



Department for Transport

UK Port Freight Statistics: 2020

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 terms of cargo as well as the route taken.

Impact of the coronavirus pandemic

Ports were affected by measures to prevent and reduce the global spread of Covid-19 throughout 2020, as well as the EU transition period. The extent of either cannot be quantified in this release, however this publication makes links to wider data sources to contextualise the trends.

In this publication

Things you need to know [p2](#)

UK major ports summary [p4](#)

Freight by cargo type [p8](#)

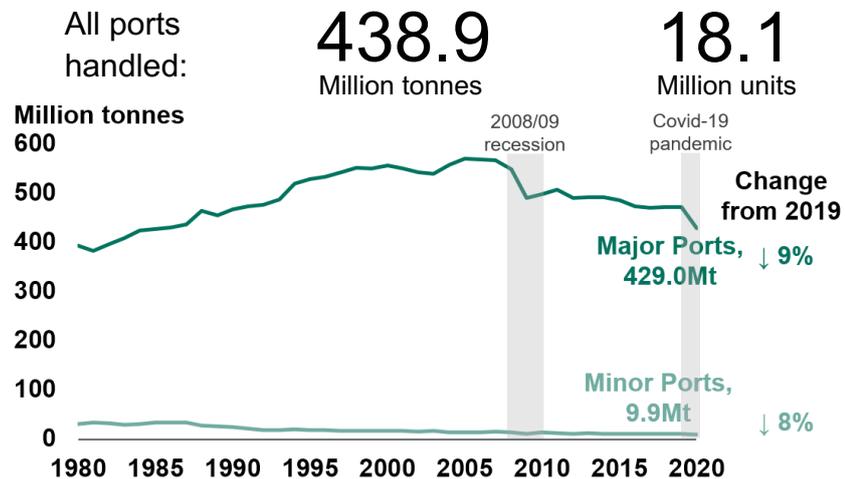
- Liquid Bulk [p9](#)
- Dry Bulk [p10](#)
- Lo-Lo (containers) [p11](#)
- Ro-Ro [p12](#)

Freight by direction and route [p15](#)

- Short sea [p17](#)
- Deep sea [p18](#)
- Domestic traffic [p19](#)

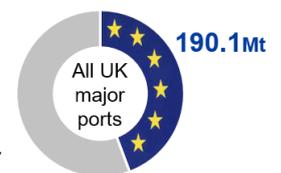
Background notes [p21](#)

Tonnage handled by UK ports decreased by 9% in 2020 compared to the previous year



The EU remained the largest trade partner

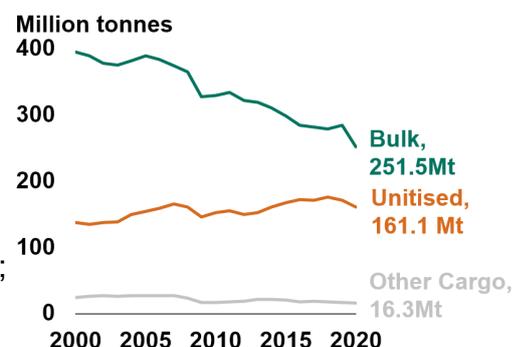
More goods were moved between UK major ports and the EU than any other region in 2020, accounting for 44% (190.1 million tonnes) of total major port traffic. This share is up 3 percentage points on the previous year since traffic with other regions declined more than with the EU.



All cargo groups at UK major ports declined in 2020

The decline in traffic for all cargo groups was of varying magnitudes, compared to 2019. **Liquid bulk was affected the most** in terms of tonnes handled, driven by a lack of demand for oil products and crude oil. Other general cargo, and liquid and dry bulk cargo groups were at their lowest levels since 2000 in 2020.

All UK major ports saw a decline in unitised traffic, consisting of roll-of/roll-off (Ro-Ro) and lift-on/lift-off (Lo-Lo) categories, of varying magnitudes. This decline was most noticeable for Ro-Ro traffic; driven by a 4.2 million fall in passenger vehicles units, down 67% since last year.



1. Things You Need to Know

This release provides 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 import and export tonnage being transported by sea**.

Updates and Revisions since Previous Release

Revisions to 2019 data: Following a data reporting issue for one data provider, affecting three ports, 2019 data has been revised. Ports affected were Goole, Grimsby & Immingham and Hull. The revision to Grimsby & Immingham data reduced the port's rank to 2nd in terms of tonnage handled, meaning London handled the most cargo for 2019 for the first time since 2000, a position which has been maintained in 2020. Further information on these revisions can be found in the Notes and Definitions.

Re-categorising cargo: As a result of improved processes and the additional option for the shipping agents to provide a cargo description in the new data collection system, DfT has been better able to identify and correct mis-categorised cargo.

Some of the errors identified appear to be systematic, however, there is insufficient information available to make changes for past years. Therefore, 2020 data for affected categories may diverge from previous trends. Trends at a cargo group level are generally unaffected by these corrections. Further information on re-categorising cargo and the improvements made to processes can be found in the Notes and Definitions.

Uses and users of these statistics

These statistics are used for several purposes, such as:

- informing policy in both government and in the maritime industry representative bodies and individual businesses.
- providing baseline information and/or calibration data for forecasts and transport models, such as the [port freight traffic forecasts](#).
- providing data for market analysis by transport consultants and businesses outside Government.

Users

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

Port freight data has recently been used in [Maritime 2050](#), the government's vision for the future of the British maritime sector, the [Port connectivity study](#), an assessment of the current ability of inland rail and road networks to move freight to and from ports, and the [Future of Freight](#), the National Infrastructure Commission's review of existing infrastructure and recommendations of ways to transform how freight moves to and around the UK.

Data and definitions

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 and minor ports. Major ports (51) are strategically important and/or handle at least 1 million tonnes of cargo annually. The majority of this publication covers major port data, as more detail is collected from these ports, such as cargo category and type.

Cargo categorisation

Cargo is categorised based on the means by which goods are loaded onto or off the vessel. See page 8 onwards for further information and analysis of cargo categories.

Unitised traffic: only lift-on/lift-off (Lo-Lo) and roll-on/roll-off (Ro-Ro) freight services can be expressed in terms of units, which relates to how the cargo was contained. For example, a container, a trailer, or a passenger car is assigned a value of 1 unit. Apart from passenger vehicles, all unitised traffic can be expressed in terms of tonnage as well.

All other categories (liquid bulk, dry bulk and other general cargo) are only expressed in tonnage.

Bulk cargo tends to be unpackaged and transported in large quantities, either in liquid or granular form, as a mass of solids. Examples include crude oil, coal, gravel, etc. This is typically dropped or poured into a hold, and is unloaded via suctions, screw or grabber.

Direction of travel

Inwards and outwards traffic refers to the direction of travel at UK ports, and includes both domestic (for example, traffic between Liverpool and Belfast) and international traffic.

These statistics cover freight handled at UK major ports. The port of loading or unloading is also recorded - this may not be the port of ultimate origin or destination. For example, if a ship carrying cargo from Asia unloads/loads the cargo at a European port which is then put on another ship to the UK, our statistics will state the port of load as the European port, rather than the port in Asia. This is known as **transshipment**.

Imports and exports only relate to international traffic and is explored in more detail on page 15.

Ship types and arrivals

For the purposes of these statistics, cargo is categorised depending upon how it is transported on the ship. Information is available on the ship type and the number of times ships arrived at UK ports (see [PORT06](#) tables and page 7). This part of the publication is considered to be outside the scope of National Statistics.

Related data sources

[HMRC](#) publishes **tonnage and value** to a much more **granular commodity** level for goods moved between the UK and countries outside the EU by sea. Comparisons between port freight and these sources, specifically for certain cargo categories, are explored further in our [Notes and Definitions](#).

The Department of Business, Energy and Industrial Strategy publish the [Digest of UK Energy Statistics \(DUKES\)](#) which covers the production and consumption of fuels and energy in the UK.

Information on freight moved by different modes, including a breakdown of domestic freight is available in **Transport Statistics Great Britain [chapter 4](#)**.

[Eurostat](#) publish comparative port freight data for **European Union** countries, enabling UK ports to be compared to those in other EU countries.

Dashboard and tables

Detailed Port Freight statistics data is published in [filterable tables](#), at the top of the linked webpage is a table index to help you identify which table contains the data you need.

The [Port Freight Statistics dashboard](#) allows you to explore the most detailed data available for major ports more visually.

2. UK Major Ports

Trends in tonnage traffic

Prior to 2020, overall tonnage handled by UK major ports remained relatively stable since the dip during the 2008 recession. However, **tonnage in 2020 is 9% lower compared to 2019, and 12% lower than 2009 levels. Major ports accounted for 98% of overall port freight tonnage in 2020.** The [quarterly port freight statistics](#) illustrate the trend within recent years including the extent of the decline in national tonnage and unit levels during 2020 compared to pre pandemic forecasts alongside a detailed timeline of changes in Covid-19 measures throughout the year. Additionally the quarterly trend is broken down by cargo group and port in the experimental statistics table [PORT0503](#) and shown in the chart on page 8.

The **25.9 million tonne decline in liquid bulk accounted for the majority (61%) of the overall fall** in major port freight traffic in 2020 compared to 2019, fuelling the decline in overall port freight traffic. Most UK major ports that handle a significant amount of liquid bulk experienced substantial decreases in tonnage traffic, with Southampton, London and Grimsby & Immingham experiencing the greatest declines in liquid bulk traffic in 2020, of over 4 million tonnes each. Of the few ports that experienced increases in the liquid bulk category, Tees & Hartlepool had the greatest absolute increase, fuelled by an increase in crude oil and liquefied gas ([PORT0301](#)). However, this increase was a tenth of the size of the decline at each of Southampton, London and Grimsby & Immingham.

London handled the most tonnage in 2020, 47.4 million tonnes, despite being 12% down on 2019's 54.0 million tonnes. Since last year's release, Grimsby & Immingham's 2019 tonnage has been revised downwards to 51.2 million tonnes, which means that **London handled the most tonnage for a second, consecutive year.** Further information on revisions can be found in the "Things You Need to Know" section (page 2) or the Notes and Definitions.

The top 10 major ports, in terms of the amount of tonnage handled in 2020, remain unchanged from 2019, with the exception of Tees & Hartlepool overtaking Southampton in rank. This is a result of a 16% decline in Southampton's overall tonnage, largely due to a decline in liquid bulk, and a 4% increase at Tees & Hartlepool ([PORT0303](#)).

Top 10 UK major ports by tonnage, 2020 ([PORT0303](#))

	Million tonnes	Change from 2019
London	47.4	↓ 12%
Grimsby & Immingham	45.6	↓ 11%
Milford Haven	33.6	↓ 4%
Liverpool	31.1	↓ 9%
Tees & Hartlepool	29.3	↑ 4%
Southampton	27.6	↓ 16%
Felixstowe	23.1	↓ 9%
Forth	23.0	↓ 9%
Dover	21.9	↓ 7%
Belfast	18.6	= 0%
All other major ports	128.0	↓ 11%

Trends in unitised traffic

In terms of overall units, all UK major ports saw a decline of varying magnitudes. Dover, the largest Ro-Ro port in the UK, experienced the greatest decline in absolute terms (1.6 million units). Even with this decline, **Dover handled 23% and 22% of the UK's major port Ro-Ro units and tonnage respectively in 2020** (compared to 25% and 22%, respectively, in 2019).

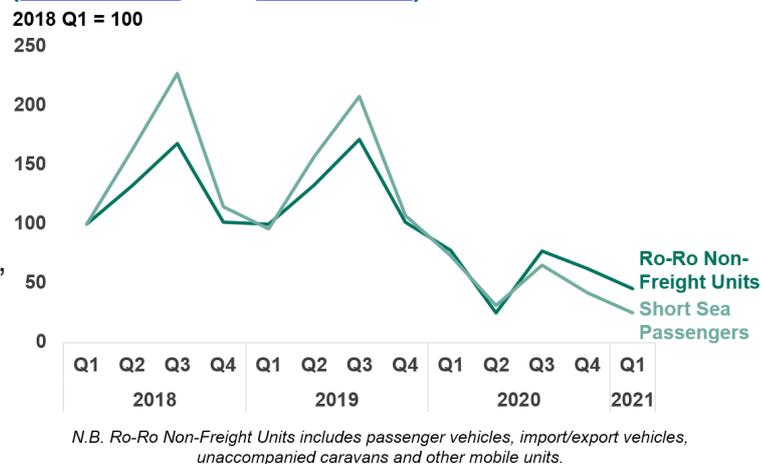
This **fall in units is driven largely by a fall in passenger vehicles**, linked to the measures that were implemented throughout 2020 to mitigate the spread of Covid-19, including the nation-

wide lockdowns, advice from the Foreign and Commonwealth Office against all non-essential international travel, and quarantining measures for those coming from countries with relatively high rates of Covid-19. A full timeline of these events can be seen in DfT's [Sea Passenger Statistics](#) table [SPAS0107](#).

The impact can also be seen in the [Sea Passenger Statistics](#) series, which recorded a **63% decline in the number of sea passengers arriving at or departing from UK ports in 2020**, this compares to a **67% decline in passenger vehicles**.

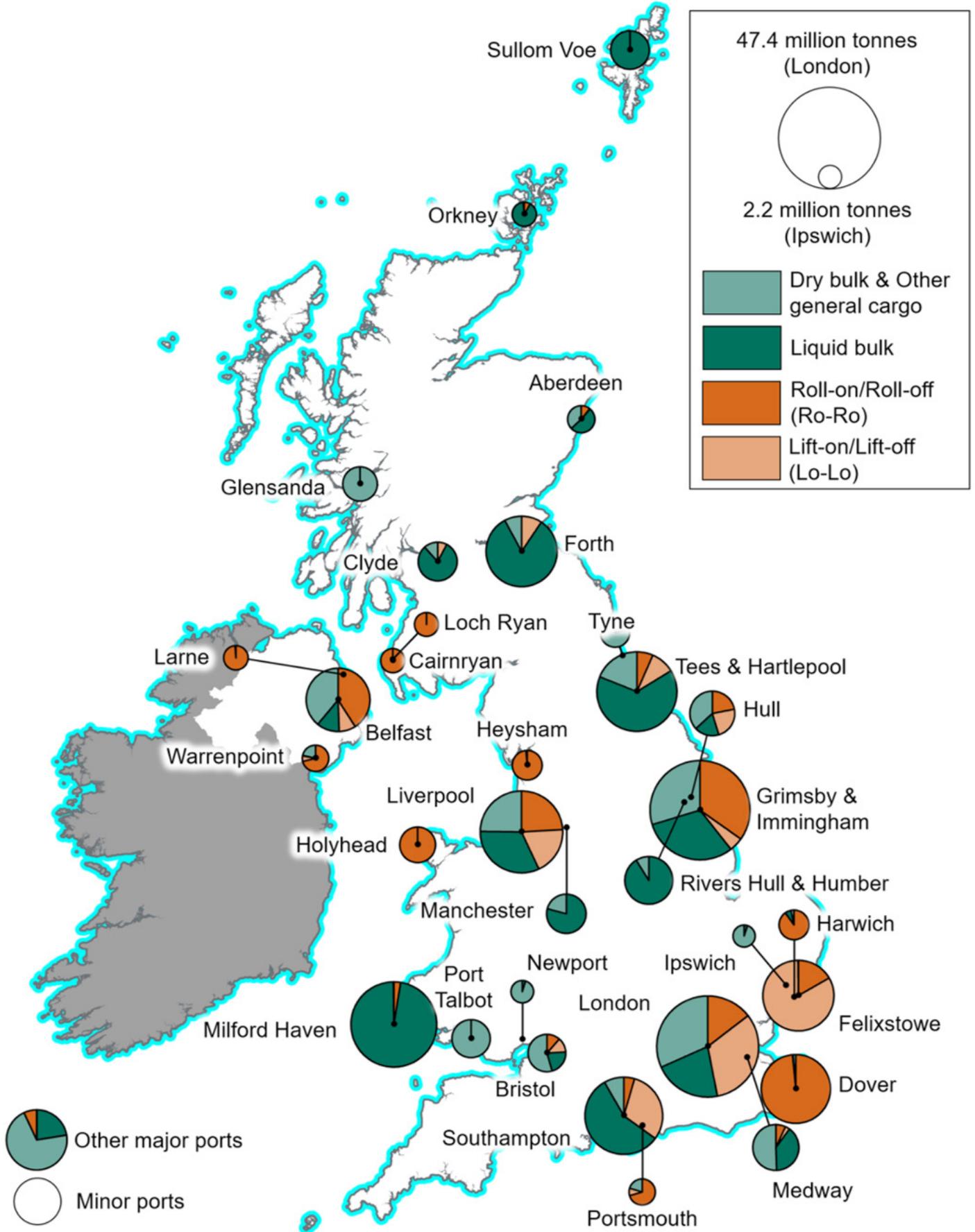
Looking at only freight carrying Ro-Ro, units declined by 4% between 2019 and 2020, a lesser extent than passenger vehicles, which were down 67%. This is due to freight drivers being exempt from many of the travel restrictions the government put in place to ensure the continual flow of freight. Further analysis of this traffic can be found in the Ro-Ro section on page 12.

Quarterly Ro-Ro Non-Freight Units and Short Sea Passenger Trends, indexed on 2018 Q1 ([PORT0503](#) and [SPAS0107](#))



Felixstowe saw a 9% and 8% decline in tonnage and unitised traffic respectively in 2020, falling to 23.1 million tonnes and 2.3 million units in 2020 from 2019, driven by a fall in container traffic. However, the overall picture for containers is complex: container traffic with the EU increased whilst all other regions saw a decline. The quarterly estimates ([PORT0503](#)) show a drop in Q2 2020 driven by a slowdown in production markets but in the fourth quarter both tonnage and units increased. There are multiple factors that may have affected container traffic during this period: the easing of Covid-19 measures; queuing issues experienced at container ports, such as Felixstowe, near the end of the year where ships were being re-directed to other UK ports; and potential stockpiling in preparation for the end of the EU transition ([Office for National Statistics](#)).

UK major ports*: tonnage by cargo type, 2020 ([PORT0304](#))



* All ports marked on the map handled over 2 million tonnes of freight in 2020.

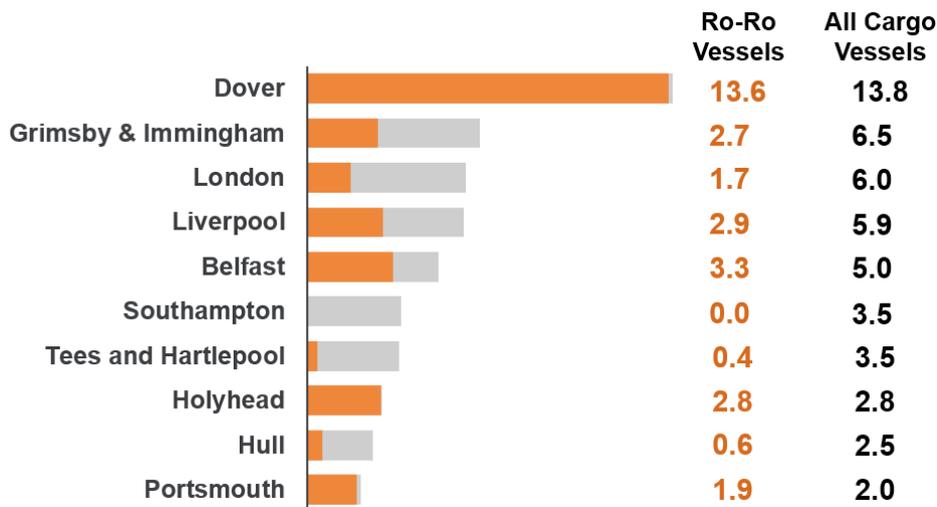
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Vessel Arrivals at UK Major Ports

An estimated total of 82.3 thousand cargo vessels arrived at UK major ports during 2020, 14% less than the 2019 level. A sixth of these were at Dover, which alone handled 13.8 thousand vessel arrivals in 2020, down from 17.2 thousand ([PORT0602](#)).

The ports with the highest number of vessel arrivals tend to be those with regular ferry (Ro-Ro) services; other ports with the highest number of cargo vessels included those handling the most tonnage - Grimsby and Immingham, London and Liverpool which all handle dry bulk, liquid bulk and containers as well as Ro-Ro.

Top 10 UK major ports with most cargo vessel arrivals in thousands, 2020 ([PORT0602](#))



Ro-Ro vessels accounted for round half (48%) of all cargo vessel arrivals overall at major ports in 2020. In terms of deadweight tonnage (DWT) - a measure of cargo carrying capacity - container ships accounted for 27%, despite being responsible for only 8% of arrivals.

Between 2010 and 2019, the number of cargo vessels arriving at UK major ports fell, whereas the total DWT and gross tonnage (GT) arriving have remained broadly stable - reflecting an increase in average vessel size, particularly for container ships. However, in 2020 the fall in vessel arrivals was substantial enough to lead to a drop in DWT and GT. A fall in passenger travel demand following international travel restrictions as well as social distancing of port workers reducing efficiencies are likely to have contributed to this decline. This correlates with the fall in cargo tonnage handled at UK major ports in 2020, outlined on page 15.

Arrivals statistics

Statistics on vessel arrivals are outside the scope of National Statistics, and are based on data from a number of sources including the Maritime and Coastguard Agency CERS system.

The methods used to compile these figures changed in 2018. 2017 figures using the previous and current method are provided in the [PORT06](#) tables for comparison. Further details are provided in the [Notes and Definitions](#).

These figures largely exclude domestic ferries such as to and from the Isle of Wight.

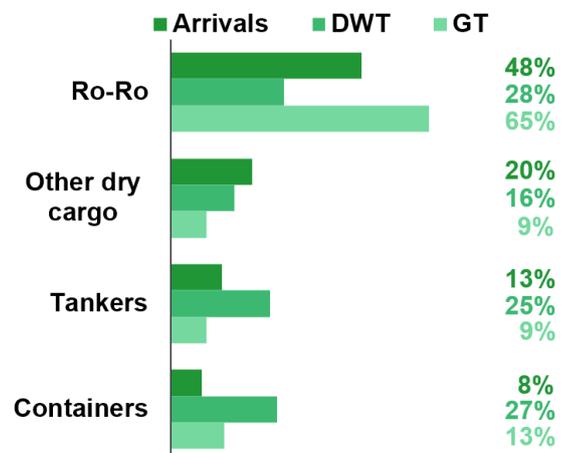
The [PORT06](#) tables cover all vessels arriving at all UK ports, whilst this page only covers arrivals at UK major ports.

Definitions

Gross Tonnage (GT) refers to the measurement of the ship's internal volume (i.e. the space on the ship).

Deadweight Tonnage (DWT) refers to the maximum weight, in tonnes, a ship can carry in terms of cargo, fuel and stores, before reaching its loadline mark.

Cargo vessels arriving at UK major ports by ship type, 2020 ([PORT0601](#))

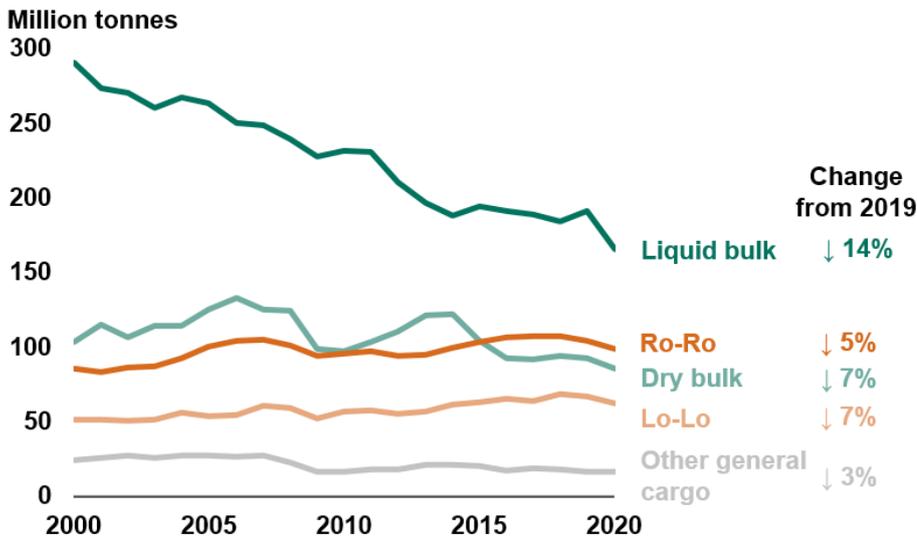


N.B. Some vessel types are excluded from the chart and so percentages do not sum to 100.

3. Major Port Freight by Cargo Type

In 2020, all cargo groups were affected by factors relating to the global pandemic and saw a decline in tonnage handled. Liquid bulk saw the greatest fall in both absolute and percentage terms amounting to a 25.9 million tonne (down 14%) decline in 2020 from 2019 ([PORT0201](#)). Whilst this is a continuation of the long-term trend for liquid bulk, the percentage decline in 2020 is the largest since the beginning of this time series.

UK major port tonnage by cargo since 2000 ([PORT0201](#))



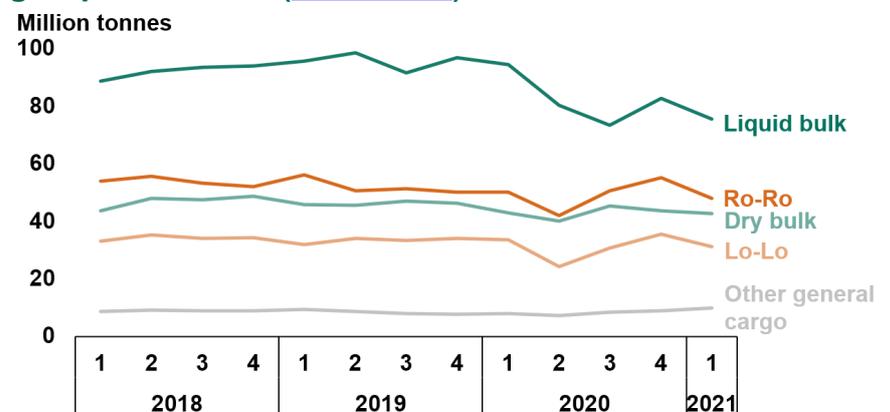
How can units or tonnage increase, whilst the other decreases?

For unitised traffic, the number of carrying units (e.g. a lorry or shipping container) are recorded as well as the weight of the cargo being carried, excluding the weight of the carrying unit itself. Passenger vehicles are recorded with no weight and empty containers/goods vehicles are recorded as one unit with no weight. Therefore if the ratio of empty to loaded vehicles changes, it is possible for tonnage to increase while units decrease, as has happened in 2018.

Unitised traffic has continued its short-term trend of decline, however in **2020 unitised traffic declined 25% to 17.9 million units**, the largest decline in both absolute and relative terms since this series began. This decline was mainly driven by Ro-Ro cargo, namely passenger and trade vehicles. Lo-Lo unitised traffic declined in 2020 from 2019, where most of the decline was seen on deep sea routes, even though there was an increase in the number of containers of at least 40ft being handled.

The experimental quarterly estimates in [PORT0503](#) (published for the first time in June 2021 for Q1 2021 figures) show the trend during 2020. All cargo groups declined in the second quarter when the UK-wide lockdown restricted production in most industries, but most groups showed some recovery by the fourth quarter in 2020, which could be linked to stockpiling before the end of the EU transition period. Variations between different cargo categories within these cargo groups are unavailable in these experimental quarterly statistics.

UK major port quarterly tonnage estimates by cargo group since 2018 ([PORT0503](#))





Liquid Bulk

Liquid bulk consists of any liquid or gas that is transported in a tank.

Liquid bulk traffic accounted for 39% of tonnage handled at UK major ports in 2020, totalling 165.6 million tonnes, continuing to account for the highest proportion of all the cargo groups.

Liquid bulk traffic has declined in recent decades, mainly driven by falling levels of crude oil handled which, together with oil products, make up most of the liquid bulk category, accounting for 83% in 2020.

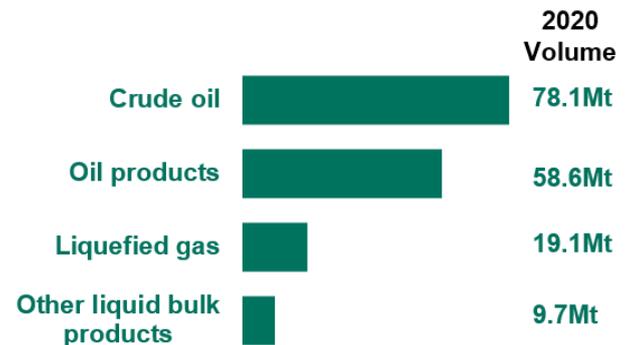
In 2020, the fall in traffic was largely due to the decline in shipments of oil products, which fell by 17.1 million tonnes compared to 2019; oil products accounted for 66% of the overall decline in liquid bulk tonnage.

The Department for Business, Energy & Industrial Strategy (BEIS) commented in their [Energy Trends](#) publication in March 2021 that, due to the restrictions imposed on travelling in 2020 demand for fuels fell. BEIS reported declines in the demand for petrol, diesel and jet fuel in 2020, all of which are included in the port freight oil products cargo category.

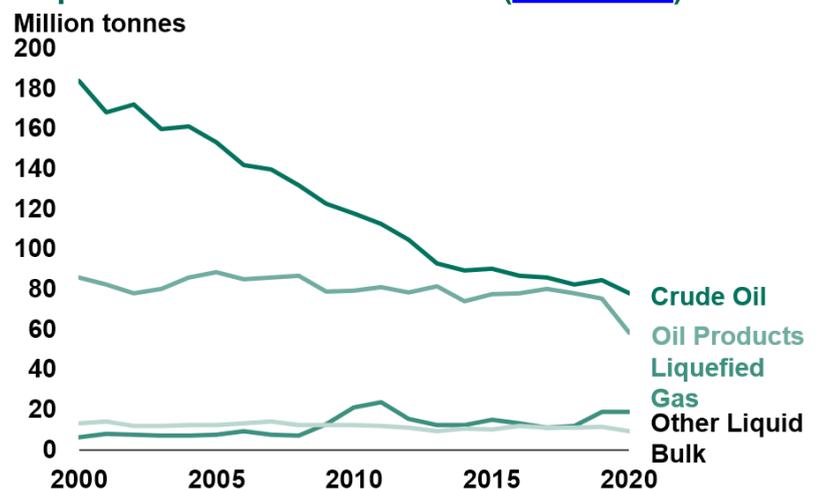
The top 5 international countries that traded oil products with the UK in 2020 were the same as last year: Netherlands, Belgium, Russia, USA and the Irish Republic.

Oil products moved between UK ports and ports in the Netherlands, USA, Russia, Saudi Arabia and India fell the most in absolute terms in 2020; all of these countries remained in the top 10 of countries trading oil products with the UK in 2020, apart from India which fell from 10th place to 16th in 2020. The fall in trade of oil products with these countries was largely due to a fall in imports, except for the USA, where the decline in traffic was driven by a fall in exports ([PORT0205](#)).

Liquid bulk can be broken down into:



Liquid bulk handled since 2000 ([PORT0201](#))



Top 10 countries handling oil products in 2020, and rankings in 2019 ([PORT0499](#))

	Million tonnes	Change from 2019	Rank in 2019
Netherlands	11.2	↓ 23%	1 st
Belgium	5.6	↓ 9%	3 rd
Russia	4.6	↓ 28%	2 nd
USA	3.3	↓ 39%	4 th
Irish Republic	3.2	↓ 21%	5 th
Sweden	2.1	↓ 7%	7 th
Saudi Arabia	1.7	↓ 47%	6 th
Spain	1.1	↓ 11%	12 th
Denmark	0.9	↓ 4%	15 th
Norway	0.9	↓ 49%	8 th
All other international routes	1.9	↓ 48%	

Liquefied gas was the only liquid bulk category that saw an increase in volume in 2020, up 1% (0.1 million tonnes) since 2019. The port that saw the largest increase in liquefied gas by far was Milford Haven, who handled 1.5 million tonnes more of the cargo in 2020 than in 2019. Most of Milford Haven's increase was fuelled by increased traffic with the USA, Qatar and Russia which accounted for 47%, 31% and 20%, respectively, of the increase in liquid bulk at the port ([PORT0499](#)). The upgraded jetty at the port completed in 2018, was built to allow imports from countries other than Qatar. This contributed to the sustained increase in liquefied gas traffic with the USA at the port, which is at an all-time high in 2020 at 2 million tonnes. Prior to 2018, Milford Haven relatively low levels of liquefied gas with the USA.



Dry Bulk

Dry bulk consists of cargo that is in bulk, so can be scooped up, not bagged items.

Overall dry bulk volumes have varied considerably over the past decade, largely due to fluctuating volumes of coal and ores. However, **in 2020, the decline in dry bulk was driven mainly by the fall in other dry bulk products**, which includes biomass products. This reflects changes in fuels for energy production over the past decade, and the decline in demand for fuel in 2020, as covered in the liquid bulk section.

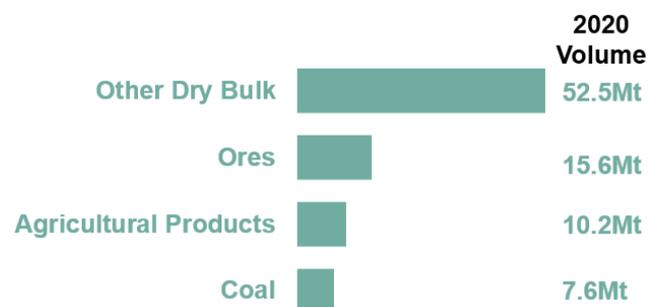
In 2020, coal handled was at an all-time low, at 7.6 million tonnes, continuing its downward trend since 2013's recent peak. 2020's decline can be attributed to further closures of coal-fired power plants in 2020 and reduced coal consumption in electricity generators ([BEIS Energy Trends](#)).

This is in-line with the UK's plan to completely phase out coal-fired power plants by 2025 and reflects changes in fuels used for energy generation.

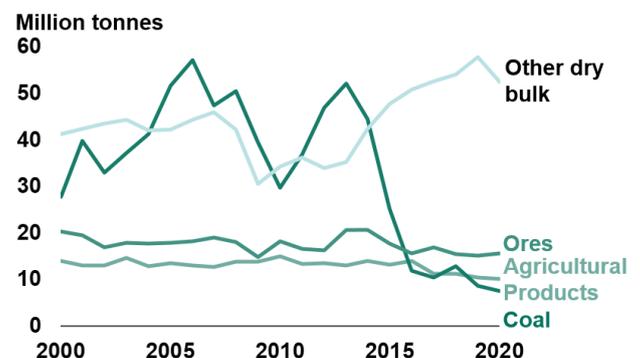
From internal analysis, using DfT cargo

categorisation being applied to [HMRC Trade Statistics](#), the **UK imported around 19.1 million tonnes of biomass from international countries in 2020**, mainly from the United States (33% of all imports). The ports of Tees & Hartlepool and Grimsby & Immingham accounted for 62% of the non-EU imports. See section 4 of the Notes and Definitions for further information.

Dry bulk can be broken down into:



Dry bulk handled since 2000 ([PORT0201](#))





Lift-on/Lift-off (Lo-Lo) Cargo

Lo-Lo consists of container traffic. Information about the cargo transported in the containers is not collected in the port freight series, but can be found in [HMRC data](#) for goods moved to and from outside the EU.

When measured in twenty-foot equivalent units (TEU), **Lo-Lo traffic in 2020 decreased by 7% to 9.7 million TEUs compared to 2019, breaking its upwards trend since 2012.** This decline was mainly driven by a fall in the amount of 40ft containers being handled at UK major ports ([PORT0201](#)). This overall decline in container traffic was also seen worldwide, where the number of container ship arrivals has been generally fewer than in 2019 throughout the year ([UNCTAD](#)). The effect of Covid-19 lockdown on manufacturing in China caused container port calls to start decreasing in February, with a more noticeable decrease from April to June due to the lockdowns imposed in most economies of the world, which can be seen in the quarterly chart on page 8.

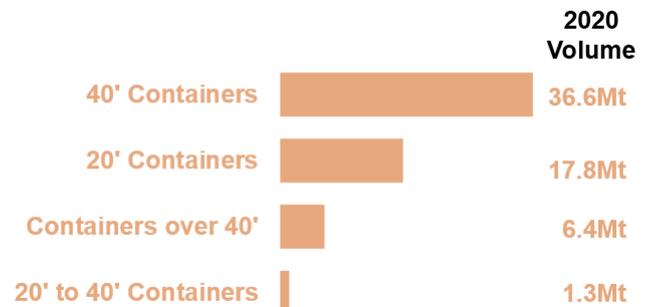
Felixstowe continued to handle the largest amount of containerised traffic in the UK, handling 36% of TEUs in 2020. The port also experienced the largest absolute fall in this traffic, accounting for just under half of the overall decline in Lo-Lo TEU traffic ([PORT0301](#)). Like many ports across the country, Felixstowe's traffic fell noticeably in the second quarter of 2020 with the national lockdown imposed in late March ([PORT0502](#)).

The proportion of empty to loaded containers remained relatively stable in 2020, roughly maintaining the 30:70 split seen since 2003 ([PORT0301](#)).

Tonnage traffic declined across all Lo-Lo categories apart from containers greater than 40ft. Containers greater than 40ft saw a 0.5 million tonne (up 9%) increase in tonnage traffic, to 6.4 million tonnes in 2020. The number of units for this category also rose, up 47.4 thousand units (up 12%) to 0.4 million units in 2020, however the majority of the increase was seen in the number of empty units handled, accounting for 76% of the increase. This suggests that 40ft containers were either more full, or carrying heavier cargo.

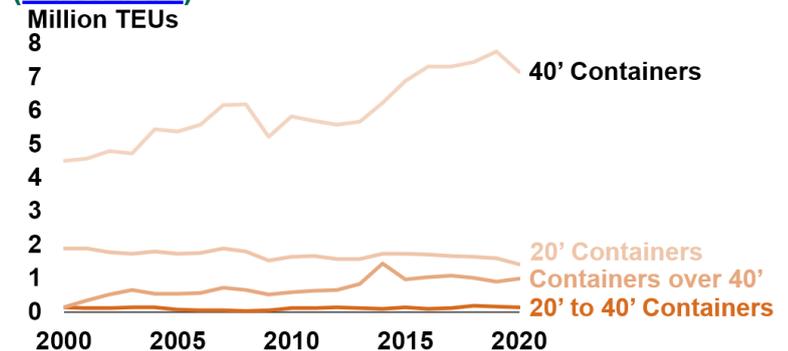
Lo-Lo tonnage fell noticeably in 2020 between the UK and all world regions, except the EU,

Lift-on Lift-off traffic can be broken down into:



Lo-Lo traffic since 2000, in TEUs and by cargo

([PORT0201](#))



Definitions

TEU (twenty-foot equivalent units) is a standardised measure to allow for the different sizes of container boxes. See the [Technical Note](#) for TEU values for each of the container categories.

Lo-Lo tonnage excludes the weight of the container itself, so an empty container has a weight of 0.

which saw an increase in traffic. The decline disproportionately affected deep sea shipments, compared to domestic and short sea traffic.

The countries which saw the largest absolute declines in Lo-Lo tonnage moved to and from UK ports were:

- USA down 1.3 million tonnes;
- China down 0.8 million tonnes;
- Singapore down 0.7 million tonnes.



Roll-on/Roll-off (Ro-Ro) Cargo

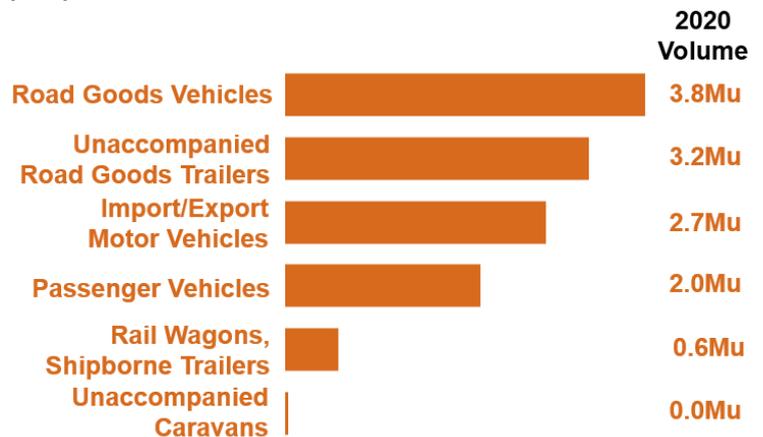
Ro-Ro traffic consists of cargo that can be moved on to, or off, a vessel either by their own propulsion (such as a passenger car) or with assistance (such as an unaccompanied trailer).

Depending on the metric used, Ro-Ro traffic has declined by different magnitudes. In terms of tonnage, which excludes passenger vehicle volumes, Ro-Ro fell by 5% in 2020, compared to 2019. However, the decline was much steeper from a unitised perspective, i.e. the number of vehicles being handled at UK ports. **In 2020, Ro-Ro unitised traffic fell by 31%, to 12.3 million units, to the lowest level since this series began.** The main driver for this sharp decline was the 4.2 million fall in passenger vehicles, which can be largely attributed to the restrictions on international travel introduced to limit the spread of Covid-19 in 2020 ([PORT0201](#)).

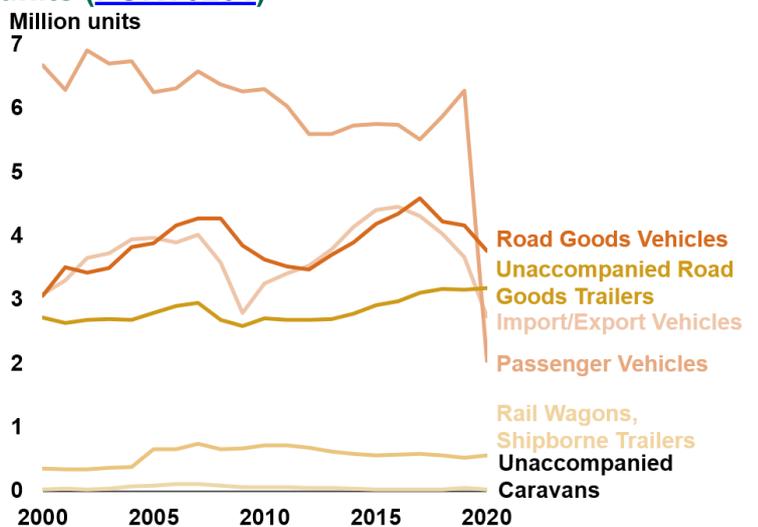
Looking at just Ro-Ro main freight units, which excludes vehicles that do not carry freight, the decline in tonnage was 4%, close to the 5% fall in overall Ro-Ro tonnage in 2020, because tonnage is not collected for passenger vehicles. See the main freight section below for further information on this subset of Ro-Ro.

In 2020, self-propelled Ro-Ro accounted for 45% of Ro-Ro tonnage. In terms of Ro-Ro units, historically the proportion of self-propelled to non-self-propelled units remained roughly 80:20 from 2000 to 2019. However in 2020, the proportion of self-propelled units fell 10 percentage points to

Roll-on/Roll-off unitised traffic, in million units (Mu), can be broken down into:



Ro-Ro traffic handled at UK ports since 2000, in units ([PORT0201](#))



69%, due to the noticeable decline in passenger vehicles, and a slight increase in unaccompanied Ro-Ro traffic ([PORT0202](#)).

Most of the UK Ro-Ro traffic is with the EU, accounting for 73% of both tonnage and unitised traffic in 2020; because of this, the EU trend drives the trend of the cargo group ([PORT0302](#)).

Passenger Vehicles

The number of passenger carrying vehicles fell from 6.3 million in 2019 to 2 million units in 2020, the lowest level since 2000; this constitutes a 67% decrease on last year's levels. Dover, the largest UK Ro-Ro port, accounted for 33% of this decline. This decline in passenger vehicles is linked to the pandemic and the implementation of various travel restriction policies throughout 2020, such as the national lockdowns, travel corridors, and quarantining requirements from those arriving from international destinations.

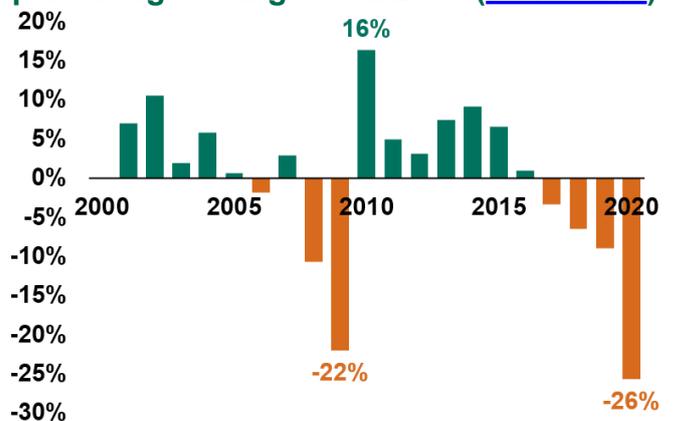
Hull, the second largest UK port to handle passenger vehicles in 2019, saw a 96% decline in traffic, handling 40.5 thousand units in 2020, almost 900 thousand units less than in 2019. This decline is due to the impact Covid-19 has had, where a lack of demand for the ferry services lead to routes eventually being cancelled.

Whilst these statistics do not include the number of passengers carried, this is available in the Department's [Sea Passenger Statistics](#) series, which showed a **63% decrease in passengers on short sea international routes in 2020** (see page 17 for more information on short sea port freight traffic). Further commentary on the monthly trend of sea passengers, alongside changes in travel policy, can be found in the [short sea passengers report](#).

Import/export Motor Vehicles

Trade (import/export) vehicles fell to 2.7 million units in 2020, a reduction of 0.9 million units from 2019 levels. This is the **fourth consecutive year of decline since its peak in 2016 and levels are now lower than those seen due to the recession in 2009**. The magnitude of the decline is the greatest in this time series, in both absolute and relative terms, surpassing the decline seen in 2009 due to the global recession, which saw a fall of 0.8 million tonnes. The fall in 2020 can be explained by the impact of the Covid-19 pandemic on the UK's vehicle industry: reduced global demand for motor vehicles, and lockdowns and social distancing measures restricting factory output. DfT [Vehicle Statistics](#) show a 27% decline in new vehicle registrations during 2020, similar reduced demand across the EU is reflected in vehicle exports by sea ([ACEA](#)). Grimsby & Immingham and Southampton saw the greatest absolute declines in the amount of trade vehicles being handled.

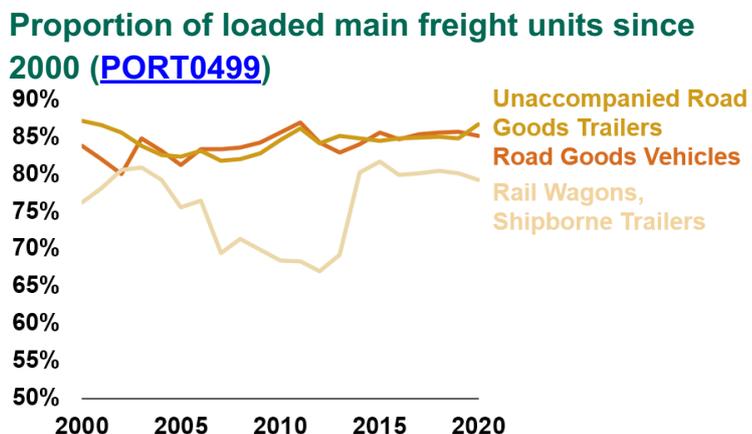
Trade vehicle units year-on-year percentage change from 2000 ([PORT0201](#))



Main Freight

Main freight is a subset of the Ro-Ro cargo group, consisting of categories which can carry freight. These categories include both accompanied and unaccompanied road goods vehicles, such as heavy goods vehicles (HGVs) and unaccompanied rail wagons and shipborne port-to-port trailers.

Accompanied road goods vehicles, which requires the driver to stay with the vehicle, **fell by 8% and 10% for tonnage and unitised traffic**, respectively, in 2020. This traffic tends to be shipped on vessels that carry passengers, whose services were limited throughout 2020. Although drivers were exempt from many of the travel restrictions until December 2020, other measures, such as social distancing, might have added further logistical difficulties when travelling between countries.



Conversely, unaccompanied road goods trailers were not affected as much on a national level, where the category **saw a slight increase in unitised traffic, and tonnage traffic remained relatively stable**. Unlike accompanied road goods vehicles, this category is not generally shipped on passenger-carrying vessels, because they take longer to load and unload, and passenger carrying vessels have quick turnaround times ([PORT0203](#)).

In 2020, the proportion of loaded unaccompanied road goods vehicles rose to 87%, its highest level since 2001 and up 2 percentage points from 2019. However, both accompanied road goods vehicles and unaccompanied rail wagons saw a slight dip in the proportion of units being loaded with cargo, down 1 percentage point each from 2019 to 85% and 79% in 2020, respectively. These statistics do not assess whether these units were fully or partially loaded.

4. Major Port Freight by Direction and Route

The majority of traffic through UK major ports in 2020 was in an inwards direction, accounting for 63% of traffic, down 2 percentage points from 2019.

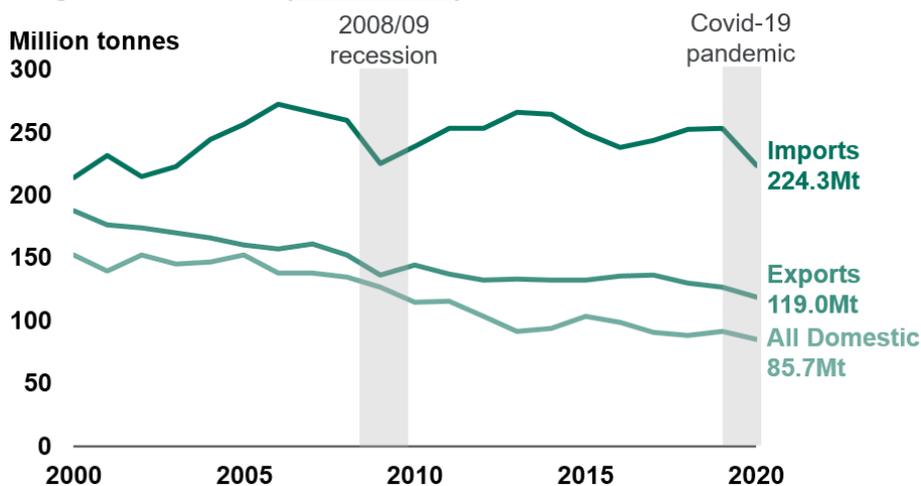


The route on which freight cargo travelled can be split into international and domestic.

International tonnage handled by UK major ports in 2020 fell by 10%, from 380.2 million tonnes in 2019 to 343.2 million tonnes in 2020 ([PORT0205](#)). The UK continues to import more than it exports by sea; imports accounted for 65% of international traffic in 2020.

Domestic traffic has declined steadily, with fluctuations, since 2000, reaching an all-time low in 2020 at 85.7 million tonnes. This was mainly due to a fall in the amount of bulk goods being handled at UK ports.

Major port international freight by direction and domestic freight since 2000 ([PORT0205](#))



The EU continues to be our largest maritime trading partner, accounting for 55% of all international tonnage trade at UK major ports in 2020. Even though the volume of trade with the EU has fallen for the third consecutive year, the proportion of international traffic between UK and EU ports has risen 4 percentage points, from 51% in 2019, due to greater declines in traffic with other world regions.

International freight by route, 2020 ([PORT0204](#))

Route	2020 Volume (Mt)	Change from 2019
European Union	190.1	↓ 3%
Other Europe & Mediterranean	55.0	↓ 14%
America	48.4	↓ 12%
Asia	42.1	↓ 24%
Africa	6.5	↓ 24%
Australasia	1.1	↓ 37%

Definitions

Inwards/outwards:

Inwards and outwards include both domestic and international traffic.

Imports/exports:

International traffic only.

Domestic: Goods moved between two UK ports (coastwise) and one-port traffic to or from UK offshore locations such as wind farms or sea dredging.

Note on Routes

In this series, route refers to the port of load/unload, not the final destination or source of the goods. Sometimes goods are shipped to an intermediate destination (e.g. Rotterdam), and then to another destination (e.g. UK ports), this is known as transshipment. Numerous attempts have been made to quantify the effects of transshipment 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.

The **Netherlands remained the UK's biggest trading partner, in terms of tonnage handled**, accounting for 30% of all EU traffic and 17% of international port freight traffic in 2020.

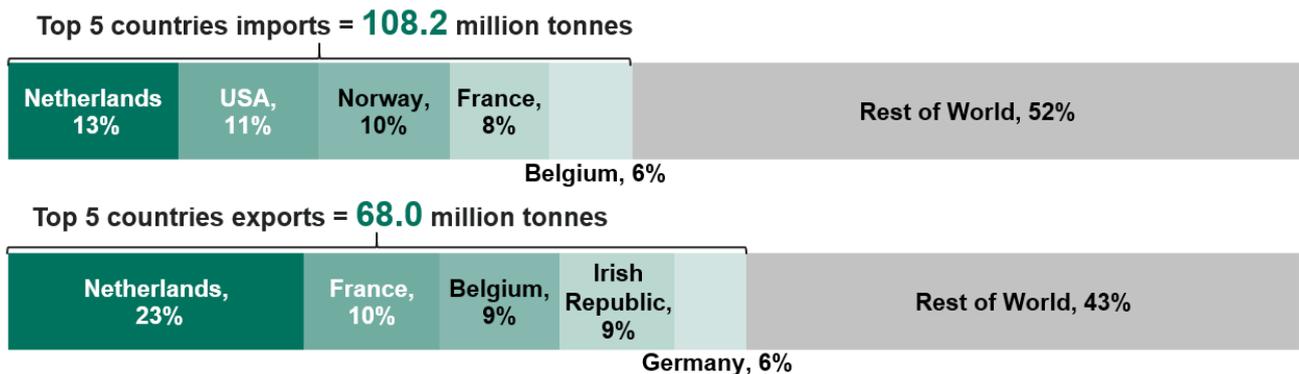
Asia experienced the greatest absolute tonnage decline of all world regions over this period, down 13.4 million tonnes in 2020. This was driven by a decline in exports, namely crude oil, to China (down 61%); imports from China remained relatively stable ([PORT0499](#)).

As with overall traffic, **international liquid bulk accounted for the largest proportion of any cargo group and experienced the greatest decline in 2020**. Other Europe and Mediterranean countries accounted for the largest proportion of the UK's imported liquid goods, accounting for 29% in 2020, most of this being imported from Norway. 56% of exported liquid bulk goods went to EU countries, up 7 percentage points from 2019, as a result of increased exports to the region and decreased exports to other world regions, most notably Asia and America.

The top 5 countries the UK **imported** goods from in 2020 have remained unchanged and accounted for 48% of international imports in 2020 ([PORT0206](#)).

The only change to the top 5 countries the UK **exported** goods to in 2020 was the decline in exports to China, which has resulted in it dropping out of, and Germany now in, the top 5. These 5 countries accounted for 57% of international exports in 2020 ([PORT0206](#)).

Share of top 5 countries UK major ports imported from and exported to, 2020 ([PORT0206](#))



The value of goods imported and exported by all modes in the UK and further information on businesses is available from [HMRC trade statistics](#). For non-EU countries, HMRC also publish tonnage of goods moved by mode and port of clearance, allowing comparisons with port freight. The [notes and definitions](#) accompanying these statistics outline these comparisons between port freight and HMRC tonnage for certain cargo types.

HMRC Trade Statistics in 2020

Value of goods traded for all modes (ordered by value in pounds)

Imports

£489 billion

Exports

£311 billion

Top trading partners

- Germany
- China
- United States
- Netherlands
- France

Top commodities traded

- Precious metals
- Machinery
- Vehicles
- Electrical equipment
- Mineral substances

Top trading partners

- United States
- Germany
- Republic of Ireland
- Netherlands
- France

Top commodities traded

- Machinery
- Previous Metals
- Vehicles
- Mineral fuels
- Electronic equipment

£ 



Short Sea Freight with EU, Non-EU European and Mediterranean Countries

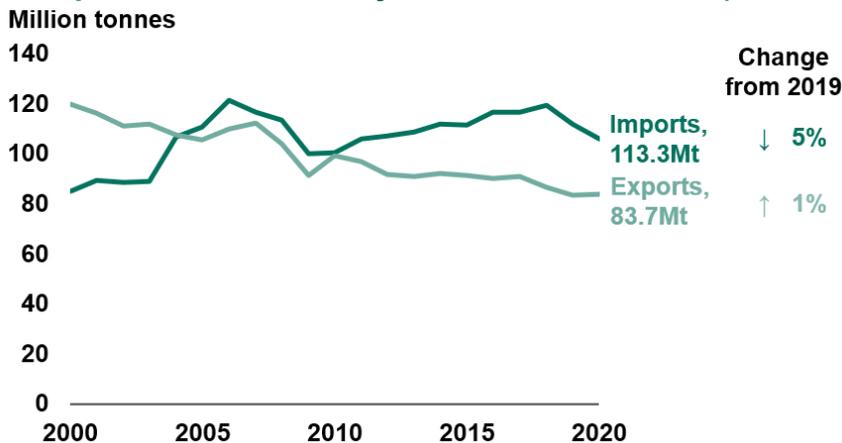
Short sea freight fell for the third consecutive year to 245.1 million tonnes in 2020, from its recent peak at 273.5 million tonnes in 2017.

Most short sea freight is trade with the EU, which accounted for 78% of short sea freight in 2020, up from 75% in 2019. This was due to a proportionally greater fall in traffic with other (non-EU) European and Mediterranean countries, namely Algeria, Norway and Russia, than with other EU countries.

Tonnage of EU imports declined for all cargo groups except container traffic, leading to an overall decline of 5%. Conversely, exports to the EU increased by 1%, driven by an 8% increase in liquid bulk exports which marginally offset the 8% decline in Ro-Ro exports to the EU.

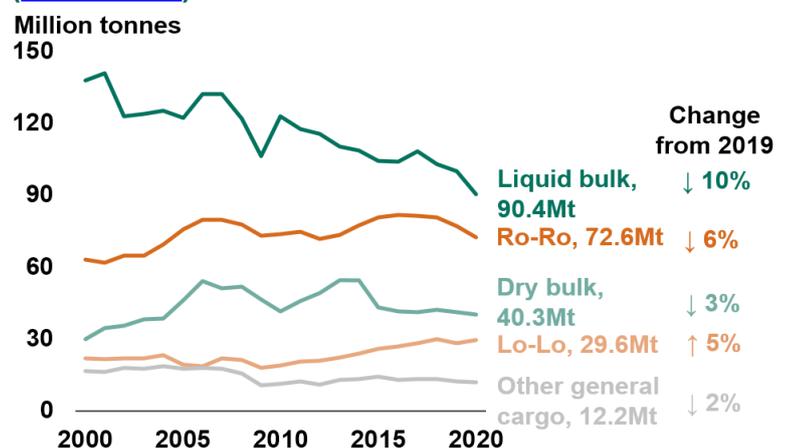
More than half (56%) of trade with the EU consisted of goods imports in 2020. Prior to 2005, the majority of trade with the EU was exports from the UK. Imports from the EU have been on an overall upwards trend since 2009, however, in 2020 they fell for the second consecutive year. Conversely, exports to the EU increased slightly (up 1%) in 2020, following a long-term decline since 2000.

European Union traffic by direction since 2000 ([PORT0499](#))



The cargo group breakdown for short sea trade largely follows the national trend, with the exception of Ro-Ro accounting for a much larger proportion of tonnage (30% of short sea traffic compared to 23% of all traffic). **France accounted for 33% of the UK's Ro-Ro short sea traffic in 2020**, although this proportion has been declining since its peak at 39% in 2014. **The vast majority (91%) of Ro-Ro traffic between the UK and France continued to pass through Dover** ([PORT0499](#)).

Short sea traffic by cargo type since 2000 ([PORT0499](#))



Definitions

Short Sea: Maritime traffic that moves cargo along a coast without having to cross an ocean. This consists of European Union (EU) and 'Other Europe and Mediterranean' (Extra-EU) countries.

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

Transshipment

These statistics cover freight handled at UK major ports. The port of loading or unloading is also recorded - this may not be the port of ultimate origin or destination. For example, if a ship carrying cargo from Asia unloads/loads the cargo at a European port which is then put on another ship to the UK, our statistics will state the port of load as the European port, rather than the port in Asia.



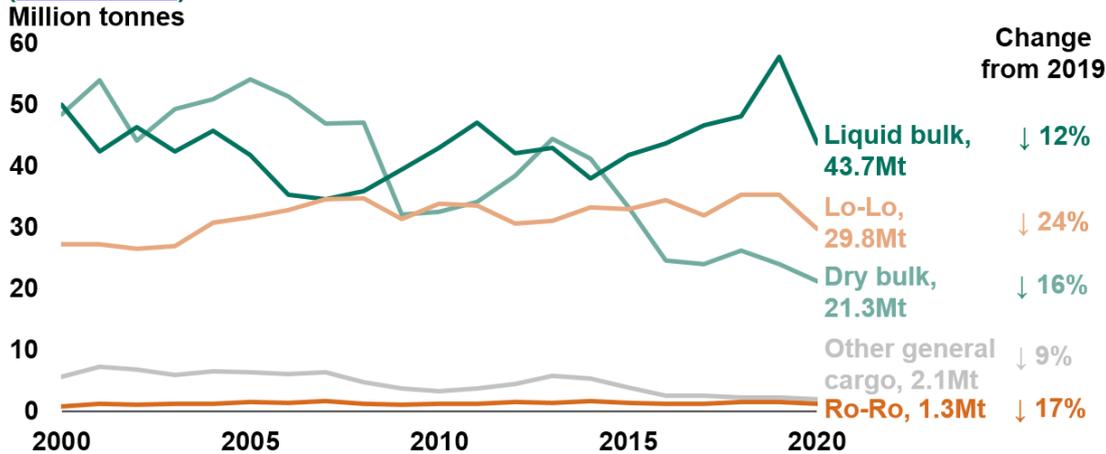
Deep Sea International Freight

Deep sea traffic declined sharply in 2020, down 19% from 120.9 million in 2019 to 98.1 million tonnes in 2020. This was mainly fuelled by the fall in the amount of liquid bulk being traded, specifically crude oil and oil products, although all cargo groups saw a decline.

Overall trade with deep sea countries has seen a steady decline since 2000; bulk traffic has shaped the trend the most.

International deep sea traffic by cargo type since 2000

([PORT0499](#))



The **USA continued to be the largest deep sea trading partner to the UK in 2020, in terms of the amount of tonnage handled.** Although it experienced a 16% fall in traffic in 2020, it accounted for 30% of all tonnage traffic from deep sea countries, where liquid bulk cargo accounted for the biggest proportion of USA-UK traffic.

There was an increase in trade with Qatar for the second consecutive year (almost all liquid bulk) that could be linked to [improved diplomatic relations](#) with the UK, since the crises from 2017 where Qatari ports were blockaded by Saudi Arabia and the United Arab Emirates.

South Korea saw the largest absolute increase in trade with the UK in 2020, compared to 2019, increasing by 1.3 million tonnes. This increase was fuelled by a rise in crude oil being exported from UK ports to South Korea. Near the end of 2019, the UK signed a [trade agreement](#) with South Korea which continued the agreement that was in place prior to the UK leaving the EU, which is likely to have facilitated this increase.

Trade with deep sea countries has generally accounted for the majority of Lo-Lo container traffic since 2000. However, 2020 was the first year where it dropped below half, accounting for 48% of tonnage Lo-Lo traffic in 2020.

Following a period of stability, **2020 saw the greatest change for deep sea Lo-Lo traffic since 2000, falling by 15%.** Worldwide, there were lower volumes of container ship arrivals throughout 2020 ([UNCTAD](#)), which can be related to measures countries adopted to limit the spread of

Definitions

Deep Sea: Maritime traffic that crosses oceans. This consists of countries in Africa, America, Asia and Australasia. Mediterranean countries are classed under short sea in the port freight series.

5 biggest deep sea container trade routes, 2020 tonnage		
		Change from 2019
1. China	7.8Mt	↓ 9%
2. Singapore	3.1Mt	↓ 18%
3. India	2.9Mt	↓ 10%
4. USA	2.7Mt	↓ 32%
5. Malaysia	2.0Mt	↓ 3%

Covid-19.

China continued to be the UK's largest partner for container traffic in 2020, since 2004.

However, since its peak in 2016, China's Lo-Lo traffic has been declining; 2020's volume (7.8 million tonnes) is now less than 2009 levels (8.4 million tonnes).

Lo-Lo trade with the USA fell 32% in 2020; the USA is now the UK's fourth largest deep sea trading partner for containerised goods, after Singapore and India. This is the USA's lowest ranking since this time series began.



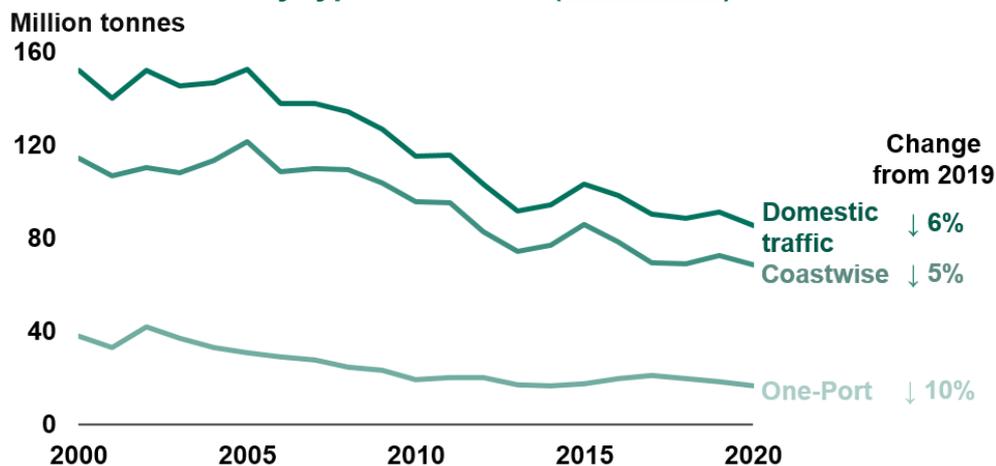
Domestic Port Traffic

Trends in tonnage traffic

Since 2012, the proportion of tonnage carried on domestic routes continues to account for around 20% of all traffic handled by UK major ports, totalling 85.7 million tonnes in 2020. **Domestic tonnage decreased by 6% compared to 2019.** Coastwise traffic made up 83% of domestic tonnage in 2020.

Decreases were seen across all cargo groups, reflecting the overall port freight trend across all world regions, which also saw decreases across all cargo groups between 2019 and 2020. Ro-Ro saw the smallest relative decrease of 2% from 2019, in terms of tonnage handled. The **vast majority of domestic Ro-Ro tonnage was made up by accompanied roads goods vehicles (29%) and unaccompanied roads goods trailers (70%).** The former declined 13% to 7.3 million tonnes, however, the latter experienced a 3% increase in traffic to 17.6 million tonnes in 2020.

Domestic traffic by type since 2000 ([PORT0499](#))



Definitions

Coastwise: Traffic carried around the coast from one UK port to another, including domestic ferry services.

Figures are double-counted in the port freight data for this type of traffic. For example, data of a shipment from Liverpool to Belfast is collected from both Liverpool's and Belfast's perspective (one being an inwards, the other record being an outward voyage).

One-port: Traffic to and from offshore locations - such as oil rigs and sea dredging.

The **overall domestic traffic decrease** from 2019 was **mainly driven by the decline in bulk goods**, where dry bulk declined by 2.5 million tonnes (down 9%) and liquid bulk by 2 million tonnes (down 6%). Coal was the only bulk cargo category to have experienced an increase in 2020. Domestic Lo-Lo tonnage saw the largest percentage decrease in domestic traffic, contradicting the international trend which saw an increase however, the amount of Lo-Lo moved domestically is much smaller than internationally leading to larger fluctuations in percentage changes.

In 2020, 68.9 million tonnes of domestic traffic was coastwise, accounting for 80% of domestic traffic ([PORT0706](#)), and has been generally decreased steadily since 2007. This is down 3.9 million tonnes (5%) from 2019. Since 2005, coastwise traffic has generally declined, mainly as a result of a fall in liquid bulk traffic. Lower volumes of crude oil being refined in the UK is likely to be a contributory factor in this decline. Further decline in 2020 mirrors the international trend and can be linked to the lack of demand for crude oil and oil products ([BEIS](#)).

One-port tonnage saw decrease of 10% in 2020, returning to 2014 levels. One-port tonnage consists of traffic to and from offshore locations including sea dredging and oil rigs. Crude oil one-port tonnage has declined considerably since 2000; the reduction in North Sea oil and gas production is likely to have been a contributory factor.

Trends in unitised traffic

Both domestic Ro-Ro and Lo-Lo units decreased in 2020, compared to 2019, falling by 23% and 16%, respectively. The biggest decline in Ro-Ro units was seen in passenger cars and motorcycles; down to 629.8 thousand units in 2020, a 46% decline from 2019, mirroring the overall trend.

Similar to the overall picture (see the Ro-Ro section on page 12), accompanied road goods vehicles fell 90.3 thousand units (down 12%), whilst unaccompanied road good trailers increased by 1% (6.7 thousand units) in 2020.

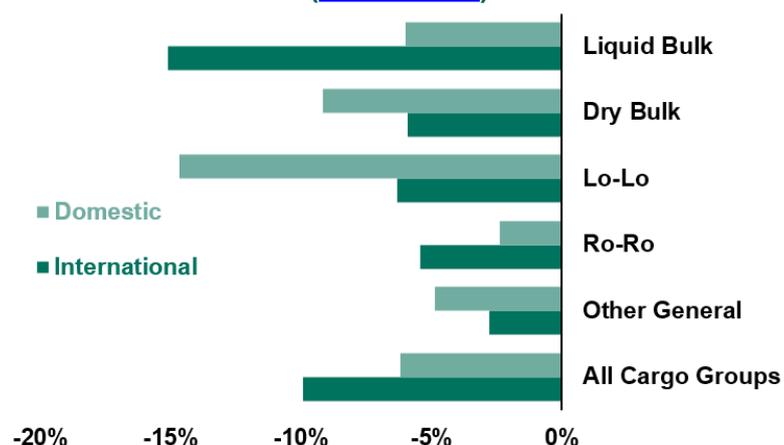
There was a **28% decrease in import and export vehicles in 2020**, the sixth consecutive year of decline for the traffic. This decline is similar to the decline in this traffic internationally (see page 15), which was down 26% from 2019.

Port trends in tonnage traffic

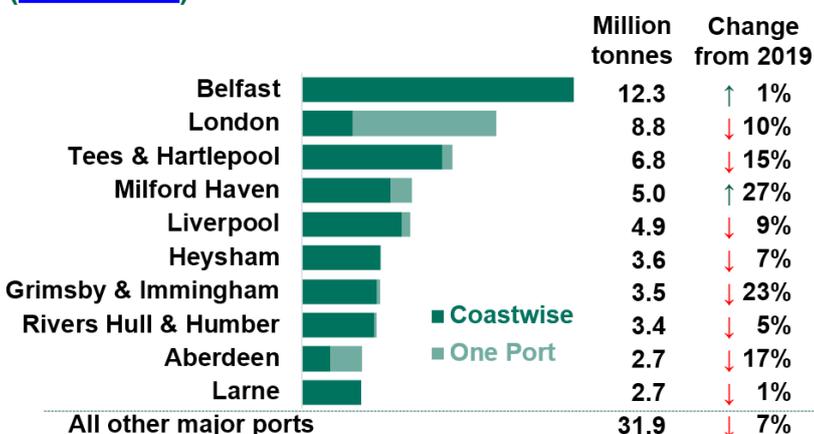
In 2020, Belfast remained the UK port that handles the most domestic traffic - 12.3 million tonnes. London followed as the second largest handler of domestic traffic, despite its 1.0 million tonne (10%) decline since 2019. London handles mostly dry bulk; therefore, this decrease follows the overall trend of declining dry bulk in domestic UK traffic.

In contrast to the overall decline in domestic liquid bulk this year, **Milford Haven saw a 27% increase in domestic liquid bulk tonnage in 2020**, up 1.1 million tonnes from 2019. Domestic crude oil and oil products handled at the port were responsible for this increase, increasing by 0.7 and 0.4 million tonnes, respectively, in 2020.

Tonnage percentage change across cargo groups between 2019 and 2020, by domestic and international traffic ([PORT0499](#))



Top 10 UK major ports by domestic tonnage, 2020 ([PORT0499](#))



5. Background Notes

Strengths and weaknesses of the data

- Overall the port freight statistics are believed to be fit for the purposes outlined on page 2, though data are known to be less reliable at lower levels of aggregation e.g. port, route and country level. The notes and definitions document includes comparisons with other sources which illustrate some differences.
- Final port freight statistics are published 7 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](#) and [Background Quality Report](#) are completed and checked. The detailed results in this release are based on this grossed data.
- Vessel arrivals statistics are considered less robust, and are outside the scope of National Statistics as a result, though are believed to give a good general indication of the more significant seagoing movements.

Related information

- The web tables and charts give further detail of the key results presented in this statistical release. They are available here: [port and domestic waterborne freight statistics](#).
- These [notes](#) provide further information such as definitions and a list of UK ports.
- The [Background Quality Report](#) provides further information on how the data is collected, quality assured and comparisons with relevant data sources.
- National Statistics are produced to high professional standards set out in the Code of Practice for Statistics. They undergo regular quality assurance reviews to ensure they meet customer needs: [Code of Practice](#). The arrivals statistics included in this release are not National Statistics.
- These statistics were [designated as National Statistics](#) in February 2013. The continued designation was confirmed in December 2018.
- 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: [port freight quarterly statistics](#).

Feedback

We welcome any feedback on these statistics by email to maritime.stats@dft.gov.uk, or fill in our two-minute [user feedback survey](#) which aims to make Maritime Statistics better, more informative and more user friendly. We are also conducting a [feedback survey](#) on how the experimental quarterly cargo port freight statistics ([PORT0503](#)) have been presented and published.



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