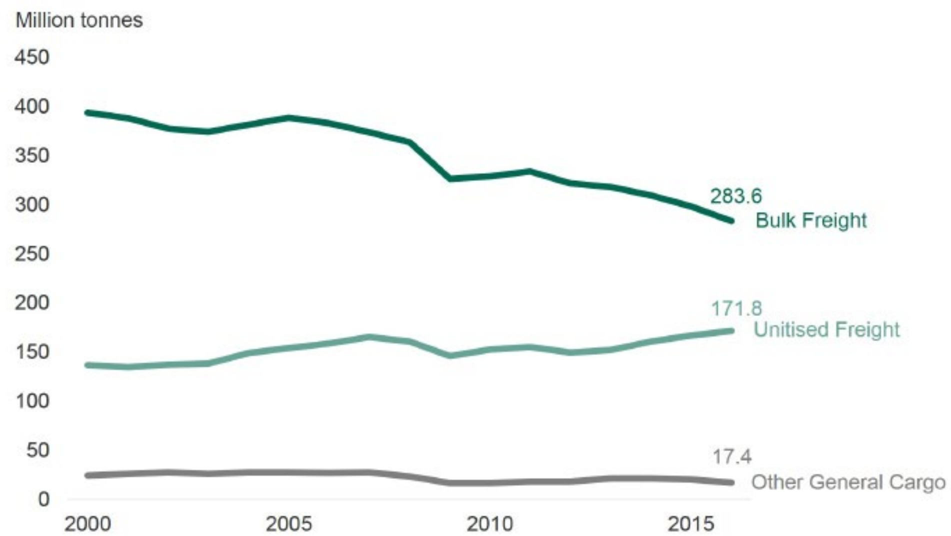
5.9 million of these units were containers, a record high. In terms of the standardised TEU (twenty-foot equivalent units) measure, there was a 4% increase to 10.2 million TEUs in 2016.

Unitised traffic also includes motor vehicles for import/export, of which there were 4.5 million units, an increase of 1% and the highest figure of this millenium.

Definitions

Unitised traffic: 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 broken down into lift-on lift off (lo-lo) a.k.a containers, and roll-on, roll-off (ro-ro) e.g. lorries. See page 9 for a full breakdown.

Chart 3: UK major port freight by cargo type: 2000 to 2016



Definitions

TEU (twenty-foot equivalent units) is a standardised measure to allow for the different sizes of container boxes.

Size	TEU
20ft	1
40ft	2
>20ft & <40ft	1.5
>40ft	2.25

Detailed statistics on freight traffic (tonnage) by port can be found in the statistical data sets, PORT0101 and statistics on unitised traffic in PORT0203, PORT0204 and PORT0205.

Inwards Traffic

Inward traffic into UK ports decreased by 4% to 303.1 million tonnes in 2016. Freight into major ports decreased 4%, whereas inward traffic into minor ports increased by 8% compared to 2015, seeing 7.8 million tonnes being handled in 2016.

Definitions

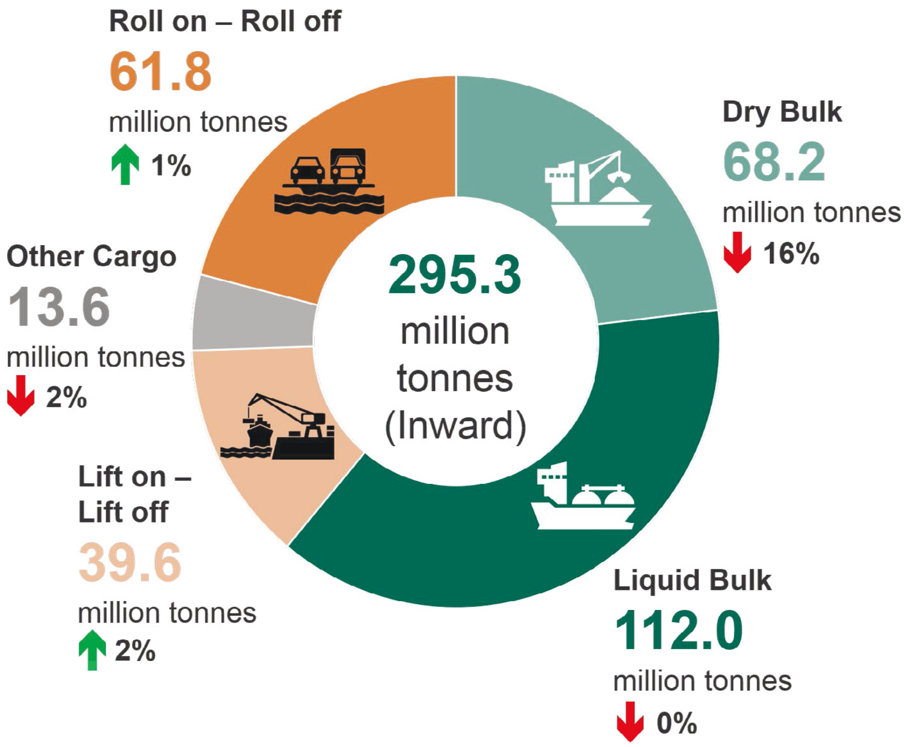
Inwards/ outwards: Inwards and outwards includes both domestic and international traffic.

Imports/ exports: International traffic only.

All UK countries apart from Northern Ireland saw a decrease in inward tonnage in 2016. Northern Ireland ports saw an increase of 6% to 16.5 million tonnes handled, due in part to a 7% increase in inward traffic at Belfast, which makes up 66% of all Northern Ireland inward freight. Notably, Belfast has bucked the national trend by seeing an increase in inward coal freight by 4% to 1.3 million tonnes.

Inward unitised traffic at major ports also increased slightly by 1% to 12.6 million tonnes. This included a 3% increase in lift-on lift-off container freight to 3.0 million units (5.2 million TEUs). Felixstowe accounted for 44% of all UK inward units in containers, but saw a fall by 2% to 1.3 million units in 2016. The largest increase was in London which saw an extra 86 thousand units enter its ports in 2016, an increase of 24% to 449 thousand units (759 thousand TEUs).

Chart 4: UK major port inward tonnage by cargo category, 2016 and change since 2015



Outward Traffic

Outward traffic from UK ports decreased slightly by 1% to 180.9 million tonnes in 2016. Freight leaving UK major ports decreased by 1% from 2015 to 177.5 million tonnes, and there was also a decrease in the traffic leaving UK minor ports, by 7% to 3.5 million tonnes.

90 million tonnes of outward traffic is to the EU, this is down 2% from 2015. The EU accounted for 66% of all outward traffic. A further 16% is to countries in the Asian continent, notably China, which made up 6% of all outward traffic through UK ports.

Outward freight of iron and steel products (categorised under "Other Cargo" below) has fallen markedly since 2015, down 58% to 1.6 million tonnes in 2016. The closure of the Redcar Steelmill and the reduction in output of the Scunthorpe Steelmill have reduced not only the imports of coal and ores, but also the output in iron and steel products.

Unitised traffic leaving UK ports increased 4% to 8.5 million units in 2016. Container traffic rose 4% to 2.9 million units; this is equivalent to a 5% increase in TEUs to 5.0 million TEUs.

Chart 5: Iron and steel tonnage by direction, UK major ports

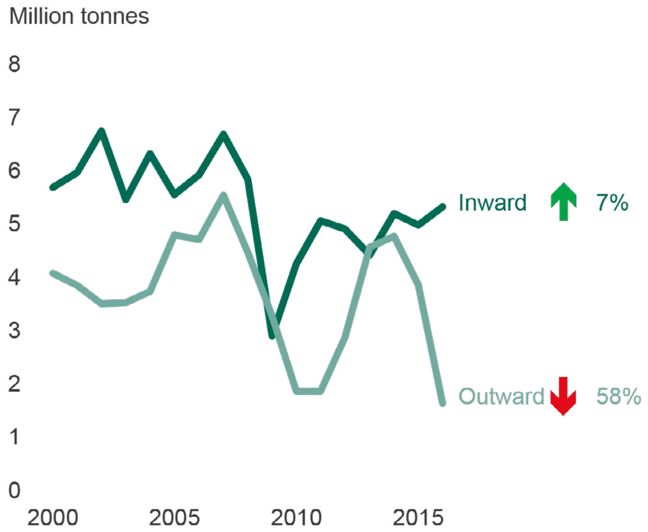
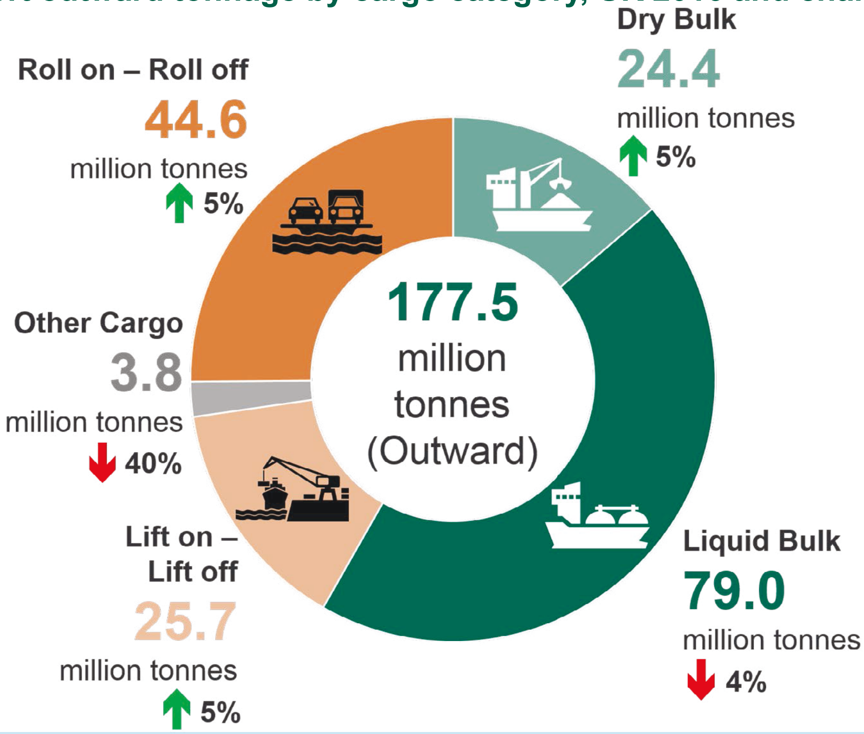
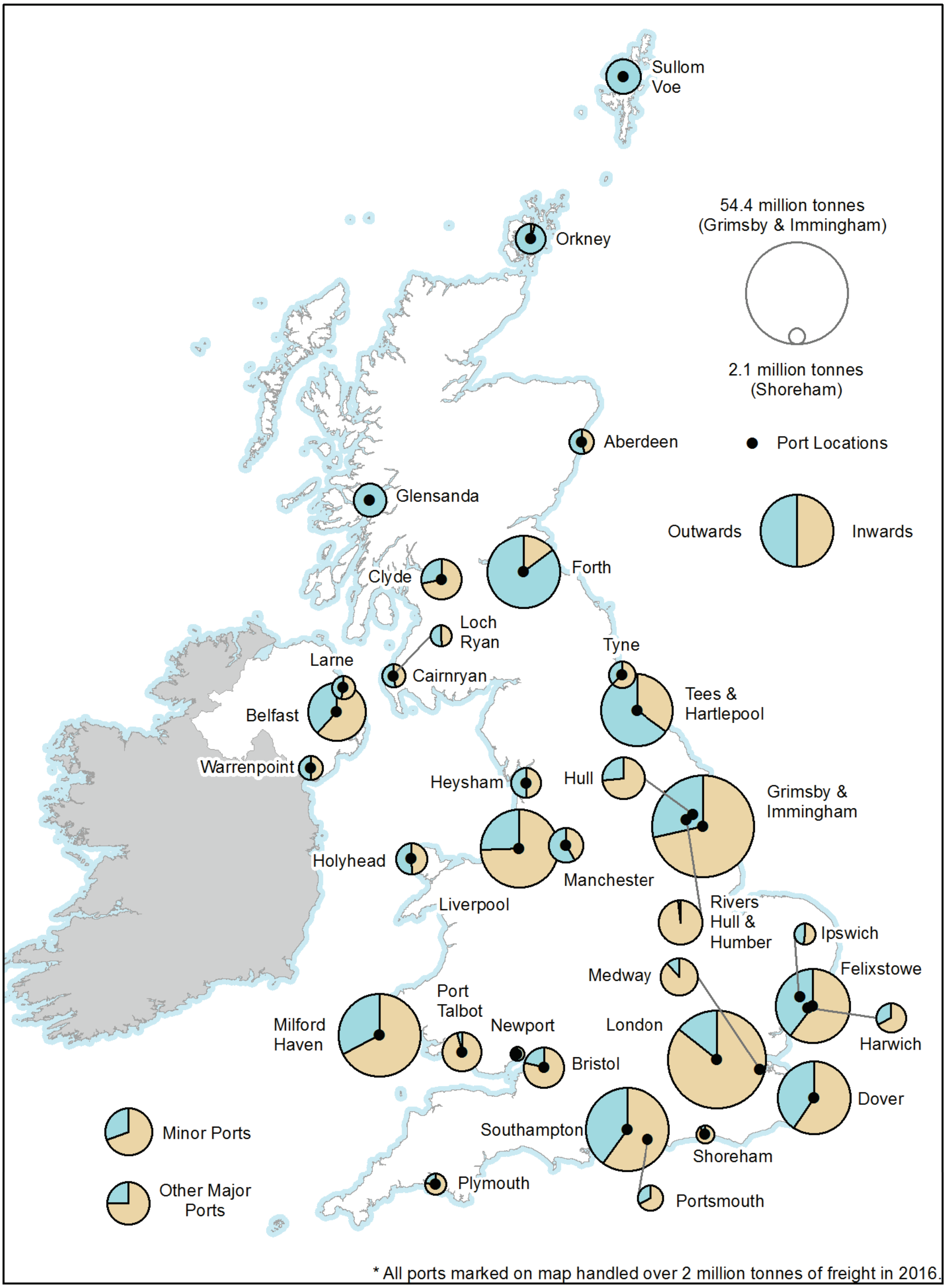


Chart 6: Major port outward tonnage by cargo category, UK 2016 and change since 2015



Detailed statistics on freight traffic (tonnage) can be found in the statistical data sets, PORT0101 and statistics on unitised traffic in PORT0203.

UK major ports: tonnage by direction, 2016



3. Major Port Freight by Cargo Type

The 3% reduction in the tonnage passing through UK major ports in 2016 was due mostly by the reduction in dry bulk tonnage. 2016 saw 11.5 million fewer tonnes of dry bulk goods passing through UK ports than in previous years, a fall of 11%. This was mostly due to the fall in coal and ores. Liquid bulk has also been falling steadily since the turn of the century, and is down 2% from 2015 to 191.0 million tonnes.

Definitions

Cargo Category:

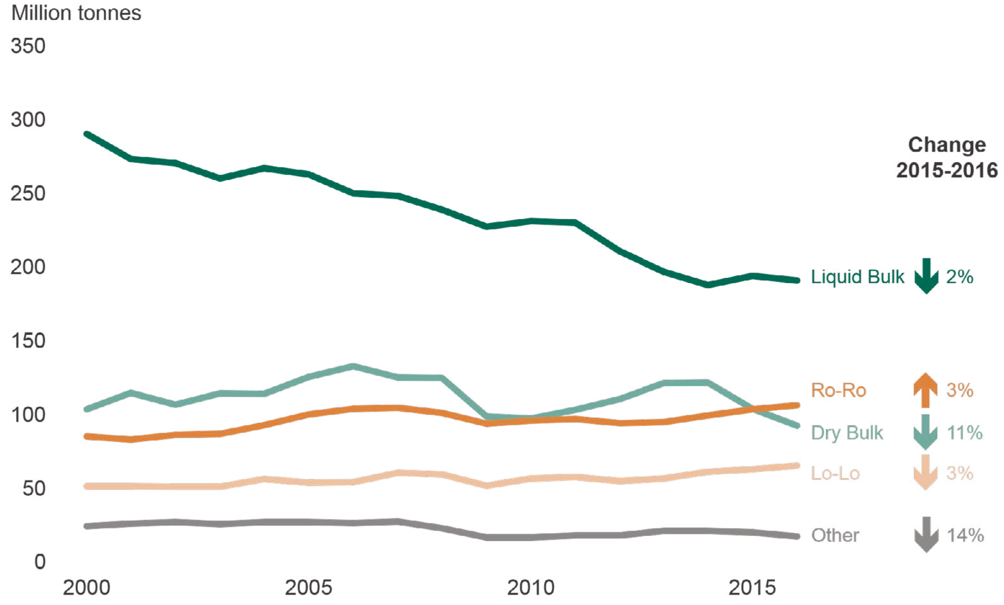
5 main categories- liquid bulk, dry bulk, Ro-Ro traffic, Lo-Lo traffic and other general cargo.

Cargo is allocated a category in respect to how it is handled at ports i.e. how it is loaded and carried on the ship. The main categories are then are spilt into smaller subgroups eg crude oil. Breakdown by cargo category is only availale for major ports.

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. All figures in this section relate to major ports

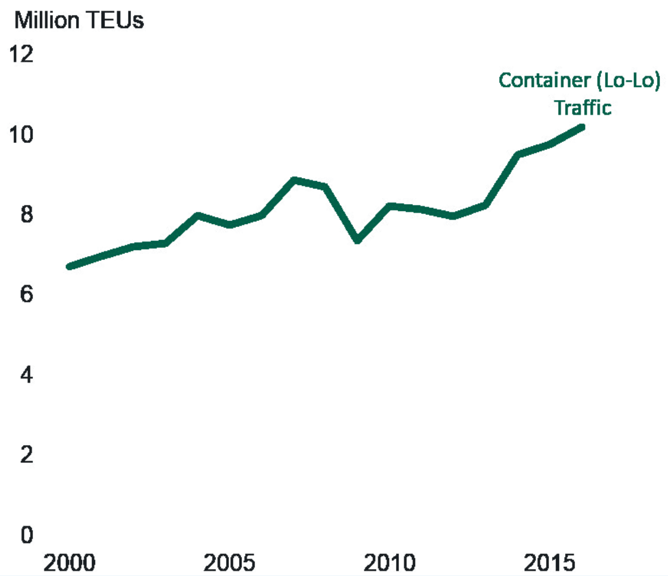
Chart 7: UK major port freight by cargo type



In contrast to the fall in bulk goods, there was an increase in the volume of unitised goods (Ro-Ro and Lo-Lo) passing through UK ports. Roll-on roll-off traffic increased 3% to 106.4 tonnes.

In terms of total units, there was a 1% increase to 18.2 million units in 2016. Lift-on lift-off traffic in the form of containers also increased by 3% to 5.9 million units. In terms of 'twenty-foot equivalent units' (TEUs), a measure which standardises the various lengths of containers that are in standard use, the amount of goods passing through UK ports in containers has been steadily increasing since 2000, and was 10.2 millions TEUs in 2016.

Chart 8: Container traffic in TEUs since 2000, UK major ports

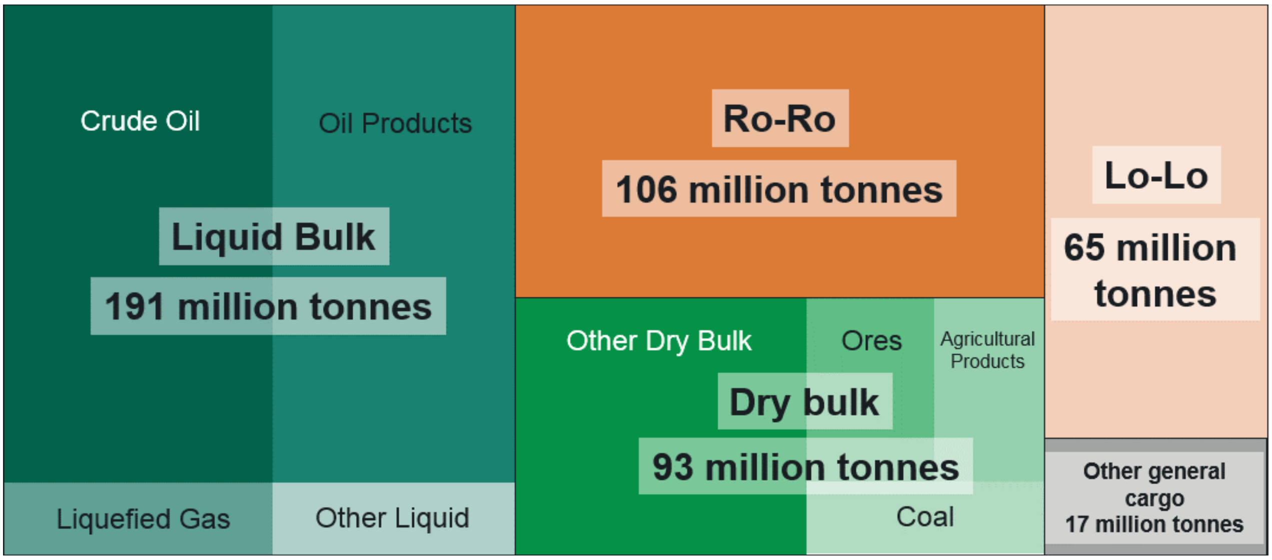


Detailed statistics on freight traffic (tonnage) by cargo type and unitised traffic can be found in the statistical data sets PORT0104, PORT0206, PORT0208.

Cargo Categories by Tonnage

All of the cargo categories included in these statistics can be expressed in terms of the tonnage transported.

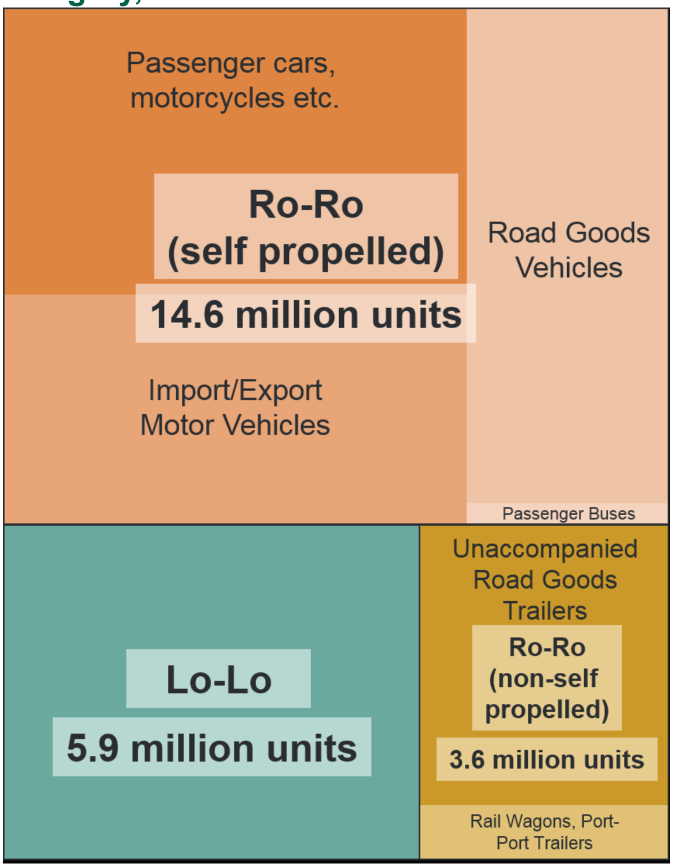
Chart 9: UK major port freight by cargo category, in tonnes, 2016



Cargo Categories by Units

Only lift-on lift-off freight (i.e. container traffic) and roll-on roll-off freight services can be expressed in terms of units, that is the exact amount of cars, lorries, containers etc. that were transported.

Chart 10: UK major port freight by cargo category, in units 2016



Roll-on Roll-off traffic are vehicles and trailers either driven on under their own power (self propelled) or transported on via a platform vehicle (non-self propelled).

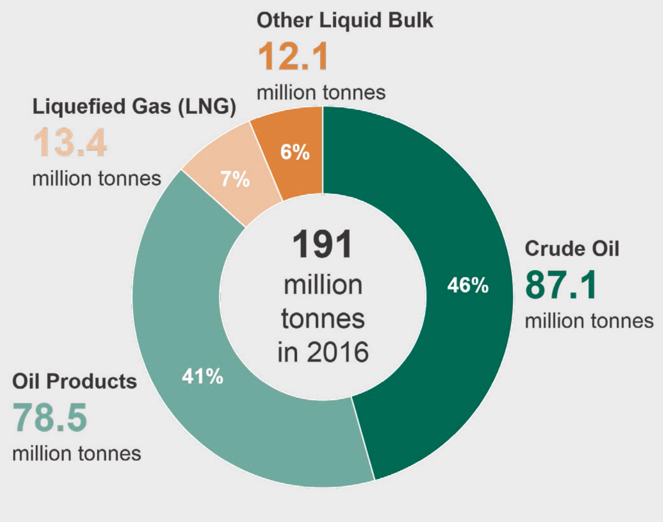
For the purposes of these statistics, cargo is categorised depending upon how it is transported on the ship. Because of this, no distinction is made on the type of ship itself that transports goods such as ferries, cruiseferries, RoPAX (Hybrid RoRo and Passenger transport), ConRO (Hybrid RoRo and container) or RoLo vessels (Hybrid RoRo and LoLo services).

Limited information is however available on the type of ship with regards to the number of arrivals at ports, contained with our UK Ship Arrivals data series (PORT06).

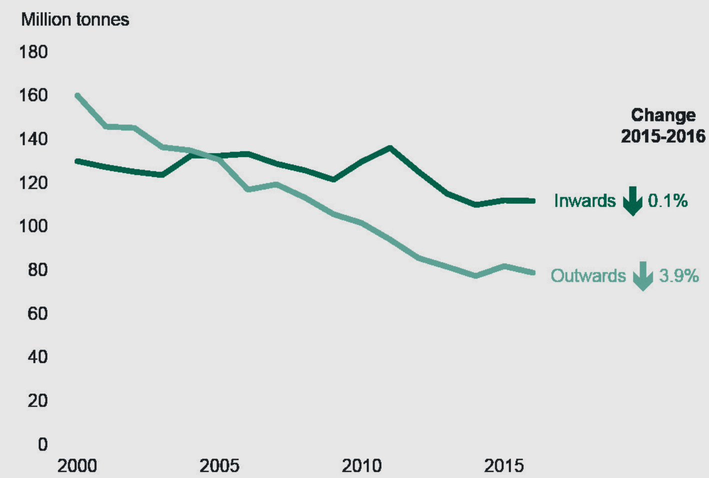
Liquid Bulk

In 2016, 191 million tonnes of liquid bulk was handled by UK major ports, down 2% from 2015.

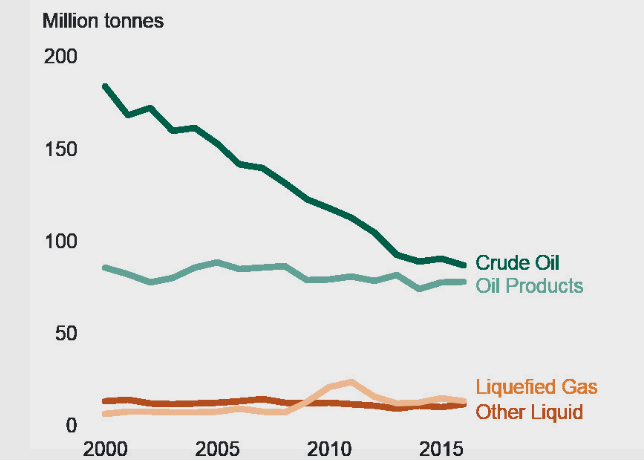
Liquid bulk cargo categories, 2016



Liquid bulk by direction since 2000



Liquid bulk categories - trend over time

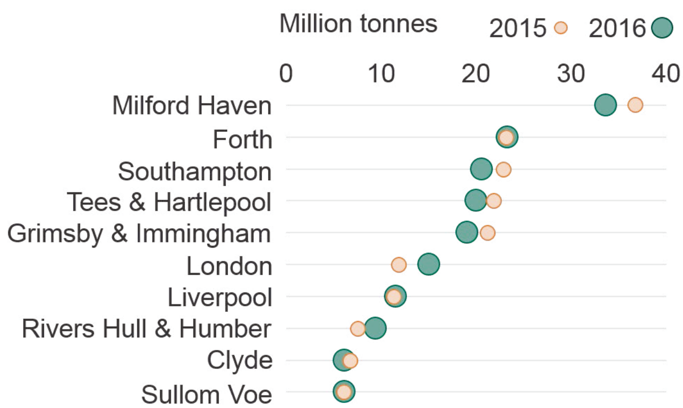


Change in freight handled ...

	Since last year (2015)	From 5 years ago (2011)	From 10 years ago (2006)
Crude Oil	4%	23%	39%
Oil Products	1%	4%	8%
Liquid. Gas	12%	44%	42%
Other Liquid	15%	0%	11%

Liquid bulk is the largest of the main cargo category types, with 191 million tonnes being handled at UK major ports, accounting for 40% of all tonnage. Whilst the quantity of liquid bulk handled by UK ports has been generally falling since the start of the millennium, this has slowed in both directions over the past three years. Milford Haven itself handles 33.7 million tonnes, which is 7.1% of all UK port freight, and remains the top port for liquid bulk traffic.

Chart 11: Top 10 UK ports handling liquid bulk in 2016, and change from 2015



Detailed statistics on freight traffic (tonnage) can be found in the statistical data set PORT0104.

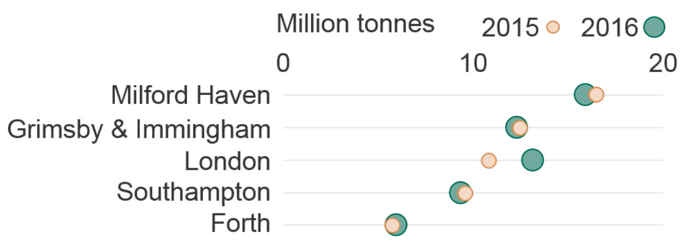
Crude Oil

The amount of crude oil passing through UK ports has halved since 2000, from 184.3 million to 87.1 million tonnes in 2016. Both inward and outward tonnage has decreased in the last decade, however outward tonnage has been broadly stable at around 38 million tonnes since 2012. Inward traffic fell for the fifth year in a row to 48.9 million tonnes in 2016. The majority of UK ports saw a reduction in the tonnage of crude oil handled in 2016 compared to the previous year, the largest being an 18% decrease in Southampton. However, the ports of the Rivers Hull and Humber experienced a rise from 7.5 million tonnes in 2015 to 9.4 million tonnes in 2016. This is despite the TOTAL Lindsey Oil Refinery halving its capacity in September 2016 as part of its £30 million investment project. However, in 2015 work on the Tetney Sea Line Project was completed which may have boosted flow to the refinery to offset this difference.

Oil Products

78.5 million tonnes of oil products, which include petrochemical derivatives, were handled by UK major ports in 2016. Inward oil products have risen since 2000, from 37.5 million tonnes to 46.4 million tonnes in 2016, outward movement has been falling at around the same rate.

Chart 12: London saw the largest growth in oil products out of the top 5 ports, compared to the previous year

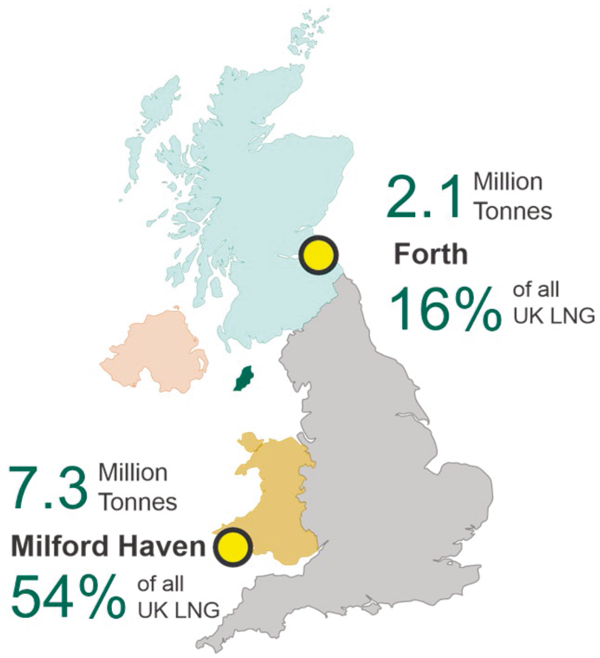


Liquefied Gas

Most UK ports saw a reduction in the amount of liquefied gas handled in 2016. The largest of these reductions was experienced by Milford Haven, however it still remains the largest port for handling of liquefied gas in the UK. Grimsby and Immingham also showed a decrease, handling 29% fewer tonnes of liquefied gas than in 2015.

Some ports, however, experienced an increase; London handled around 35% more liquefied gas, followed closely by Medway ports who (32% increase), overtaking Tees and Hartlepool into third place for tonnage of liquified gas.

Chart 13: Over two-thirds of all UK Liquefied Gas (LNG) tonnage is handled in two ports

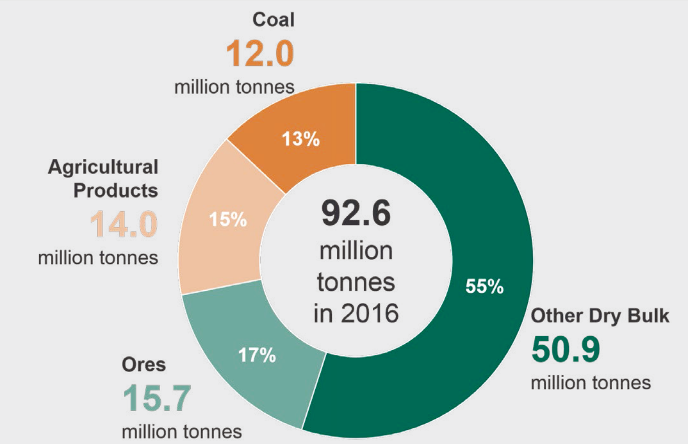


Detailed statistics on freight traffic (tonnage) can be found in the statistical data set PORT0104.

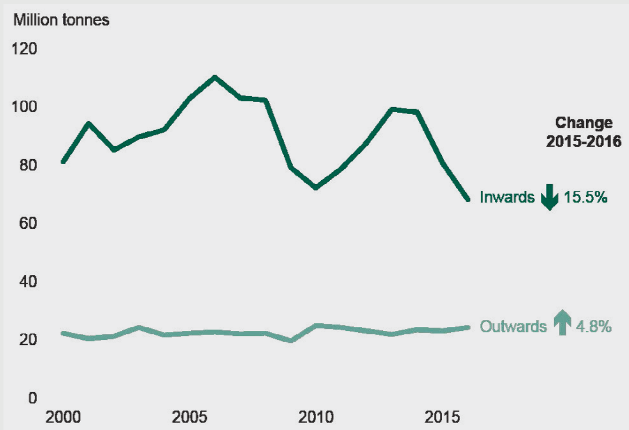
Dry Bulk

In 2016, 93 million tonnes of dry bulk was handled by UK major ports, down 11% from 2015. The majority of this fall is due to a sharp fall in coal freight.

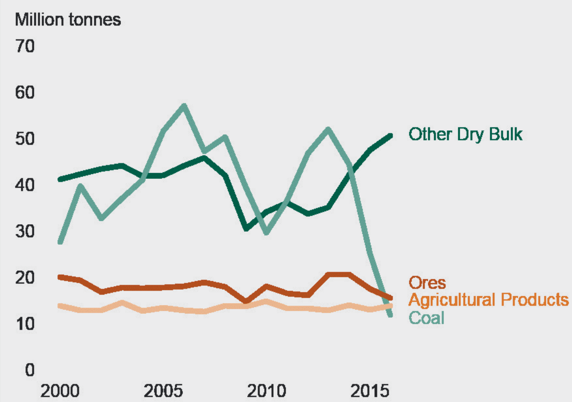
Dry bulk cargo categories, 2016



Dry bulk by direction since 2000



Dry bulk cargo categories - trend over time

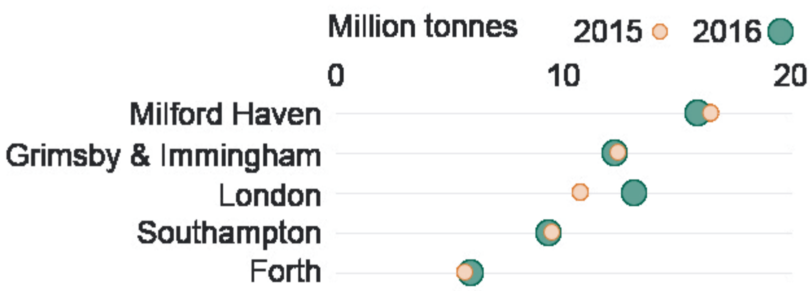


Change in freight handled in 2016...

	Since last year (2015)	From 5 years ago (2011)	From 10 years ago (2006)
Other Dry	↑ 7%	↑ 40%	↑ 15%
Coal	↓ 53%	↓ 67%	↓ 79%
Agricultural	↑ 6%	↑ 4%	↑ 7%
Ores	↓ 11%	↓ 6%	↓ 14%

Volume of dry bulk goods handled by UK ports has varied considerably over the past decade, largely due to a steep decline in the amount of coal handled. This has also resulted in dry bulk goods handled by UK ports reaching its lowest point since 2000, affecting trends for ports that handled a lot of dry bulk in 2015.

Chart 14: Top 10 ports for dry bulk 2016 and change from 2015, UK



Definitions

Other Dry Bulk

Cargo in this category includes:

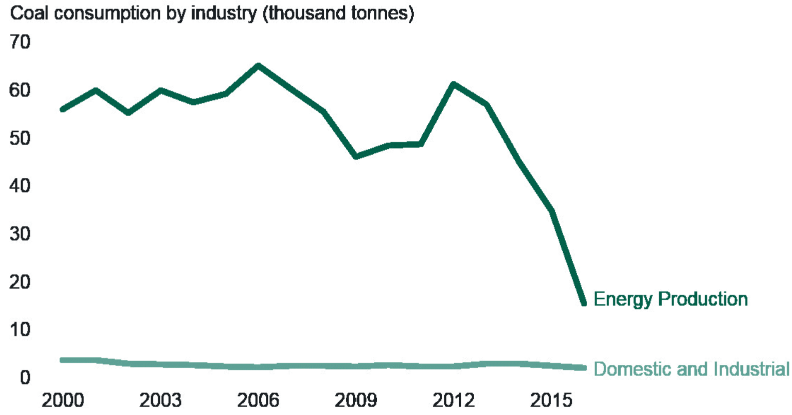
- Sea-dredged aggregate
- Cement
- Fertiliser

Information about what goods are classified under each cargo category can be found in the [Port Traffic Statistics: Administrative Rules].

Coal

Closure of coal powered stations to meet 2025 emissions target[1] and restricted use by 2023, along with several events concerning UK steelworks in 2016, have caused a large fall in the tonnage of coal handled by UK ports. In addition to the closure of Redcar steelworks causing reductions in the North East, Scunthorpe steelworks was sold to British Steel and saw a reduction in output after being sold with several coke ovens being stopped. However, Port Talbot still handles the largest amount of ores of any UK port (5.4 million tonnes), and the third highest amount of coal (2.0 million tonnes).

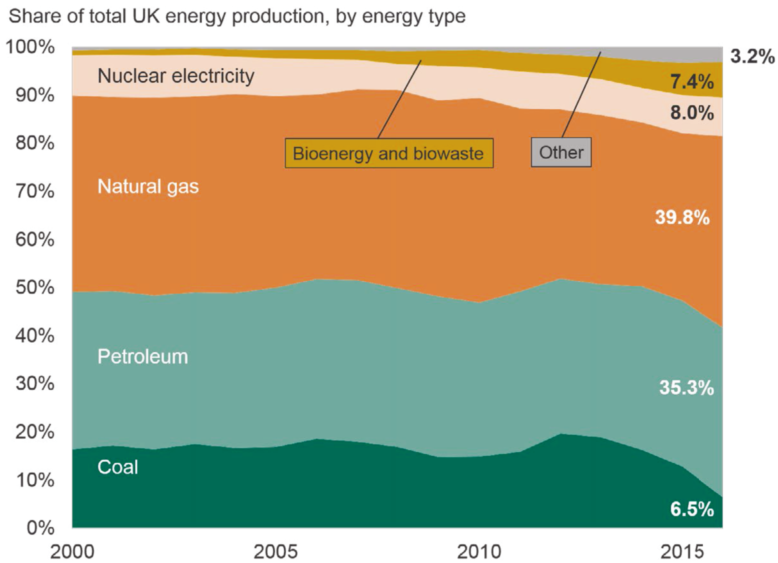
Chart 15: Total UK consumption of coal has fallen markedly...



Source: BEIS, Digest of UK Energy Statistics (DUKES), Energy Trends, Table 2.1 - Inland consumption of solid fuels

Figures from BEIS Energy Trends publication show a falling consumption of coal in energy production. 9 coal-fired power stations have closed since 2012[2]. As more than half of coal supply is provided by imports, falling consumption has driven the drop of port freight in this category. This has been, in part, offset by the growth of biowaste, bioenergy and renewable sources, which now provide 11% of all UK energy.

Chart 16: ... whilst the share of UK energy produced by renewable sources reaches 11%



Source: BEIS, Digest of UK Energy Statistics (DUKES), Energy Trends Table 1.1.1 - Inland consumption of primary fuels and equivalents for energy use

Agricultural Products

Whilst agricultural products only make up 15% of dry bulk handled at UK ports (14.0 million tonnes), there has been a rise in recent years. In 2016, 8.5 million tonnes entered UK ports compared to 5.5 million tonnes outward.

London ports have seen an 8% increase since 2015 in the tonnage of agricultural products handled following the creation of a grain export facility at Sheerness, including conversion of an old warehouse to a site which can handle 12,000 tonnes of grain at any one time.

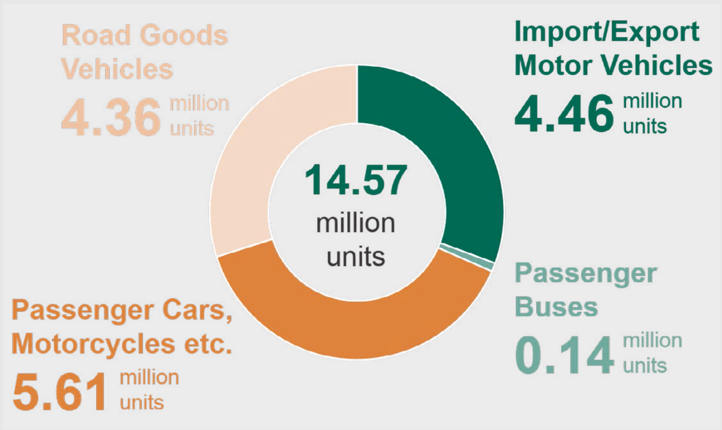
Energy statistics, including coal supply and consumption, can be found in the Energy Trends Publications, produced by the Department for Business, Energy & Industrial Strategy.

1. https://www.gov.uk/government/news/government-announces-plans-to-close-coal-power-stations-by-2025
2. Taken from Digest of UK Energy Statistics, BEIS, July 2016

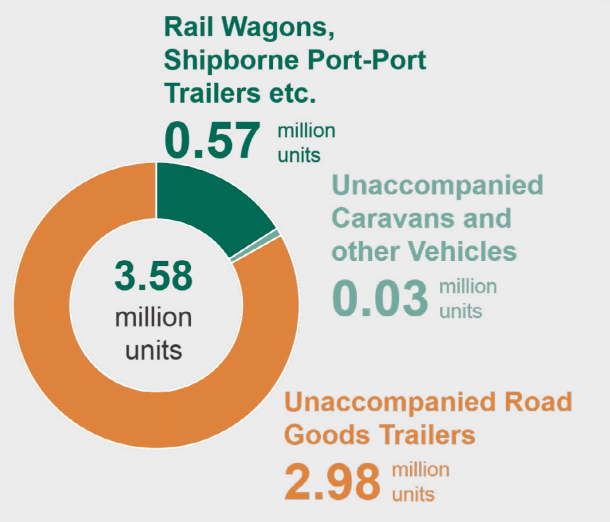
Roll-on Roll-off Cargo

In 2016, 18.2 million Ro-Ro units passed through UK major ports via roll-on roll-off services, up 1.4% compared to 2015.

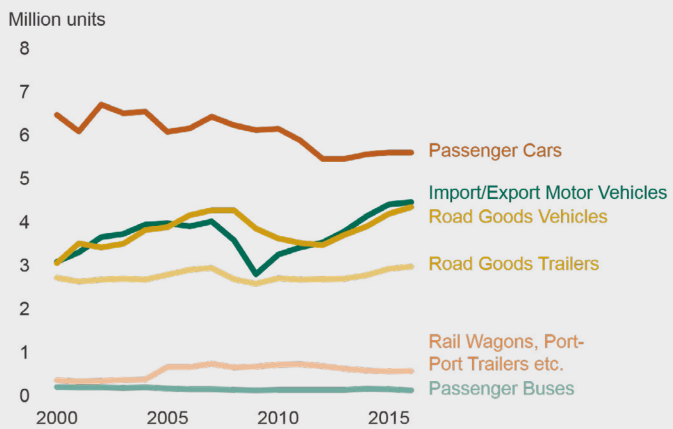
Self-propelled Ro-Ro categories, 2016



Non Self-propelled Ro-Ro categories, 2016



RoRo categories - trend over time



Change in units handled in 2016...

	Since last year (2015)	From 5 years ago (2011)	From 10 years ago (2006)
Import/ Export Motor Vehicles	↑ 1%	↑ 30%	↑ 14%
Passenger Buses	↓ 13%	↓ 4%	↓ 13%
Passenger Cars	↑ 0%	↓ 5%	↓ 9%
Rail Wagons	↑ 1%	↓ 21%	↓ 14%
Road Goods Vehicles	↑ 4%	↑ 23%	↑ 5%
Road Goods Trailers	↑ 2%	↑ 11%	↑ 2%

Roll-on roll-off (Ro-Ro) traffic has been rising both in terms of the tonnage, as well individual units. 106.4 million tonnes of Ro-Ro freight passed through UK major ports in 2016, up 2.6% on 2015, this does not include the weight of the vehicles.

In terms of units, Ro-Ro traffic between UK ports made up 21.9% of all Ro-Ro passing through UK ports in 2016. Traffic between the UK and the EU accounted for 76.7% of Ro-Ro.

Chart 18: Top 5 ports for Ro-Ro Traffic in the UK (million tonnes)

Import/Export Motor Vehicles

A quarter of all trade in/out of major ports in motor vehicles passes through Grimsby and Immingham, which handled 1.1 million vehicles in 2016. Imports of vehicles at this port have increased 36% over the past 5 years contributing to an overall total increase of 30% in import of vehicles since 2011, however imports dropped 1% in 2016.

Southampton has seen a 75% increase in export of vehicles over the past five years, this along with increases in other ports such as Grimsby and Immingham, London and Bristol has contributed to export of vehicles increasing for the second consecutive year to 1.5 million vehicles exported in 2016.

Passenger Cars

5.6 million passenger cars passed through UK major ports in 2016, unchanged on 2015 but down 5% over the past 5 years.

Dover was the top port for passenger cars; 38% of passenger vehicles passed through Dover, totalling 2.1 million units.

Road Goods Vehicles

Similar to passenger cars, the majority of road goods vehicles travelling to or from the UK pass through Dover. 2.6 million units travelled through Dover in 2016, 60% of all UK road goods vehicle Ro-Ro traffic.

The largest changes were experienced by Belfast, up 34% compared to 2015, and Liverpool up 22% on 2015.

Chart 18: Motor vehicles through UK major ports by direction

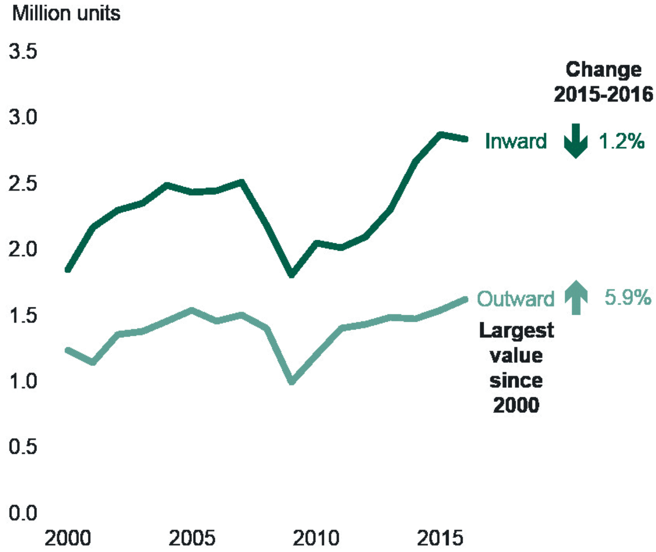


Chart 19: Top passsenger car routes in the UK (thousand units)

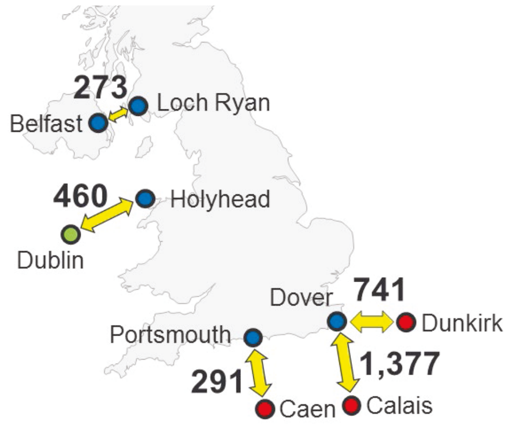
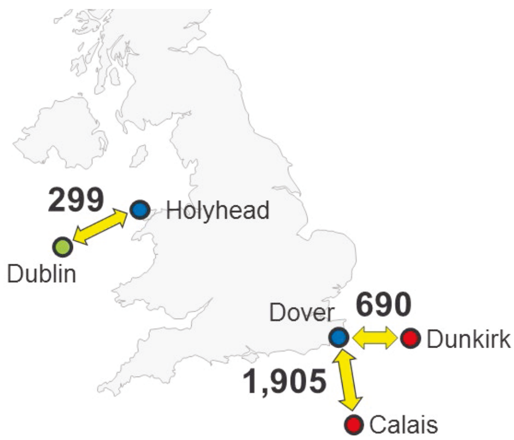


Chart 20: Top road goods vehicle routes in the UK (thousand units)

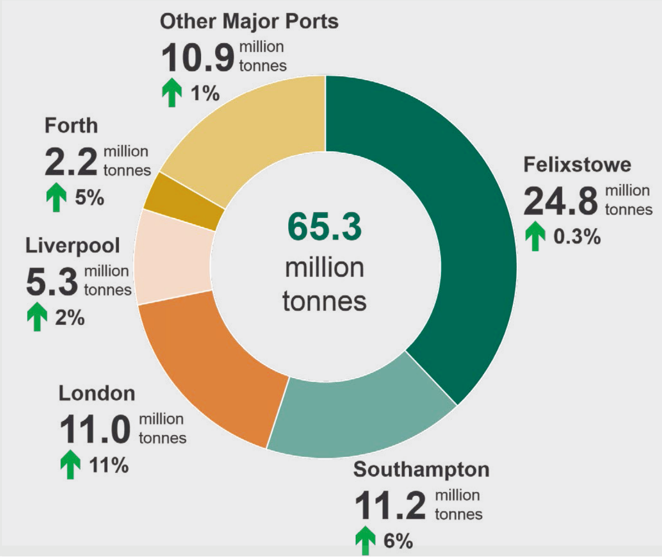


Detailed statistics on freight traffic (unitised) can be found in the statistical data sets PORT0209, PORT0211, PORT0404 and PORT0419.

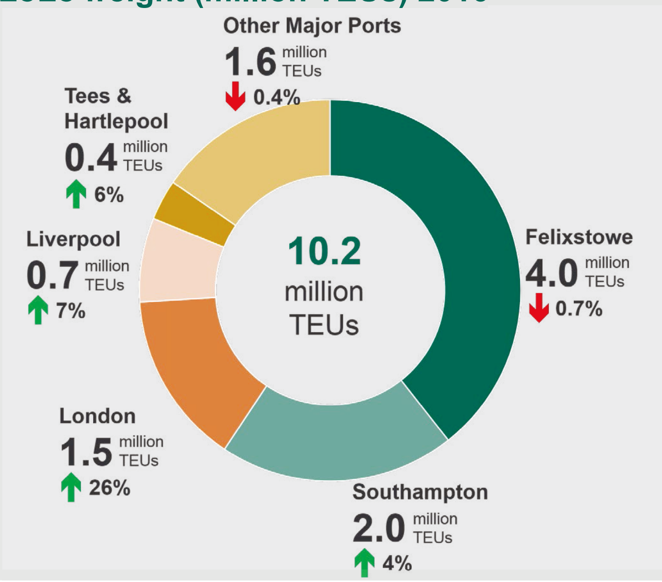
Lift on - Lift off Cargo

10.2 million TEUs of container traffic passed through UK major ports in 2016, up 4% from 2015.

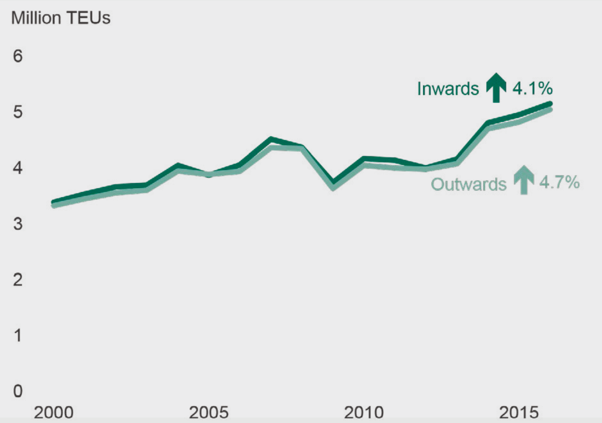
LoLo freight (million tonnes) 2016



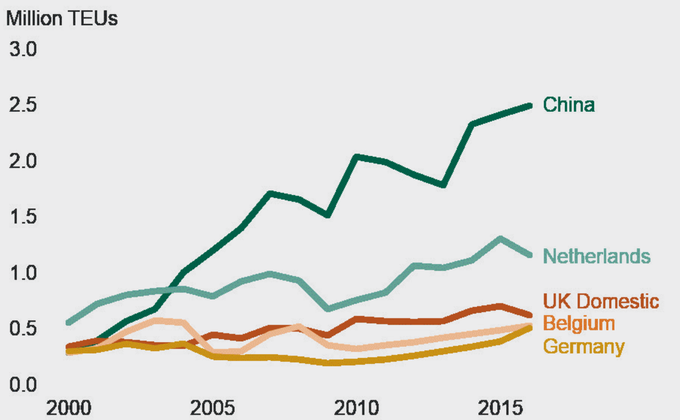
LoLo freight (million TEUs) 2016



LoLo TEUs - trend over time



LoLo trading partner with UK, TEUs



Measured in twenty-foot equivalent units (TEUs), lift-on lift-off (Lo-Lo) traffic increased 4% from 2015, its fourth consecutive year of growth. London ports have seen the largest growth, handling 1.5 million TEUs in 2016, which is a 26% increase on 2015. Since 2012, container traffic at London has increased by an average of 22% year-on-year.

Medway container traffic increased in 2015 to fall in 2016, with an average reduction of 20% year on year since 2010.

Liverpool saw a 7% growth to 727 thousand TEUs in 2016, and in November 2016 opened a new £400m container port to increase capacity.

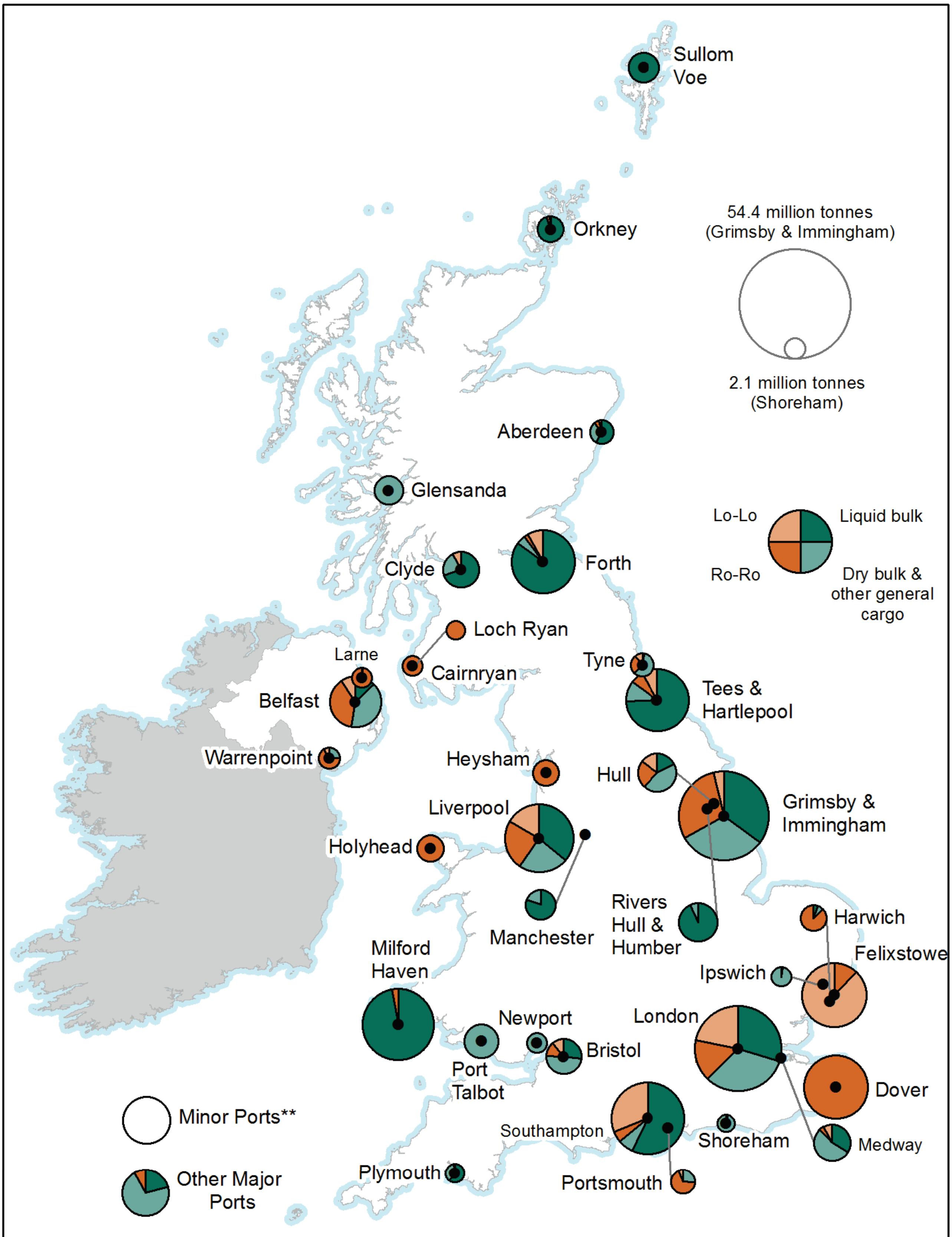
Definitions

TEU (twenty-foot equivalent units) is a standardised measure to allow for the different sizes of container boxes.

Size	TEU
20ft	1
40ft	2
>20ft & <40ft	1.5
>40ft	2.25

Detailed statistics on freight traffic (unitised) can be found in the statistical data sets PORT0209, PORT0211, PORT0404, PORT0419 and PORT0428.

UK major ports: tonnage by cargo category, 2016



* All ports marked on map handled over 2 million tonnes of freight in 2016.
** Information on tonnage by cargo is not available for minor ports.

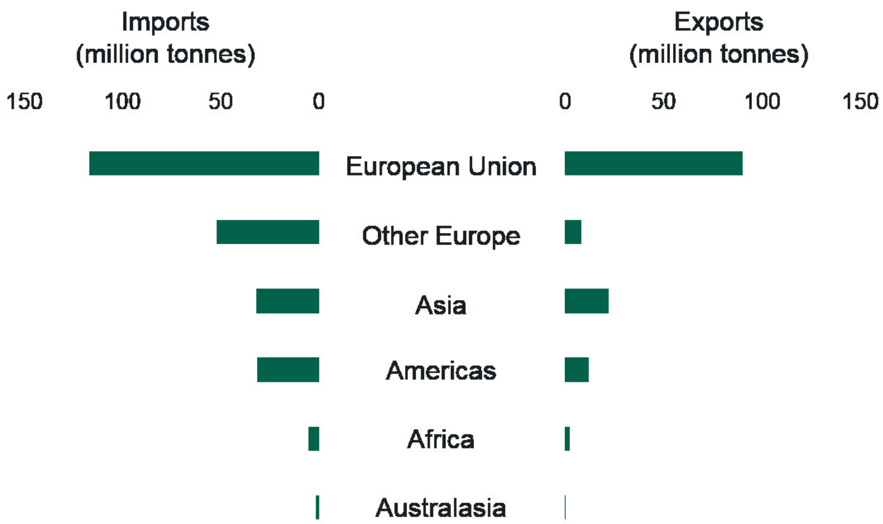
4. Port Freight by Trading Partner

Domestic tonnage (between UK ports or one-port traffic) amounted to 98.6 million tonnes in 2016, which was 21% of all tonnage through UK major ports.

International tonnage handled decreased to 374.2 million tonnes in 2016, a drop of 2% compared to 2015. The majority of this is with the European Union (EU), a total of 206.8 million tonnes. This figure has increased by 2% compared to 2015. Most of this rise is due to an increase in inward liquid bulk; oil product imports from the EU have risen 24% since 2015 to a total of 21.9 million tonnes.

In 2015 we imported 22.3 million tonnes of coal from international partners, however in line with falling consumption these imports fell 59% to 9.1 million tonnes in 2016. For example we imported 5.9 million tonnes of coal from Columbia in 2015, this fell to 2.7 million tonnes in 2016.

Chart 21: Imports and exports handled by UK ports by continent, 2016



Americas
43.4 million tonnes
↓ 14% compared to 2015

European union
206.8 million tonnes
↑ 2% compared to 2015

Africa
7.5 million tonnes
↓ 26% compared to 2015

Non-EU Europe
60.5 million tonnes
↓ 7% compared to 2015

Australasia
1.9 million tonnes
↓ 26% compared to 2015

Asia
54.0 million tonnes
↑ 7% compared to 2015

Definitions

Domestic: Made up of coastwise and one-port traffic (see below).

Coastwise: Traffic travelling within UK waters between ports in the United Kingdom.

One-port: Sand and gravel etc dredged from sea bed and landed at a port for commercial purposes; and traffic to and from UK offshore locations eg oil & gas installations and wind farms.

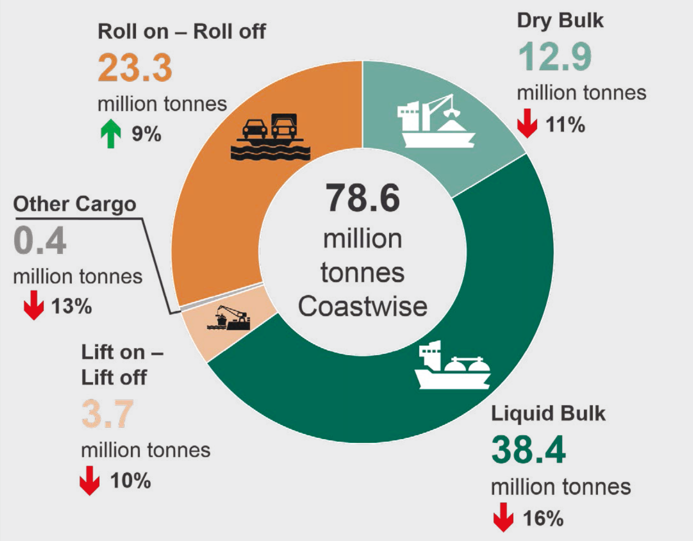
Flag: Country of registration for which the vessel operates. Vessels may appear in more than one registry (parallel registry) although only one may be active at any one time.

UK parent owned: The nationality of the company having the controlling interest in the direct owner is United Kingdom.

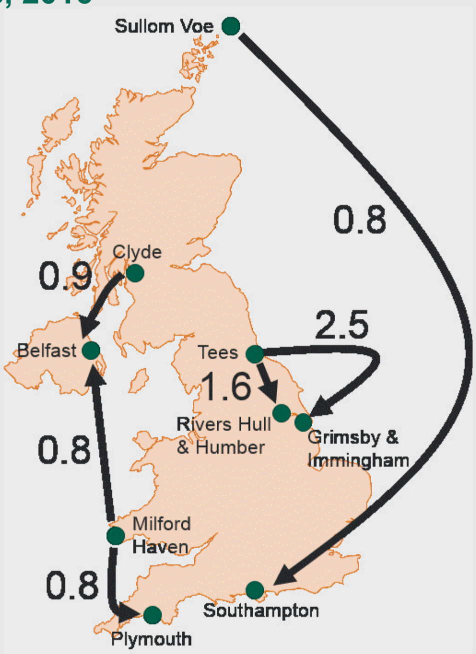
Domestic Major Port Traffic

Overall domestic major port traffic - coastwise and one-port - fell to 98.6 million tonnes in 2016, a drop of 5% from 2015. However, one-port traffic, rose 13% to 20.0 million tonnes in 2016.

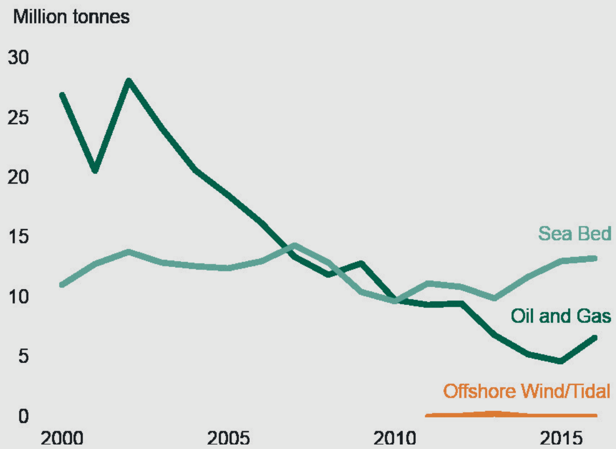
UK Coastwise freight by cargo, 2016

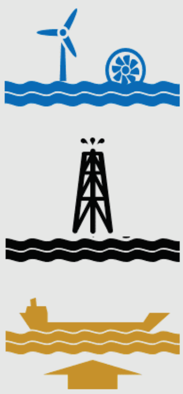


Top liquid and dry bulk freight coastwise routes, 2016



One-port activity by type - trend over time





Offshore wind/tidal

Dry bulk 2 thousand tonnes
Other cargo 45 thousand tonnes

Offshore oil & gas

Dry bulk 306 thousand tonnes
Liquid bulk 4,891 thousand tonnes
Other cargo 1,442 thousand tonnes

Offshore sea bed

Dry bulk 13,298 thousand tonnes

The largest contributor to the fall in domestic traffic was the fall in the amount of transported crude oil, which fell 14% to 25.1 million tonnes in 2016. Whilst the amount of coal fell to 1.7 million tonnes in line with the general fall in all coal handling, the amount of ores moved domestically has risen each year to 0.9 million tonnes in 2016.

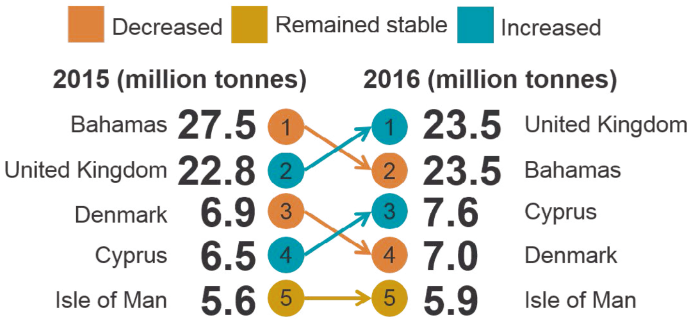
Domestic ro-ro traffic also continued to grow, 4% in 2016 to 3.3 million units, driven by a 15% rise in road goods vehicles and a 5% rise in passenger cars on domestic Ro-Ro services.

Detailed statistics on domestic freight can be found in the statistical data sets PORT0107 and PORT0108.

Domestic Traffic by Flag

The proportion of domestic traffic carried by UK registered ships increased 3% in 2016, to 23.5 million tonnes. This makes up 24% of all UK domestic traffic. This is the largest share of UK domestic traffic, level with the tonnage of goods carried by Bahamas registered ships. Bahamas registered ships moved 23.5 million tonnes of UK domestic freight in 2016, down 15% from 2015.

Chart 22: The UK flag is now the number one represented registry for UK domestic traffic



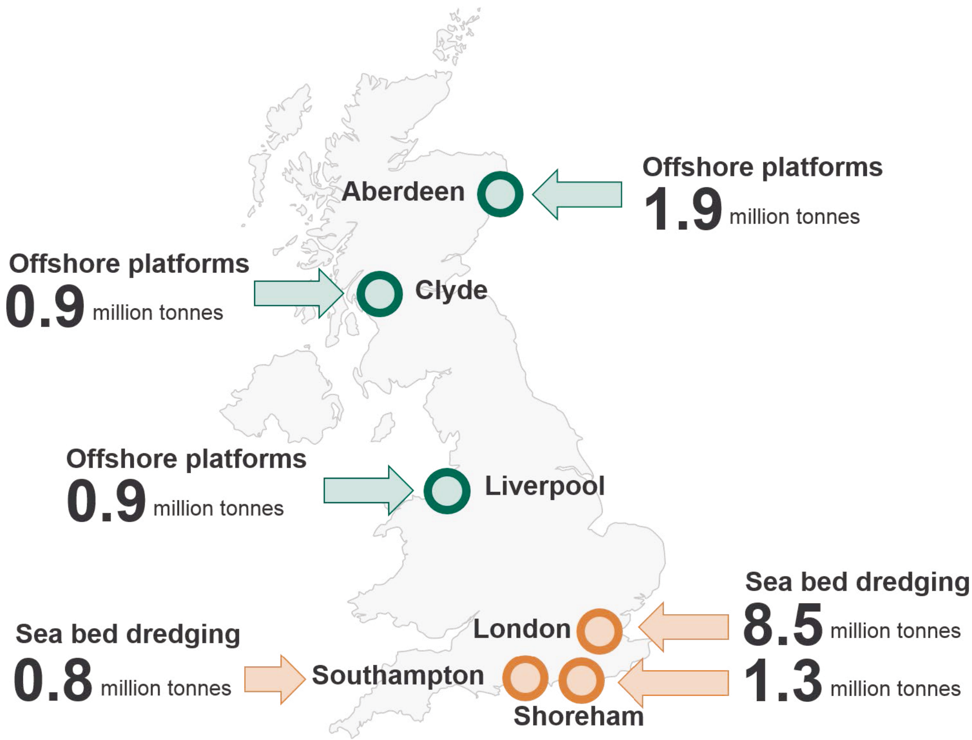
Ships registered in European Community countries (e.g. Denmark, Netherlands and Greece) saw a 13% year on year rise in trade to 18.3 million tonnes in 2016. Ships under these flags transported 22% of our domestic dry bulk and 27% of our domestic liquid bulk.

One-port Operations

One-port activity saw 20.0 million tonnes pass through UK ports. The largest percentage growth was in deliveries to offshore windfarms, where 34 thousand tonnes of iron and steel products were delivered, as well as 10 thousand tonnes of other general cargo such as coated steel pipes. The amount of crude oil handled from UK offshore platforms also nearly doubled to 3.3 million tonnes in 2016.

The amount of dry bulk extracted through sea bed dredging rose marginally to 13.3 million tonnes, up 2% since 2015.

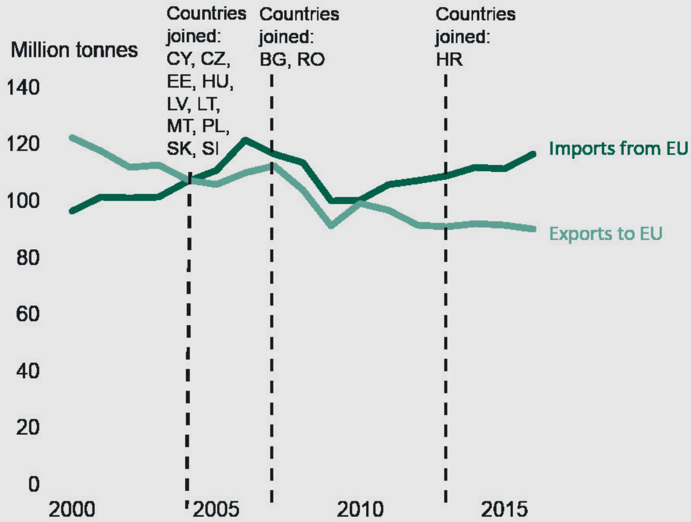
Chart 23: UK One-port operations increased by 13% in 2016



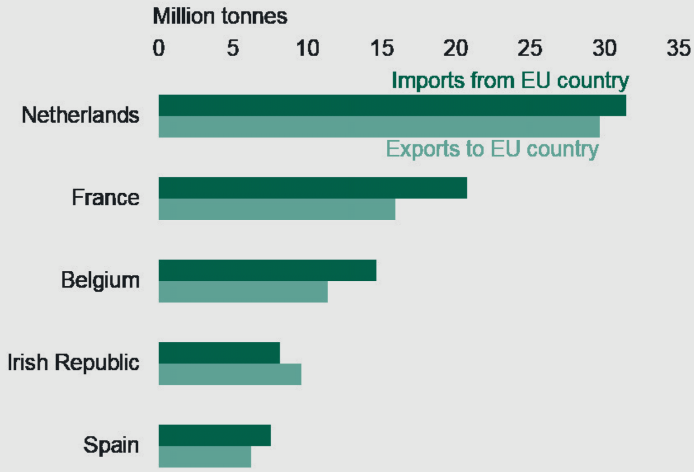
Short Sea Freight with the European Union

UK major port traffic with the European Union rose 2% to 206.8 million tonnes in 2016, due mostly to a 24% rise in imports of oil products.

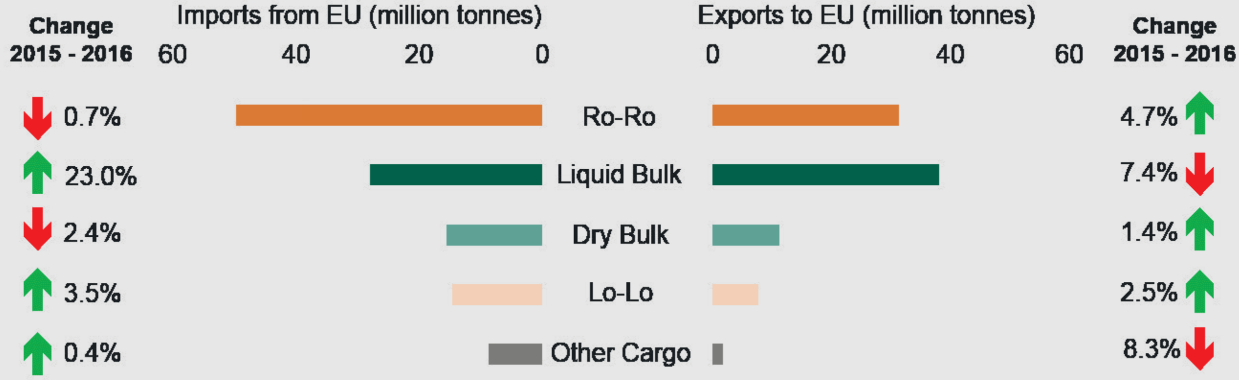
Trade with EU via UK major ports



Import/Exports via UK major ports from/to top 5 EU partner countries, 2016



Imports/Exports from/to EU partners by cargo category, UK major ports 2016



Maritime freight with the European Union grew 2% to 206.8 million tonnes in 2016, and accounted for 44% of all tonnage through UK major ports.

Imports made up 56% of all tonnage handled between the UK and EU countries. UK major ports receieved 116.6 million tonnes from countries in the EU in 2016, an increase of 4% compared to 2015. Among EU countries, the highest amount of imports was from the Netherlands, 31.5 million tonnes, 10% higher than 2015. Freight received from ports in the Netherlands now makes up over a quarter of all inward tonnage from the EU.

In contrast, exports from the UK to the EU fell 1.6% between 2015 and 2016, down to 90.1 million tonnes. This is due, in part, to a fall of 11% in exports to both France and Germany, primarily driven by falling liquid bulk imports. In contrast, exports to Italy nearly doubled to 1.8 million tonnes, with an increase in crude oil imports from 0.4 million tonnes in 2015 to 1.3 million tonnes in 2016.

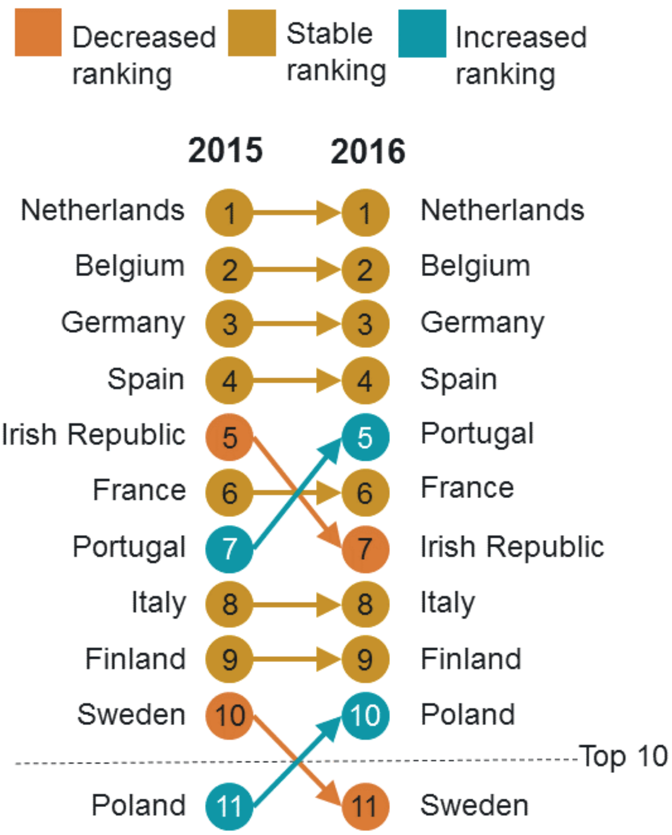
Container Traffic with EU

Container traffic with the European Union rose 8% in 2016 to 2.0 million units. In terms of twenty-foot equivalent units (TEUs), a way of standardising the various possible container sizes, container traffic rose 9% to 3.6 million TEUs.

Container exports to the EU rose by 11% in 2016 to 2.1 million TEUs. The largest component was a 31% year on year increase in exports to Germany, receiving 0.5 million TEUs in 2016.

The Netherlands still receives the majority of our container traffic (1.2 million TEUs in total during 2016), but their share fell 7 percentage points to 32% of total container traffic. Some of this traffic can be accounted for by transhipment, where goods pass through ports like Rotterdam, before being shipped to a final destination outside of the Netherlands.

Chart 24: Top 10 EU trading partners with UK, ranked on volume of container traffic



Rise in Imports of Oil Products

The tonnage of imported oil products has risen markedly since 2015. 22 million tonnes were received in 2016, up 24% since 2015. The largest rise was in imports from Netherlands ports, a 54% increase in traffic to 7.4 million tonnes. Rotterdam itself accounted for a majority of this tonnage, so that this increase may be due to transhipment (see box). Another large rise was seen in imports from Latvia, where 1.4 million tonnes of oil products were imported in 2016, a rise of 149% on 2015.

In contrast, exports to the EU of UK oil products have fell 12% to 15.9 million tonnes in 2016.

Definitions

Transhipment: The shipment of goods and containers to an intermediate destination (e.g. Rotterdam), and then to another destination (e.g. UK ports), without leaving the boundary of the port. In UK maritime statistics, as only the port of load/unload is recorded, not the final destination or source of the goods, we are unable to measure the effects of transhipment.

Numerous attempts have been made to quantify this with limited success. An example is a 2014 article UK Trade in goods estimates and the 'Rotterdam Effect', published by the Office for National Statistics.

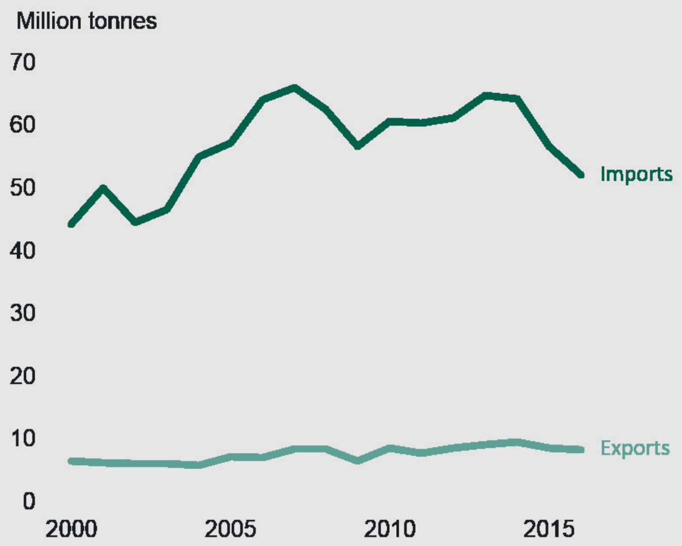
Detailed statistics on maritime freight between the European Union and the United Kingdom, as well as freight within the Union itself, can be found on the Eurostat website. The UK is required to share statistical information with the Union via Eurostat under Directive 2009/42/EC.

Detailed information on specific traded commodities is available on the HM Revenue and Customs (HMRC) website.

Short Sea Freight with Non-EU European Countries

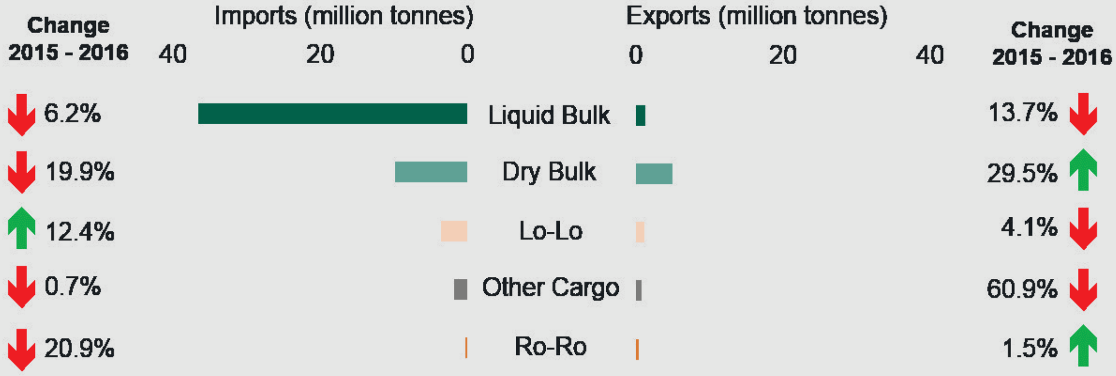
Trade with other European and Mediterranean (extra-EU) countries fell to 7% to 60.5 million tonnes in 2016 compared to the previous year, with a fall in oil products tonnage of 18%, and a fall in coal tonnage of 58%.

Extra-EU imports/exports to UK major ports since 2000



Extra-EU top 5 import/exports by country, 2016

Imports/exports to UK from extra-EU European partners by cargo category, 2016



Imports handled by UK major ports from non-EU European and Mediterranean (extra-EU) countries fell 8% since 2015 to 52.2 million tonnes, with a 64% fall in coal imports from Russia to 2.2 million tonnes.

Exports handled by ports from the UK to non-EU European and Mediterranean countries fell to 8.3 million tonnes in 2016, a reduction of 3%. UK deliveries of iron and steel products have more than halved to 0.5 million tonnes, largely due to a reduction in deliveries to Turkey (down to 0.4 million tonnes in 2016). However, exports of ores rose to 3.1 million tonnes, up 22% since 2015, the largest share being exported to Turkey; in 2016 2.5 million tonnes of ores were exported to Turkey from the UK.

Definitions

Short Sea: Maritime traffic that moves cargo along a coast without having to cross an ocean, in contrast to *deep sea* traffic that must cross an ocean to reach its destination.

Extra-EU: A Eurostat term encompassing all European and Mediterranean countries that are not part of the European Union

Growth in Agricultural Exports

The volume of agricultural products exported from the UK to non-EU European and Mediterranean countries nearly doubled in 2016 to 1.0 million tonnes. The biggest exporting UK ports in this category were ports in the Thames and Kent region, particularly London which saw a tripling of exports to 0.4 million tonnes in this category.

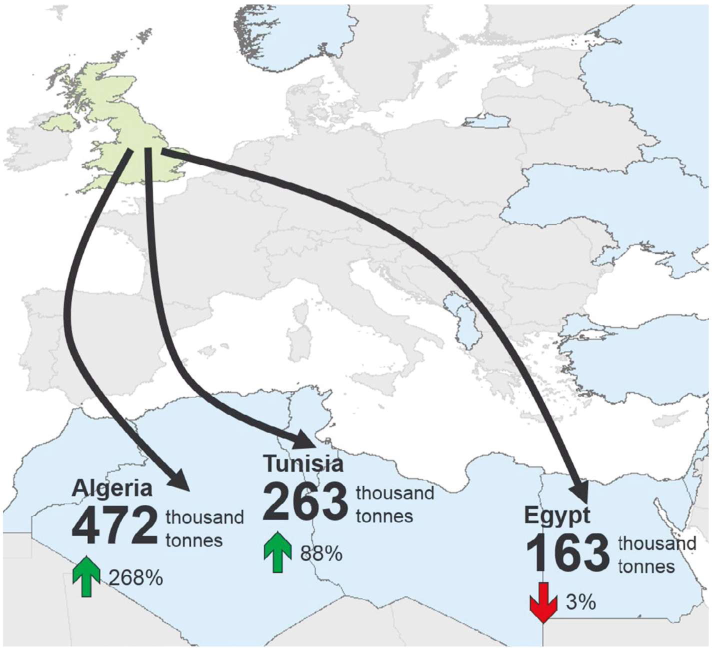
The largest destination for these exports was Algeria, who received around half of all UK agricultural exports. Algeria received 472 thousand tonnes of agricultural goods from the UK, up from only 128 thousand tonnes in 2015.

Rise in Container Traffic

Container traffic between the UK and non-EU European and Mediterranean countries rose in both directions. Inward container traffic rose to 424 thousand TEUs (up 14% on 2015), and outward container traffic rose to 171 thousand TEUs (up 17% on 2015).

Turkey remains the number one extra-EU country for container traffic to and from the UK, sending 265 thousand TEUs to the UK and receiving 55 thousand TEUs from UK ports in 2016.

Chart 25: 90% of Non-EU European Agricultural Exports from the UK are to three countries

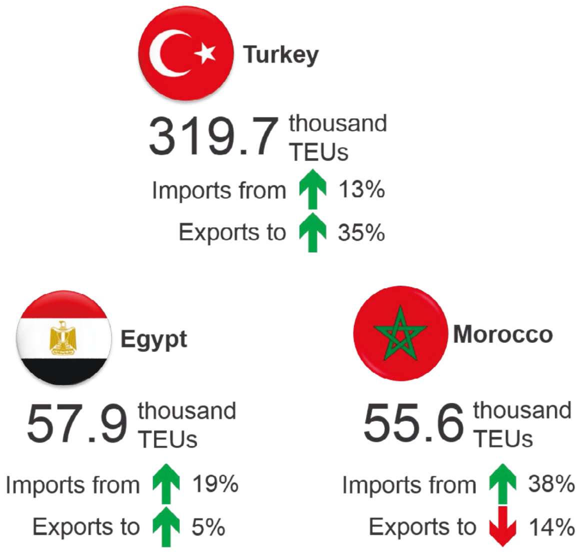


Definitions

TEU (twenty-foot equivalent units) is a standardised measure to allow for the different sizes of container boxes.

Size	TEU
20ft	1
40ft	2
>20ft & <40ft	1.5
>40ft	2.25

Chart 26: Imports of containers from the top 3 extra-EU partners with the UK continue to increase in 2016 compared to 2015

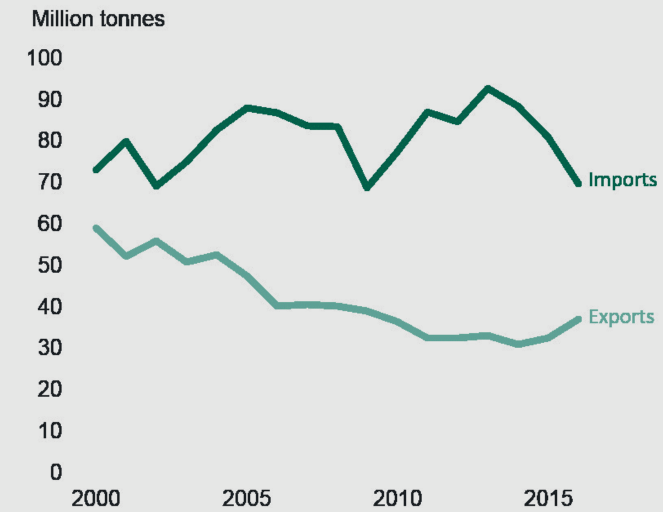


Detailed information on specific traded commodities is available on the [HM Revenue and Customs (HMRC) website.]

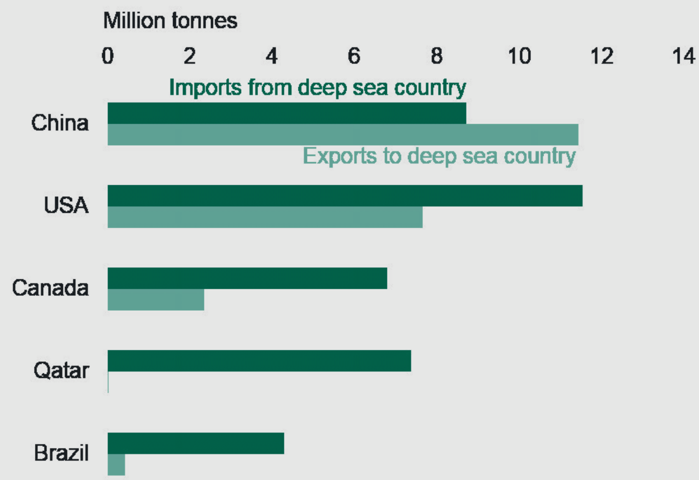
Deep Sea International Freight

106.8 million tonnes is traded with deep sea partners, down 6% from 2015, a reduction driven largely by coal and ore imports which declined 46% to 11.8 million tonnes in 2016.

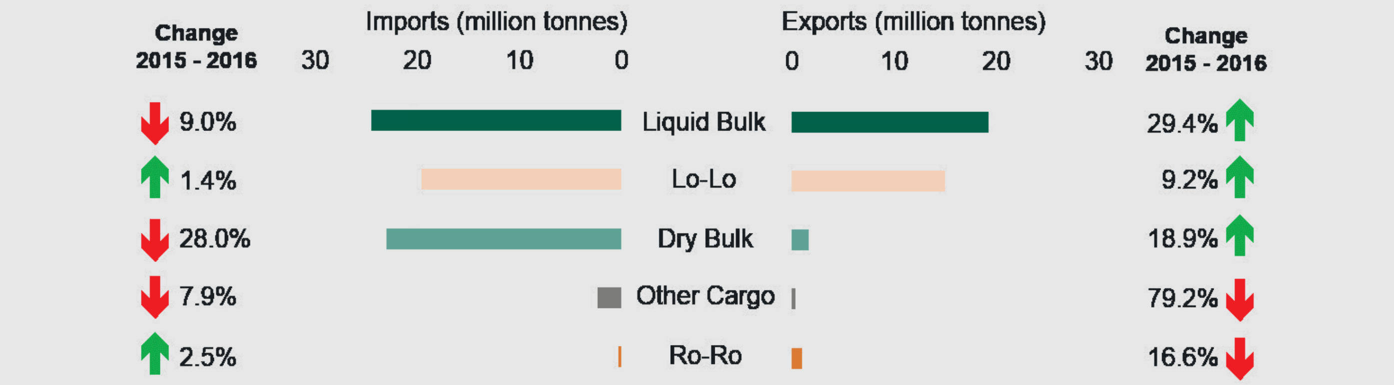
Imports/Exports from deep sea partners through UK major ports since 2000



Import/Exports from the top 5 deep sea partners through UK major ports, 2016



Imports/Exports from deep sea partners to UK major ports by cargo category



Cargo moved between UK major ports and Asia (excluding Mediterranean countries) rose 7% from 2015, to 54 million tonnes in 2016. This was driven by crude oil exports to China rising from 1.1 million tonnes in 2015, to 7.1 million tonnes in 2016. Most of this (6.2 million tonnes) came through the port of Forth. In addition to the increase in export of crude oil to China, exports of crude oil to the Americas doubled to 1.7 million tonnes.

Exports of motor vehicles from the UK to deep sea partners fell 2% since 2015. 425 thousand units of motor vehicles reached deep sea destinations in 2016, 55% went to the USA, an increase of 15 percentage points on 2015.

Definitions

Deep Sea: Maritime traffic that crosses oceans, as opposed to *short sea* traffic that can move along a coast within a continent.

Detailed statistics on international freight traffic can be found in the statistical data sets PORT0109, PORT0110, and PORT0204.

International Container Traffic

Container traffic between the UK and International deep sea destinations rose to 5.3 million TEUs, up 3% from 2015.

China is our largest partner for container traffic in 2016, resulting in 2.5 million TEUs, up 3% from 2015. This makes up 47% of all deep sea LoLo handled by UK ports. Second place is taken by the USA which contributes 0.4 million TEUs to our container traffic; this is 8% of all deep sea LoLo trade.

Fall in American Dry Bulk Traffic

Dry bulk traffic between the UK and countries in the American continent fell to 20.9 million tonnes in 2016, a drop of 28%. This fall was across the board: USA traffic fell 23% to 7.2 million tonnes, Brazil down 41% to 3.8 million tonnes, and Columbia down 51% to 2.9 million tonnes. This was driven by falling trade in both coal (4.7 million tonnes, down 59% since 2015) and ores (5.5 million tonnes, down 33% since 2015).

However, there was a 27% rise in the quantity of agricultural products traded with the Americas in 2016. This primarily composed of an increase in trade with Argentina, Brazil and the USA.

Iron and Steel Imports

Iron and Steel imports through UK major ports fell 8% to 770 thousand tonnes in 2016. This is comprised of a fall in imports from China to 397 thousand tonnes, a drop of 32% since 2015. 2016 did however see the first imports of Iron and Steel products from India, Indonesia, and Brazil, which collectively contributed 122 thousand tonnes.

Definitions

TEU (twenty-foot equivalent units) is a standardised measure to allow for the different sizes of container boxes.

Size	TEU
20ft	1
40ft	2
>20ft & <40ft	1.5
>40ft	2.25

Chart 27: Total container traffic between UK major ports and deep sea trading partners

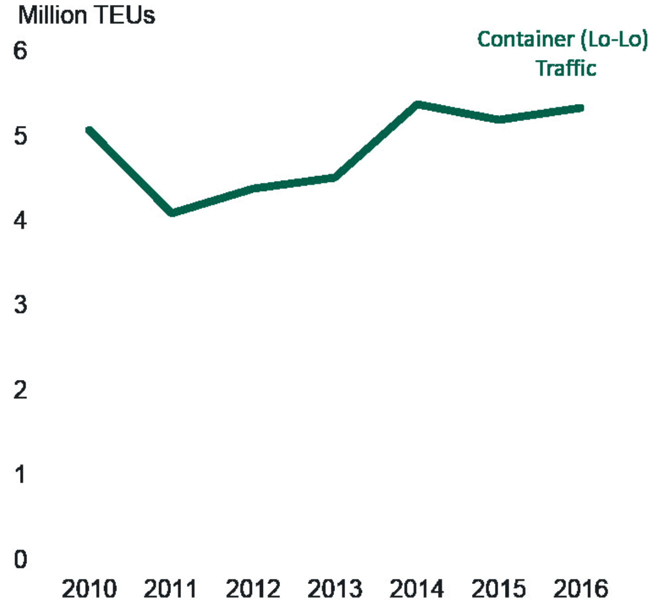
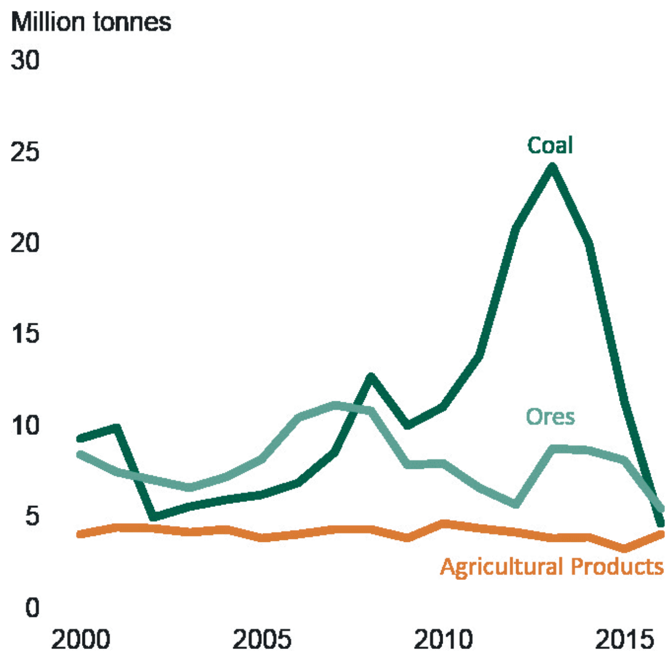
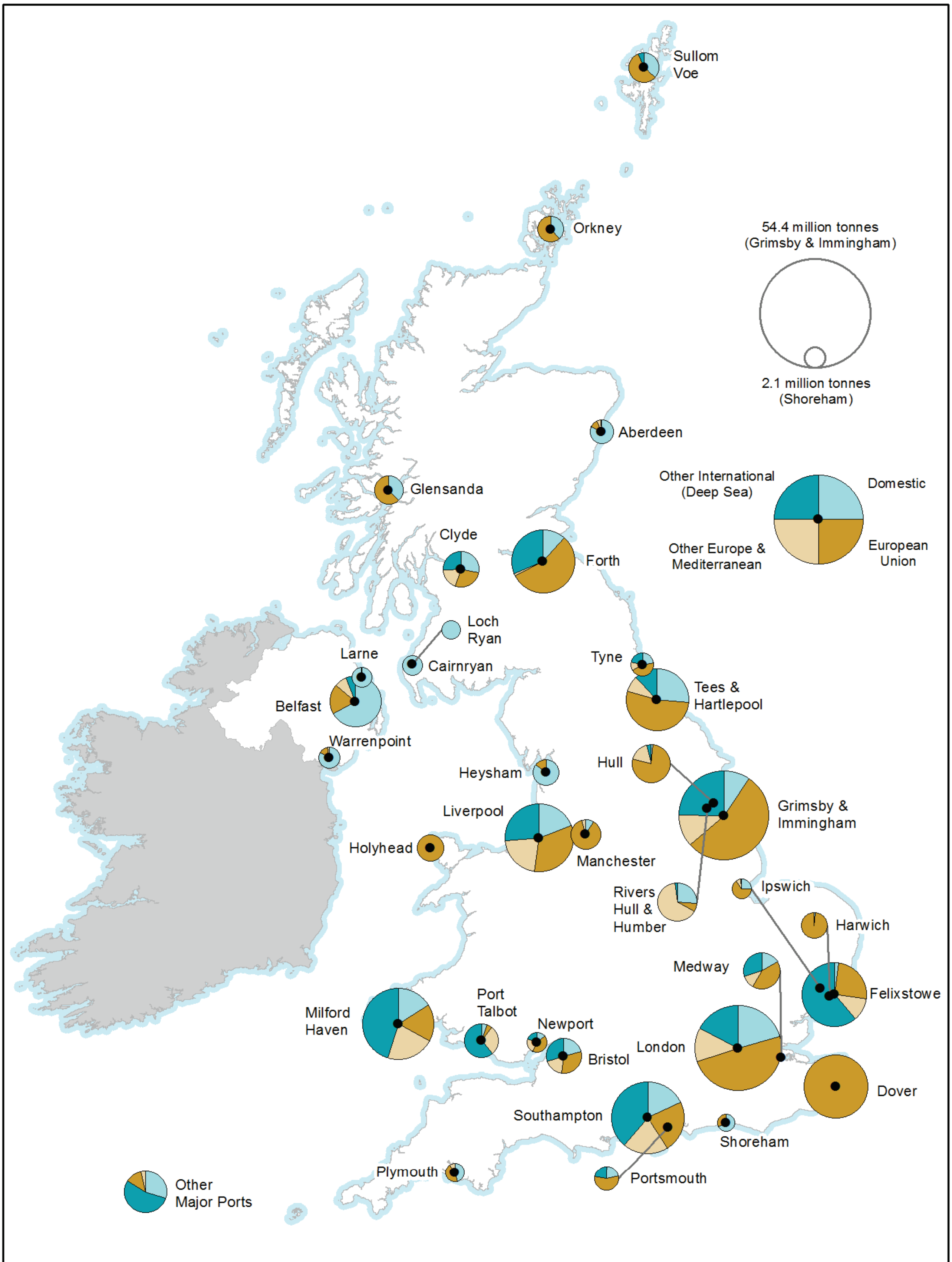


Chart 28: Selected cargo traded with deep sea partners in the American continent to UK major ports



UK major ports: domestic and international tonnage, 2016



* All ports marked on map handled over 2 million tonnes of freight in 2016.

5. Arrivals Data

The number of cargo carrying vessels arriving at UK ports decreased from a recent high of 130 thousand in 2010 to 121 thousand in 2013 before stabilising in recent years. In 2016, the number of cargo carrying vessels arriving at UK ports fell by 2% compared to the previous year to 119.7 thousand in 2016. These figures exclude 'other' vessels to ensure a comparable time series.

Including 'other' vessels there were 138 thousand vessel arrivals at UK ports in 2016. Ro-Ro vessels made up the largest number of vessels arriving at UK ports: 66 thousand vessels, which is 47% of all arrivals. This share increased by 1 percentage point compared to 2015.

The top ten ports for arrivals made up just over half of all arrivals. The largest number of arrivals came into Dover (17,936 vessels) which is 13% of all UK arrivals alone. This is made up largely of the 17 thousand arrivals of Ro-Ro vessels, accounting for 27% of all UK RoRo arrivals. Southampton received the largest amount of passenger vessels in 2016, with 477 vessels arriving.

In terms of other cargo carrying vessels (Dry cargo ships, tankers, and cellular container vessels), Southampton saw the largest amount of arrivals in terms of deadweight tonnes (171 million deadweight tonnage), which is 12% of all UK cargo ship arrivals by deadweight tonnage.

Definitions

Deadweight tonnage: is the weight of cargo, stores, fuel, passengers and crew carried by the ship when loaded to its maximum summer loadline.

Chart 29: Cargo vessel arrivals at UK ports since 2000

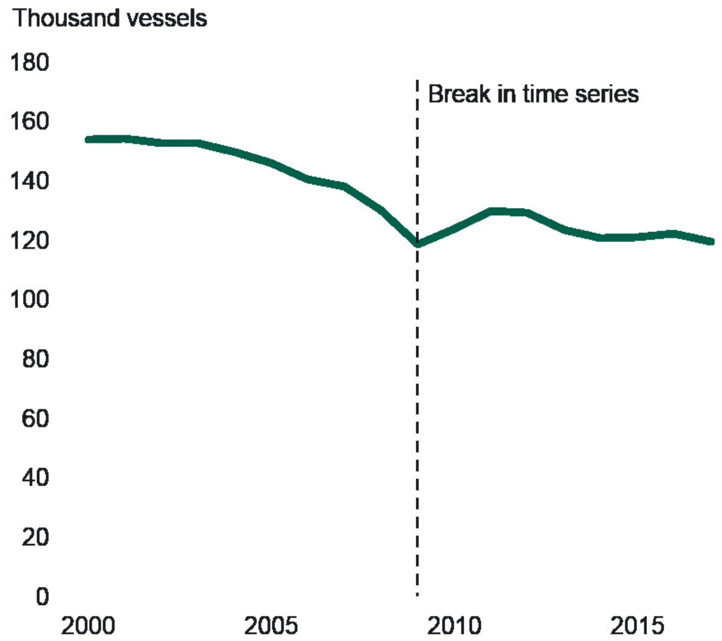
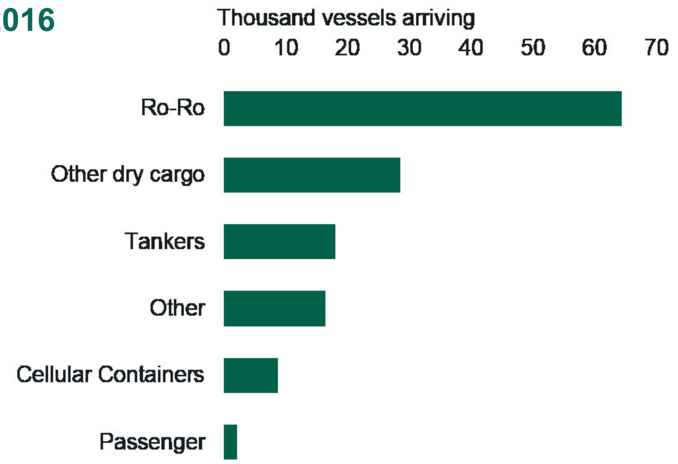


Chart 30: Vessels arriving at UK ports by type, 2016



Detailed statistics on the number of vessel arrivals can be found in the statistical data sets, PORT0601, PORT0602 and PORT0603. These statistics on the number of arrivals are not classified as National Statistics.

Section 6: Strengths and Weaknesses of the Data

- The port freight statistics relate to traffic travelling 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.
- Final port freight statistics are published 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.

Section 7: Glossary

- 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.
- 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.
- 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

Section 8: 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 would welcome any feedback on these statistics by email to maritime.stats@dft.gsi.gov.uk.

Section 9: 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.
- Full guidance on the methods used to compile these statistics can be found here: notes
- 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: pre-release access list.
- Provisional summary quarterly statistics on freight handled by UK major ports are also updated quarterly. The latest tables can be found here: Quarterly summary.