Department for Transport

Port Freight Statistics 2020: notes and definitions

Introduction

Department for Transport statistics on UK port traffic are published in two stages: (1) provisional quarterly releases, published 10 weeks after the end of the quarter. (2) more detailed final annual release, published in summer of the following year.

All port freight statistics are published through the maritime and shipping series on the DfT statistics web page: https://www.gov.uk/government/collections/maritime-and-shipping-statistics.

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Purpose and usage

These statistics relate to freight traffic to and from ports in the United Kingdom. They provide an overview of patterns and trends in cargo handled by ports which inform the work of the Department for Transport (DfT) Maritime Directorate, as well as others with an interest such as industry stakeholder organisations, academics and researchers. The statistics were used to fulfil Eurostat reporting requirements under the Maritime Statistics Directive, which will continue to maintain a consistent time series and allow comparisons with other countries.

This document outlines the coverage of these statistics, including information on data sources and processing methodology as well as changes which have occurred to both methods and published outputs.

For more detailed information about the quality of the statistics, users and uses and responses to user feedback, please see the accompanying Port Freight statistics: Background Quality Report.

1. Definitions

Ports covered

These statistics relate to freight traffic to and from ports in the United Kingdom, unless otherwise stated, and do not cover ports in the Isle of Man or the Channel Islands.

Major and minor ports. From 2000, major ports are those with cargo volumes of at least 1 million tonnes annually. There are in some years a small number of ports with less tonnage who have either just fallen below the threshold, are showing a trend that they will exceed 1 million tonnes within a year, or have previously handled more than 1 million tonnes of cargo in a year. Prior to 2000 the threshold for 'major' ports was 2 million tonnes of cargo annually.

Details of the major and minor ports included are given in Annex A.

More detailed data are collected for major ports than for the remaining ‘minor’ ports. All tables starting PORT01 have been supplemented by estimated breakdowns of the minor port traffic.

Cargo classification

Cargo types. Major port traffic is classified by cargo type, which is the means by which goods are loaded onto or off the vessel. Although for some cargo types there is further subdivision into broad commodities, the method of loading takes priority. Detail of these classifications are set out in Annex B on page 23.

Weights. All weights stated are tonnes gross, including crates and other packaging. The tare weights of containers, road goods vehicles, trailers and other items of transport equipment (i.e. the unloaded weight of the vehicle or equipment itself) are excluded.

Unitised goods. Goods which are lifted on or off the vessel in large (20 foot or longer) shipping containers, or rolled on or off in one of a variety of self propelled or towed units are said to be unitised cargoes. For these cargo types, the number of units as well as the weight of goods is recorded.

Main freight units. A subset of unitised goods are main freight units – this group consists of all containers and those Ro-Ro units which are designed to carry freight (categories 51, 61 and 63 in the cargo type table on page 7). The purpose of the main freight unit classification is that it excludes those Ro-Ro units which are not freight carrying – i.e. passenger vehicles, trade vehicles, and other specialised vehicles and trailers.

Container traffic. For the purpose of maritime statistics, the classification of containers is based purely upon their length as shown in the table. 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

Containers carried on board Ro-Ro vessels by shipborne port-to-port trailers are not included from 2000 onwards, although some operators incorrectly continued to include them until 2004 (see annex C on page 25 for details).

Vessel information

Several of the data tables provide a breakdown by vessel characteristics.

In table PORT0604 nationality refers to the nationality of the parent owner of the carrying vessel. In table PORT0605 the flag denotes the country authorising the registry of the vessel. See Shipping Fleet Statistics tables for more information on shipping fleets at https://www.gov.uk/government/statistics/shipping-fleet-statistics-2018.

Arrivals statistics - shown in tables PORT0601 and PORT0602 - include a vessel type breakdown (outlined on page 6).

Geographical breakdown

UK port traffic is classified geographically according to where the goods were last loaded or next unloaded at the other end of the sea journey. All traffic is either domestic or international. Domestic traffic is either coastwise or one-port. International traffic is either short sea or deep sea, and short sea traffic may be further divided according to whether or not it is with another EU member state. A more detailed description of these terms is given in the following table.

Geographical classification of UK port traffic			
Domestic	Coastwise	Traffic between ports in the United Kingdom (and with the Isle of Man and the Channel Islands). The totals of inwards and outwards coastwise traffic, however, do not match exactly. This is mainly because traffic between major and minor ports, or between major ports and ports in the Isle of Man and the Channel Islands, are not recorded at both ends (as is the case with coastwise traffic between major ports), but only at the major port end.	
	One-port	Dredged sand, gravel etc, landed at a port for commercial purposes; and traffic to and from UK offshore oil and gas installations (traffic with non-UK offshore oil and gas installations is recorded as foreign traffic). Formerly also included material shipped for dumping at sea, until this practice ceased.	
International	Short sea	EU (as at 1 July 2013)	Traffic with Belgium, Bulgaria, Cyprus, Denmark (including Faroe Islands), Croatia, Estonia, Finland, France, Germany, Greece, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal (including Madeira and Azores), Republic of Ireland, Romania, Spain (including the Canary Islands), Slovenia, Sweden.
		Other Europe & Mediterranean	Traffic with Albania, Algeria, Azerbaijan, Croatia, Egypt, Georgia, Gibraltar, Iceland, Israel, Lebanon, Libya, Monaco, Morocco, Norway, Russia, Syria, Tunisia, Turkey, Ukraine.
	Deep sea	Rest of world	Traffic with all countries of Africa (excluding Mediterranean countries), America (both North and South America), Asia (excluding Mediterranean and Black Sea countries) and Australasia.

2. Data collection and processing

The figures included in the port freight statistics come from several sources. The current collection arrangements for port freight traffic statistics - outlined in part A below - were introduced in 2000 to meet the requirements of the EC Maritime Statistics Directive (Council Directive 95/64/EC on statistical returns in respect of the carriage of goods and passengers by sea, recast as Directive 2009/42/EC). Whilst the way in which providers submit information has changed several times, the scope of the collection has remained basically unchanged since 2000 when it was introduced.

Additionally, tables PORT0601 and PORT0602 provide information on vessels arriving at UK ports. These are compiled from a range of data sources (outlined in part B, below).

The port freight data tables also include information on domestic waterborne freight (DWF) in tables PORT0701 - PORT0705; this is based on re-analysis of information from the port freight system and additional information on inland waterway movements. Key differences are summarised in section C below, with further details in the separate notes and definitions document for DWF.

A: Port freight statistics

Data collection. Data are collected from major ports and shipping lines and agents, on a quarterly basis, and from minor ports annually - in accordance with the Directive. Data providers can submit returns online using the Department's 'submit maritime statistics' website or in flat file format. Full details - including collection forms, instructions and code lists - are available in the guidance for data providers: https://www.gov.uk/government/publications/maritime-statistics-directive-reporting-guidance.

From 2019, DfT collate the data, carry out initial validation checks, and also operate a helpdesk to identify and follow up non-respondents (prior to 2019, this process was managed by a separate collection agency). At the end of each quarter and year, additional checks are carried out, including the cross-comparison of port and agent records, and comparisons with previous time periods. Major anomalies are followed up with data providers. Further details of the collection and the quality assurance carried out, and strengths and limitations of the data, can be found in the separate background quality report (BQR).

Compilation methodology. Published figures are based on annual totals by cargo type and direction provided by ports.

From 2000 all freight estimates shown in the tables which have a geographic element (e.g. imports, exports, foreign, domestic traffic) have been estimated by grossing procedures based on information supplied by shipping lines and agents. Port figures are used as control totals, and figures from agents are grossed to port totals on annual basis to provide a breakdown by route and vessel information which is not collected from ports. Further details of this grossing are given in the BQR.

Before 2000, this information has been estimated by ports but only approximately in many cases. The post-2000 collection arrangements provide more reliable geographic information, i.e. estimates of imports, exports, foreign, coastwise, one-port traffic, traffic on individual routes, etc.

B: Ship arrivals statistics

The PORT0601 and PORT0602 data tables present statistics on the number of arrivals of commercial cargo and passenger ships at UK ports. These statistics are based largely on different sources of data to the statistics on cargo handled obtained through the port freight collection system described above.

The data are considered a reasonably accurate estimate of the number of commercial shipping movements at UK ports, but are not necessarily exact, and the coverage of certain vessel or traffic types may be variable at the margins. Consequently, **these data are not classified as National Statistics.**

The methods for compiling the statistics were substantially revised for 2010 data (and 2009 was also re-cast on the new basis, so that 2009 estimates are available on both bases for comparison). and again for 2018 data (with 2017 being shown for both old and new methods). Previous approaches are outlined in Annex C, and the current method summarised below.

Arrivals statistics current methodology. The statistics are compiled on data from three sources:

1. Data from the Maritime and Coastguard Agency Consolidated European Reporting System (CERS), which is based on a mandatory reporting procedure for vessels arriving at UK ports. This includes information on around 100,000 vessel arrivals per year, although some regular services (mostly ferries) are exempt and it appears that some non-cargo vessels are not covered.

2. Data collected by DfT for monthly and annual sea passenger statistics. This source provides information on vessel arrivals for vessels which carry passengers, which includes the vast majority of those not captured by CERS

3. Data collected as part of the port freight collection system as outlined above. Both ports and shipping agent returns capture information about cargo vessel voyages and this information is used where information is not available from one of the above two sources.

The overall estimates of arrivals are compiled by taking the best estimate from the above three sources for each vessel and port combination, and aggregating them.

Comparison with previous approaches. The main change in the calculation method for 2018 was to replace data previously purchased from Lloyds List Intelligence (LLI) with data freely available from CERS. These sources differ in coverage, particularly for non-cargo vessels and minor ports - some of which are not well covered in CERS. A detailed comparison for the years for which both estimates are available suggests that these are not systematic; in some cases CERS counts more vessels and in some cases less, but overall for most ports there was a good agreement between the different approaches.

Users should note that the arrival statistics are best estimates based on the data available, and subject to limitations. In comparing LLI and CERS data, it was noted that some movements within ports (for example, between different terminals within Milford Haven port) were being counted. Such movements have been excluded from the figures calculated under the new approach, wherever possible, which is one reason why the figures on the new basis are generally lower.

Vessels included. The ship types included in the arrivals statistics are shown in the table, these are unchanged from the previous approach. In table PORT0602, totals are shown for all cargo vessels - excluding passenger and other vessels - for consistency with previous approaches, and because the trends for these vessel types are likely to be more robust in general.

Ship types used in ship arrival tables under new method (2009 on)		
Ship type in PORT06 tables	**Trading status**	**Vessel types included** ***(based on IHS Global world fleet data)***
Tankers	Trading	Oil tanker, oil-chemical tanker, chemical tanker, liquid gas tanker, other tanker
Ro-ro vessels	Trading	Ro-ro passenger, ro-ro containers, ro-ro other cargo
Fully cellular container vessels	Trading	Container (fully cellular)
Other dry cargo vessels	Trading	Bulk carrier, bulk-oil carrier, refrigerated cargo, specialised carrier, general cargo, general cargo-passenger
Passenger*	Trading	Passenger, cruise
Other vessels*	Non-trading	Offshore supply, dredging, bunkering tanker
Not included	Non-trading	Fish catching, other fishing, offshore (except supply), towing/pushing craft, research, other work vessels, non-seagoing ships, non-merchant ships, non-propelled vessels, non-ship structures, vessels of unknown or unrecorded type
* Not included in tables under old method up to 2009.		

'Other vessels' only includes those vessel types which may be carrying cargo which falls within the scope of the port freight collection system – e.g. offshore industry supply vessels (including dual purpose vessels such as anchor handling tug/supply vessels), or dredgers. Work boats which are unlikely to be carrying cargoes falling with the scope of the port freight system are still excluded from the table – e.g. tugs, offshore vessels other than supply ships, such as drilling vessels, pilot vessels, research ships, fishing boats, military vessels. It is not possible to match the scope of the port freight system exactly using the vessel type classifications available, and the treatment of some vessels is ambiguous. For example, dredgers may be considered outside the scope of maritime statistics as being 'work boats' – however if they land cargo in a port they are within scope of port freight statistics. Tugs are also excluded, but the cargo in any barges they are towing is again within the scope of port freight statistics.

The scope of the port freight system is theoretically limited to seagoing traffic – therefore traffic entirely within inland waters is excluded. The principal examples of inland waters traffic – Isle of Wight ferry services – are also excluded from the ship arrivals tables. It is possible that a small number of inland waters movements remain in the tables, but it is thought that the numbers involved will be relatively insignificant.

Strengths and weaknesses of the data. The data are thought to give a very good general indication of the overall level of significant seagoing commercial ship movements in the UK, but they are not necessarily completely precise.

The main limitations on the quality of the data are the accuracy with which major ports report traffic under the port freight system, and the completeness of the CERS data.

Combining three data sources and using different approaches for different ports and vessel types could introduce inconsistencies. However, checks suggest that for the majority of ports, the impact of this is likely to be minimal (though there are several ports where the estimation method is known to be less robust).

C: Domestic Waterborne Freight (DWF) statistics

As of the 2019 statistics (published in August 2020), figures for domestic waterborne freight (DWF) are presented alongside the port freight statistics and included in the same statistical release. The publication of the 2020 DWF statistics were postponed to September 2021 following the identification of a data issue which affects the internal flow figures, which affects data from 2015 onwards. Data tables PORT0701 to PORT0705 contain DWF data.

DWF statistics are based largely on data collected through the port freight collection system, but processed differently and with some additional sources, which include:

- Inclusion of data for inland waterway movements, which comes from a survey of barge operators, further information for inland movements (such as between Liverpool and Manchester) collected as part of the port freight system but not included in the port freight figures, and estimates for minor ports. It should be noted that when looking at internal waterways traffic, in 2019, more companies responded the Barge Survey and hence, internal waterways traffic may have seen an increase in their annual figures because of this.
- Counting coastwise movements in only one direction; in the port freight statistics, coastwise domestic movements are reported twice - by the inwards and outwards ports. For DWF, one direction is counted (which is the one with the highest tonnage reported overall)
- Calculation of figures for good moved, as well as good lifted (i.e. tonnage)

There are separate notes and definitions for the DWF statistics which cover the methodology used in more detail.

3. Published tables and revisions

Publication arrangements: provisional and final statistics

Port freight statistics are published in two stages in order to put usable information in the public domain as early as possible:

(1) Provisional quarterly results are published approximately 10 weeks after the end of the quarter to which they relate. These statistics are based on high level quarterly returns provided by major ports. Data are available for total weight of goods and number of units, inwards and outwards for each responding port. These figures may be subject to revision if subsequent checks at the year end highlight anomalies. Typically a very small number of ports do not provide data in time for publication, in which case figures are estimated. Typically this applies to a small number of ports and has a minimal impact on the overall national trends shown.

(2) Final detailed annual results are published about 7 months after the year end. These statistics are based on annual returns provided at the end of the year by each major port and minor port. A split into broad cargo type is available for each major port. At this stage a full reconciliation of port and shipping agent data will have been carried out, and grossing of the final data completed and checked. The detailed results are based on this grossed data. At this stage the full range of analyses, including those by route and vessel type are available.

Prior to the 2018 publication, statistics on DWF were published separately from the port freight statistics, however from 2018 onwards they have been included in one annual publication. Due to the identification of a data issue which affects the internal flow figures, affecting data years 2015 onwards, the publication of the 2020 DWF statistics were postponed to September 2021.

PORT data tables

Data tables published as part of the port freight series, including those containing data on ship arrivals and domestic waterborne freight, have the prefix PORT. Details of changes to published tables and how we work with users are given in the background quality report, but recent changes include:

- For the 2017 statistics (published 2018), the format of the data tables was revised, introducing ‘filterable’ data tables to provide a greater range of information to users. A mapping between the old and new table numbers is available on the data tables page.
- For the 2018 statistics (published in 2019), more minor changes were made, in particular the presentation of the arrivals tabes (PORT0601 and PORT0602) was changed to be more in line with the other port freight tables.
- For the 2019 statistics (published in 2020), more minor changes were made, in particular adding gross tonnage values to the arrivals table PORT0601.

Downloadable data file (PORT0499). This special file is designed to allow advanced users to filter for or download data for their own analyses. The data are disaggregated as far as is consistent with maintaining commercial confidentiality. Most of our published tables also have the raw data available within a ‘Data’ worksheet for use by interested users. PORT0499 contains data

by number of tonnes as well as units. Note that not all unitised cargo types are capable of carrying cargo therefore tonnage and units results should only be compared for those types of unit which can do so.

The tables contain data by year (from 2000), UK port, region of loading/unloading, country of loading/unloading, cargo category (at two different levels of detail) and direction of movement. Very small flows have been aggregated to world region totals to help maintain confidentiality.

Small flows. Small flows are defined by direction of travel and consist of unitised traffic weighing less than 500 tonnes and containing less than 200 units, or non-unitised traffic weighing less than 500 tonnes. In some of the data tables, these small flows are aggregated to preserve the commercial sensitivity of our data providers, as otherwise this data could identify specific shipping lines or agents.

Revisions

Where there are notable changes impacting on coverage of the published figures, these are noted in relevant changes. For example, Stranraer port closed in November 2011 and its operations were transferred to neighbouring Loch Ryan port.

Aside from the scheduled updating of the provisional figures noted above, revisions are occasionally made to correct inaccuracies. This includes minor corrections as follows:

- Statistics during 2013 for freight handled by UK ports were revised to correct a small error found in the final statistics published on 27 August 2014. The original statistics included some under-reporting due to a data supply issue identified through ongoing quality assurance processes.
- Statistics during 2016 were revised to correct for a small error found in the tables and release published in September 2017.
- During the production of the new published data tables in 2018, a series of minor errors were found on historical tables, mostly related to operations transferring between co-located minor ports and a reallocation of some cargo volumes (totals are not affected as a result). These have been indicated with an ‘r’ on the relevant table for that data point.
- For the 2018 statistics, a minor revision was made to the vessel arrival statistics (tables PORT0601 and PORT0602) for Cairnryan port for years 2014-16, to correct some double counting identified.
- 2019 statistics were revised in the 2020 publication, published on 14 July 2021, due to volumes submitted for three ports - Goole, Grimsby & Immingham and Hull - being incorrectly inputted by the data provider. These revisions have resulted in there being an overall decrease in the volume of tonnage, and increase in the volume of units, between 2018 and 2019, which contradicted the original figures. TEU’s rose over the same period, but to a lesser extent after the revision. A summary of the revisions can be found in the below tables, as well as a cargo group breakdown of the changes for Grimsby & Immingham, and Hull, which

Total change across all UK major ports in 2019

	Tonnage	Units	TEU
Original	475,342,590	23,269,929	10,534,455
Revised	471,739,344	23,903,741	10,468,103
Change	-1%	3%	-1%

were revised the most. Goole's Other General Cargo traffic was the only group that was revised, down 5% from the original figure - 732 thousand tonnes – to 692 thousand tonnes.

Total change across for the three ports in 2019

Port		Tonnage	Units	TEU
Goole	Original	1 279,630	0	0
	Revised	1,242,431	0	0
	Change	-3%	NA	NA
Grimsby & Immingham	Original	54,081,383	2,210,394	367,925
	Revised	51,245,356	2,121,245	322,182
	Change	-5%	-4%	-12%
Hull	Original	9,927,329	570,356	344,883
	Revised	9,197,309	1,293,317	324,274
	Change	-7%	127%	-6%

Change across cargo groups for Grimsby & Immingham in 2019

Port	Cargo Group		Tonnage	Units	TEU
Grimsby & Immingham	Dry Bulk	Original	14,313,307	0	0
		Revised	13,358,373	0	0
		Change	-7%	NA	NA
	Liquid Bulk	Original	19,170,781	0	0
		Revised	18,141,138	0	0
		Change	-5%	NA	NA
	Lo-Lo	Original	2,144,893	187,471	367,925
		Revised	2,008,358	175,379	322,182
		Change	-6%	-6%	-12%
	Other General Cargo	Original	1,295,077	0	0
		Revised	1,086,102	0	0
		Change	-16%	NA	NA
	Ro-Ro Non-Self-Propelled	Original	14,019,640	799,554	0
		Revised	13,618,414	776,200	0
		Change	-3%	-3%	NA
	Ro-Ro Self-Propelled	Original	3,137,685	1,223,369	0
		Revised	3,032,971	1,169,666	0
		Change	-3%	-4%	NA

Change across cargo groups for Hull in 2019

Port	Cargo Group		Tonnage	Units	TEU
Hull	Dry Bulk	Original	2,040,100	0	0
		Revised	1,855,250	0	0
		Change	-9%	NA	NA
	Liquid Bulk	Original	1,631,097	0	0
		Revised	1,474,217	0	0
		Change	-10%	NA	NA
	Lo-Lo	Original	2,168,057	190,374	344,883
		Revised	2,034,474	179,000	324,274
		Change	-6%	-6%	-6%
	Other General Cargo	Original	1,626,298	0	0
		Revised	1,530,420	0	0
		Change	-6%	NA	NA
	Ro-Ro Non-Self-Propelled	Original	1,554,719	119,313	0
		Revised	1,323,329	106,391	0
		Change	-15%	-11%	NA
	Ro-Ro Self-Propelled	Original	907,058	260,669	0
		Revised	979,619	1,007,926	0
		Change	8%	287%	NA

4. Strengths and weaknesses of these statistics

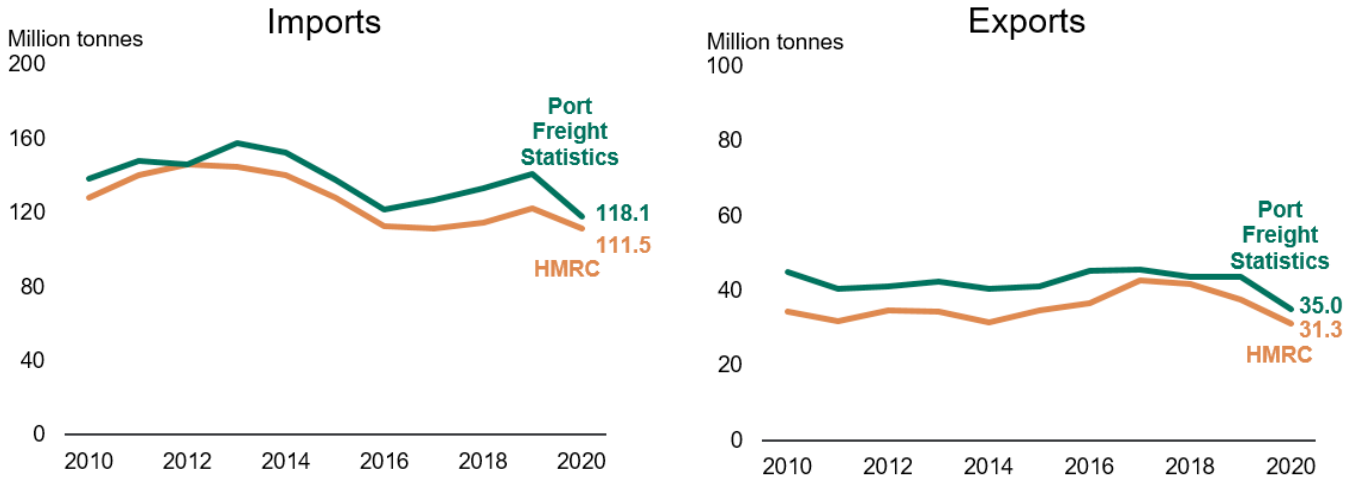
Port freight statistics undergo an extensive data validation exercise comparing data obtained from UK ports with data from shipping agents and operators (outlined in the background quality report). It is also possible to assess the quality of port freight statistics by comparing with other National Statistics, such as those produced by Her Majesty's Revenue & Customs (HMRC).

Port freight statistics: comparison with related data sources

HMRC's Overseas Trade statistics record the movement of goods for trade purposes between the UK and non-EU countries. Detailed documentation of this system is available on the UK trade info website.

The two datasets can be compared to investigate whether there are similarities in reporting coverage and whether international port freight trends for imports and exports are consistent over time. Overall, the two data sources follow a similar trend in recent years, however, HMRC import and export statistics tend to be consistently smaller than those from DfT port freight statistics. It should be noted that HMRC reports the location of where the goods are cleared through customs, and this may be different from the port where the goods entered or exited the country.

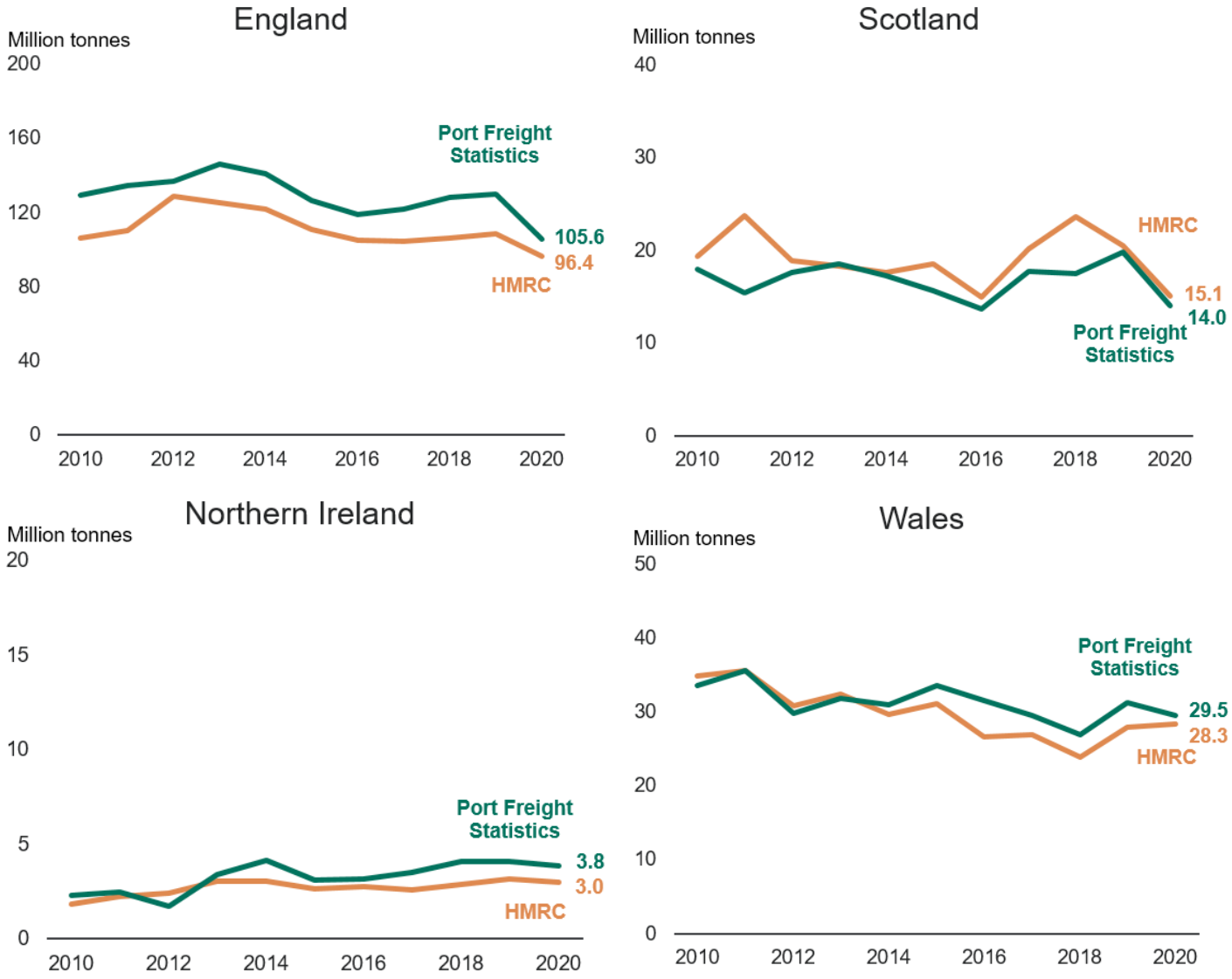
UK major port non-EU international imports and exports from HMRC and DfT, 2010-2020



Even though HMRC data reports the cargo where it has cleared customs, as stated above, the location of where it was cleared may be different from the port of unload. To tackle specific geographical differences, it is interesting to observe the differences that might exist between countries in the United Kingdom, in order to improve the detail of the checks in the reporting of particular major ports.

In the next page, you will find a comparison for total freight imported and exported in the four UK countries.

UK major port non-EU international freight from HMRC and DfT by UK country, 2010-2020



Trends seem to be very similar for both data sources across the different countries, with constant differences for England and Northern Ireland as a consequence of over-reporting of dry bulk in port freight statistics, differences for Scotland driven by crude oil and oil products and caused by other liquid bulk cargo in the case of Wales. Nevertheless, as shown in the table below, correlation between series for each country are close to 1, with the exception of Scotland.

	England	Northern Ireland	Scotland	Wales
Correlation	0.89	0.82	0.45	0.85

Additionally, it is possible to look at this data source at the cargo category level, by comparing the tonnage of non-EU freight. This comparison is made by using a look up table that joins HMRC commodity codes, known as the Harmonised System of tariffs, to DfT cargo codes, as established by the European Commission Maritime Statistics Directive (95/64/EU).

Data from both sources for 2010 to 2020 for each subgroup were analysed with the findings discussed in detail below. Note that all comparisons are for **non-EU UK major port traffic** only.

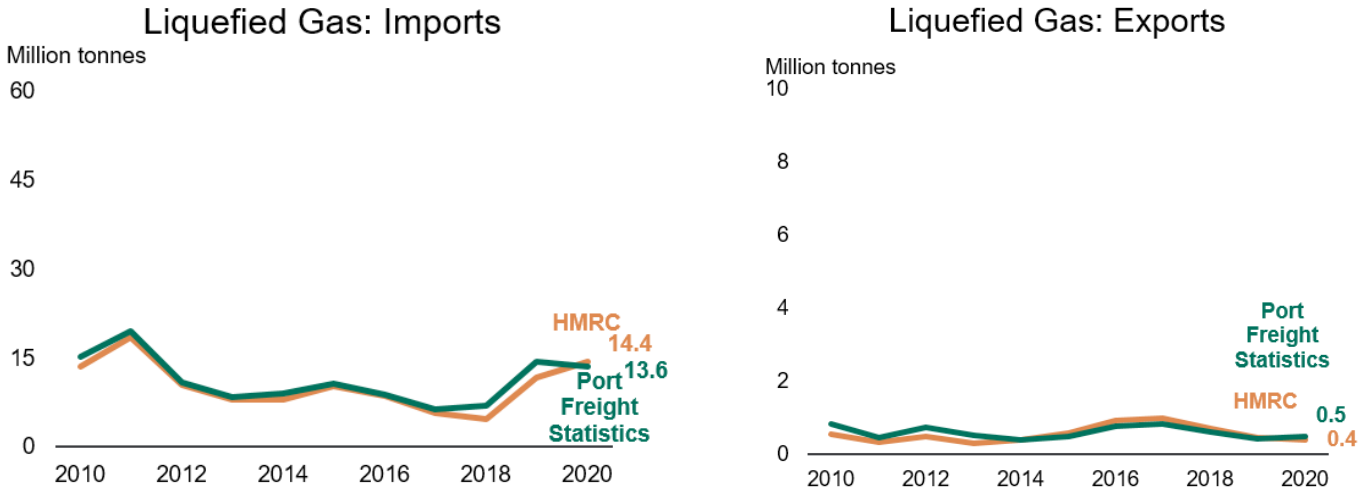
Comparison of DfT port statistics and HMRC trade data, UK energy commodity traffic, 2020

	Liquefied Gas		Crude Oil		Oil Products		Dry Bulk	
Data Source	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
HMRC	14.4	0.4	36.4	11.4	12.6	4.0	15.2	6.6
Port Freight Statistics	13.6	0.5	33.1	9.1	12.0	4.8	31.2	5.4
Difference								
Tonnage	-0.9	0.1	-3.3	-2.4	-0.6	0.8	16.0	-1.2
Percentage	-6%	19%	-9%	-21%	-5%	20%	106%	-18%

Liquefied gas

For the liquefied gas cargo category we can see that the two data sources have very similar trends and the reported tonnages are extremely similar. There is a slight difference in the coverage of the two sources for imports, especially between 2017 and 2019, but the trends followed are almost identical, with 2020's volumes being similar. For exports, although the values are very low, the differences are still minor.

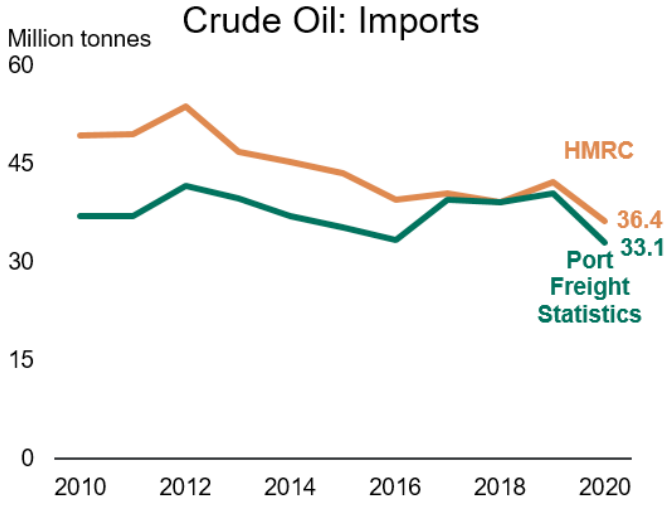
UK major port non-EU imports and exports of liquefied gas, HMRC and DfT, 2010-2020

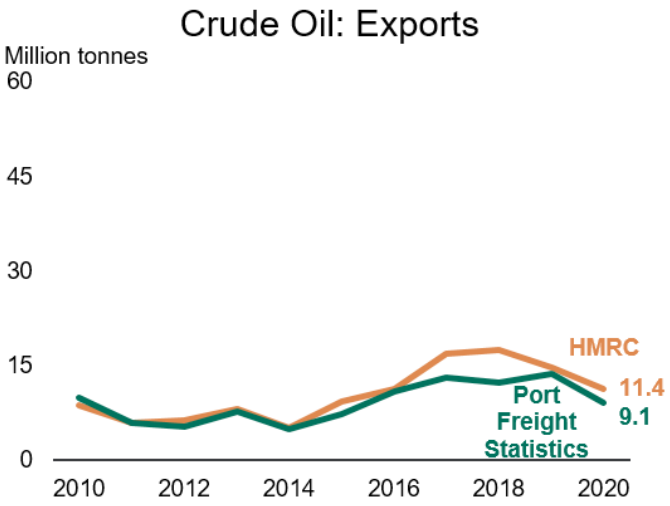


Crude oil

In the trends for crude oil imports, the differences have greatly reduced in the last years, probably driven by better reporting of port freight statistics. For exports, correlation is near 0.93, which shows that both series have followed very similar trends across time. Again, in this case, the differences for exports could be driven by slightly poorer coverage of traffic from the port freight statistics.

UK major port non-EU imports and exports of crude oil, HMRC and DfT, 2010-2020

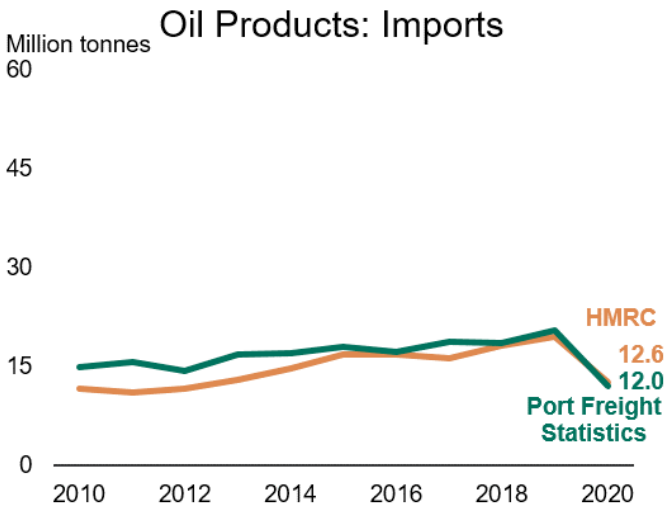


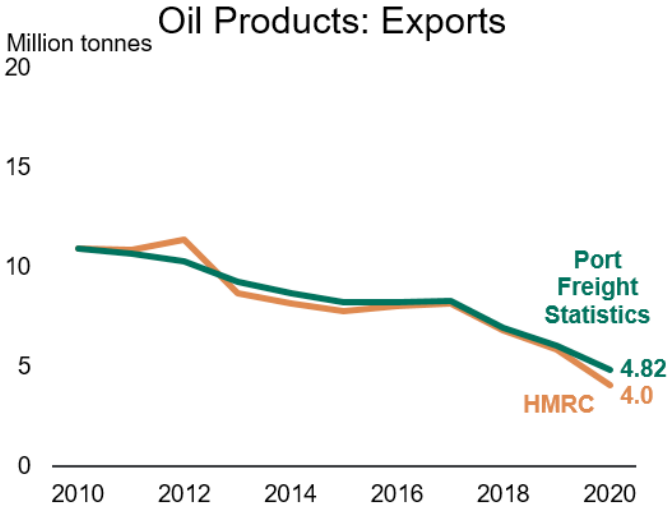


Oil products

In the trends for oil products imports, the differences have reduced in the last years, probably driven by better reporting of port freight statistics and better categorisation of cargo. Trends for both directions are very similar, although it should be highlighted that for imports, there have been several years where there has been noticeable differences between the two sources, such as 2017 and years prior to 2015. Nevertheless, absolute differences are very small for exports and almost negligible for imports in 2020.

UK major port Non-EU imports and exports of Oil Products, HMRC and DfT, 2010-2020

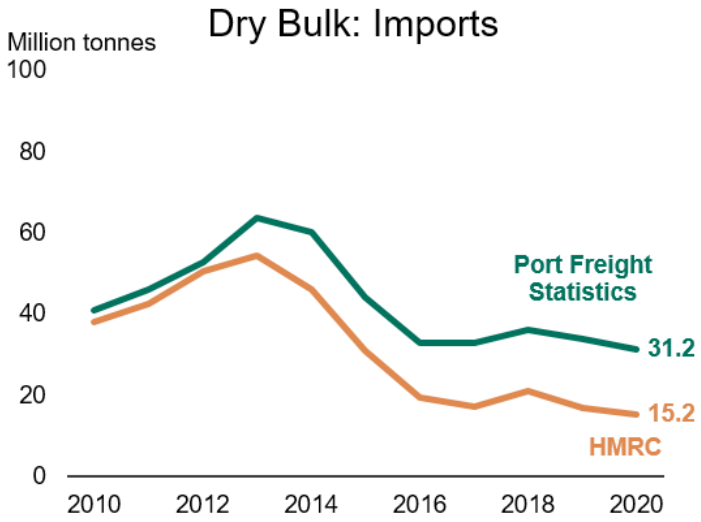


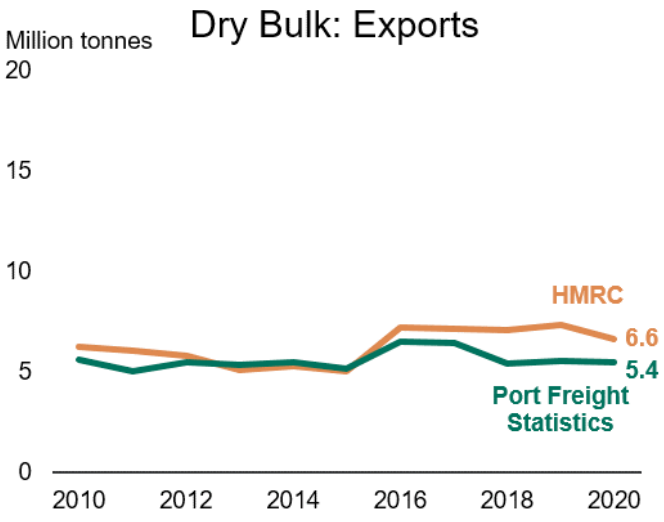


Dry bulk

Statistics for dry bulk follow similar trends for both directions, with correlations of 0.94 and 0.60 for imports and exports respectively. Differences for imports are mainly driven by poor categorisation of bulk agricultural goods in port freight statistics, which seems to be constant across time. When only considering the cargo categories ores and coal, the percentage difference of imports decreases from 106% to 25% in 2020.

UK major port Non-EU imports and exports of Dry Bulk, HMRC and DfT, 2010-2020





In conclusion, these comparisons show that these two National Statistics on freight goods products are broadly quite similar. Further investigation of possible over-reporting or wrong categorisation of dry bulk could lead to better reporting of port freight statistics.

Biomass estimates

Additionally, the biomass estimates provided on this publication are based on a commodity look up that filters HMRC Overseas Trade Statitsics data for those goods that are used as biomass fuel (wood pellets, agricultural residues, seeds...). With these cargo codes and an estimation of the importance of maritime freight in the biomass market, tonnage and value estimates have been generated for both EU and non-EU imports/exports.

Annex A: United Kingdom ports

Listed below are all the ports which were considered as active major or minor ports for the purposes of compiling the 2020 port freight statistics.

Major ports

Aberdeen
Belfast
Boston
Bristol
Cairnryan
Cardiff
Clyde
Cromarty Firth
Dover
Dundee
Felixstowe
Fishguard
Forth
Fowey
Glensanda
Goole
Great Yarmouth
Grimsby and Immingham
Harwich
Heysham
Holyhead
Hull
Ipswich
Kilroot Power Station Jetty
Larne
Liverpool
Loch Ryan
London
Londonderry
Manchester
Medway
Milford Haven
Newhaven
Newport
Orkney
Peterhead
Plymouth
Poole
Port Talbot
Portsmouth
Ramsgate
Rivers Hull and Humber
River Trent
Shoreham
Southampton
Sullom Voe
Sunderland
Swansea
Tees & Hartlepool
Tyne
Warrenpoint

Minor ports

Appledore
Ardrishaig
Ayr
Barrow
Barry
Berwick
Bideford
Blyth
Bridgwater
Brightlingsea
Buckie
Burry Port
Chichester
Coleraine
Corpach
Cowes, Isle of Wight
Falmouth
Fraserburgh
Garston
Gill's Bay Scotland
Hughtown (St Mary's)
Inverkeithing
Inverness
Kilroot
King's Lynn
Kyle of Lochalsh
Lancaster
Lerwick
Littlehampton
Llandulas
Lowestoft
Maldon
Mistley
Montrose
Mostyn
Neath
Newport, Isle of Wight
Padstow
Penzance
Perth
Port Penrhyn
Porthoustock
River Ouse
Rye
Scalloway
Scrabster
Seaham
Sharpness
Silloth
Stornoway
Sutton Bridge
Teignmouth
Troon
Truro
Wallasea
Weymouth & Portland
Whitstable
Wick
Wisbech
Workington
Yelland

Full list of current and previous ports included in port freight statistics

Includes some where freight operations have ceased.

United Kingdom Port	Description	Country of the United Kingdom	Major port for freight
Aberdeen	Wharves within Aberdeen Harbour	Scotland	Yes
Appledore	Wharf at Appledore Harbour	England	No
Ardrishaig	Wharf at Ardrishaig Harbour on the Crinan Canal	Scotland	No
Ayr	Wharves within Ayr Harbour	Scotland	No
Barnstaple	Wharves at Barnstaple and Yelland Harbours	England	No
Barrow	Wharves within Barrow Harbour (including the Furness peninsula)	England	No
Barry	Wharves within Barry Harbour	Wales	No
Belfast	Wharves within Belfast Harbour	Northern Ireland	Yes
Berwick	Wharves within Berwick Harbour	England	No
Bideford	Wharves at Bideford Harbour	England	No
Blyth	Wharves within Blyth Harbour	England	No
Boston	Wharves within Boston Harbour	England	Yes
Bridgwater	Wharves on River Parrett	England	No
Brightlingsea	Wharves at Brightlingsea Dock	England	No
Bristol	About 40 wharves at Avonmouth and along River Avon	England	Yes
Buckie	Wharves within Buckie Harbour	Scotland	No
Burghead	Wharves at Burghead	Scotland	No
Burry Port	Wharves within Burry Port Harbour	Wales	No
Cairnryan	Wharf within Cairnryan Harbour, on Loch Ryan	Northern Ireland	Yes
Cardiff	Wharves within Cardiff Harbour	Wales	Yes
Charlestown	Wharf within Charlestown Harbour	England	No
Chichester	Wharves at Chichester and Langstone Harbours	England	No
Clyde	Wharves on River Clyde and Forth of Clyde, including Clydeport, Hunterston and Ardrossan, and those on Loch Fyne and Loch Long	Scotland	Yes
Colchester	Wharves on River Colne	England	No
Coleraine	Wharves within Coleraine Harbour	Northern Ireland	No
Corpach	Wharf at Corpach at south end of the Caledonian Canal	Scotland	No
Cowes	Wharves on River Medina at Cowes Harbour, Isle of Wight	England	No
Cromarty Firth	Wharves along Cromarty Firth, including Nigg and Invergordon	Scotland	Yes
Dartmouth	Wharves at Dartmouth, Kingswear and Totnes on River Dart	England	No
Dean Point	Wharf at Dean Point near Helston	England	No

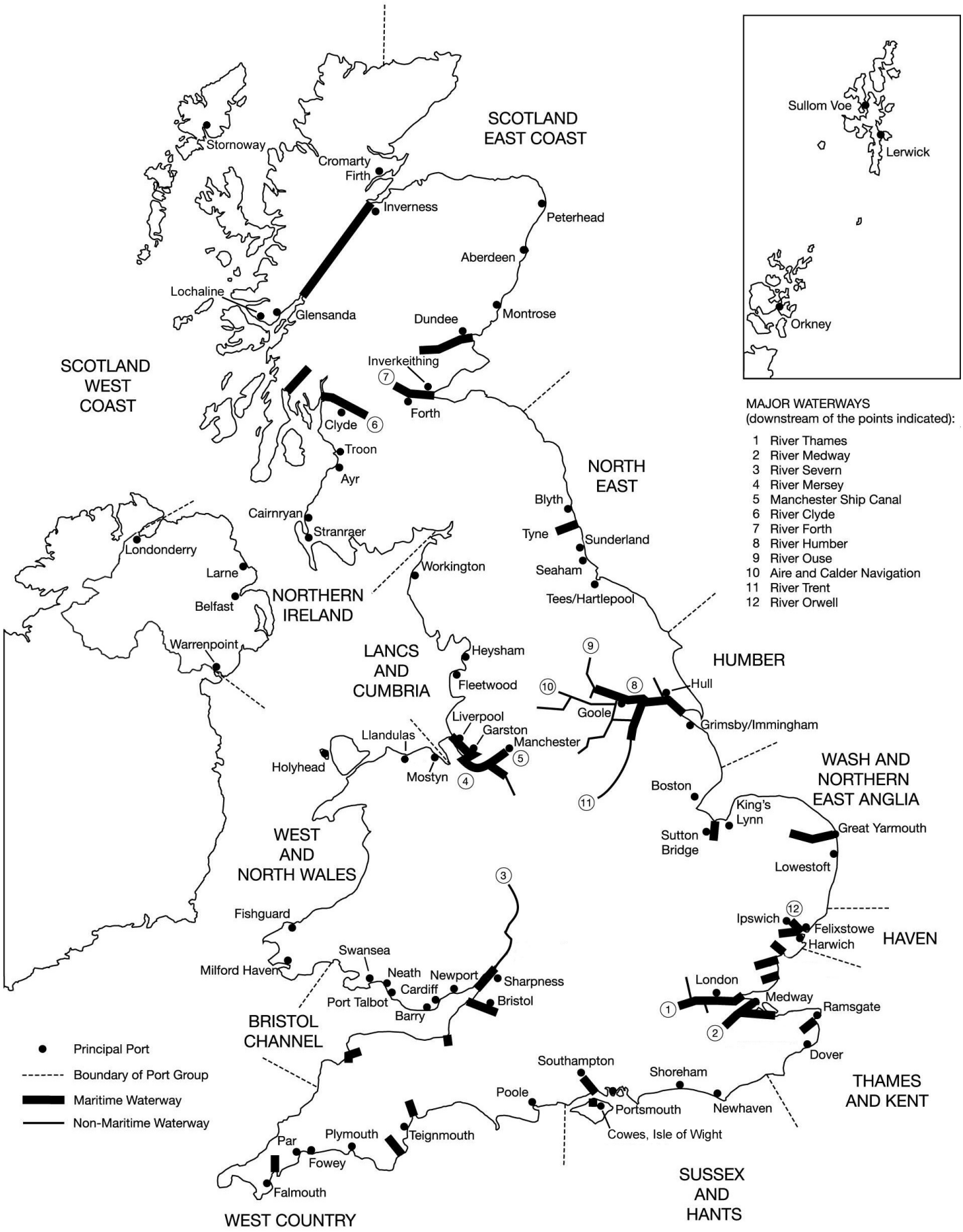
United Kingdom Port	Description	Country of the United Kingdom	Major port for freight
Dover	Wharves within Dover Harbour	England	Yes
Dundee	Wharves within Dundee Harbour on River Tay	England	Yes
Exmouth	Wharf at Exmouth on River Exe	England	No
Falmouth	Wharves at Falmouth Docks and within Falmouth Harbour (excluding Truro and Penryn on River Fal)	England	No
Fareham	Wharf at Fareham Harbour	England	No
Felixstowe	Wharves within Felixstowe Harbour	England	Yes
Fishguard	Wharf within Fishguard Harbour	Wales	Yes
Fleetwood	Wharves within Fleetwood Harbour	England	Yes
Folkestone	Wharves within Folkestone Harbour	England	No
Forth	Wharves along the Firth of Forth including Houndpoint, Grangemouth, Leith, Rosyth and Braefoot	Scotland	Yes
Fosdyke	Wharf at Fosdyke Bridge, River Welland	England	No
Fowey	Wharves within Fowey Harbour	England	Yes
Fraserburgh	Wharves within Fraserburgh Harbour	Scotland	No
Garston	Wharves at Garston (port separate from Liverpool and Manchester)	England	No
Gills Bay, Scotland	Wharf at Gills Bay Harbour (Caithness)	Scotland	No
Girvan	Wharf within Girvan Harbour	Scotland	No
Glensanda	Wharf at Glensanda on Loch Linnhe	Scotland	Yes
Goole	Wharves at Goole Docks on River Ouse	England	Yes
Great Yarmouth	Wharves within Great Yarmouth Harbour	England	Yes
Grimsby & Immingham	Wharves at Grimsby and Immingham Harbours, including Killingholme, on south side of the River Humber	England	Yes
Gweek	Wharf on River Helford	England	No
Harwich	Wharves at Parkeston Quay and Navyard Wharf within Harwich Harbour	England	Yes
Heysham	Wharves within Heysham Harbour	England	Yes
Holyhead	Wharves at Holyhead and on Isle of Anglesey	Wales	Yes
Hull	Wharves at Hull Harbour on the north side of the River Humber	England	Yes
Inverkeithing	Wharves at Inverkeithing Harbour	Scotland	No
Inverness	Wharves within Inverness Harbour	Scotland	No
Ipswich	Wharves at Ipswich harbour on River Orwell	England	Yes
Kilroot	Salt Wharf at Kilroot (separate from the major port of Kilroot Power Station Jetty)	Northern Ireland	No

United Kingdom Port	Description	Country of the United Kingdom	Major port for freight
Kilroot Power Station Jetty	Wharves for power station at Kilroot Jetty	Northern Ireland	Yes
King's Lynn	Wharves within King's Lynn Harbour	England	No
Kyle of Lochalsh	Wharf at Lochalsh Harbour	Scotland	No
Lancaster	Wharves at Glasson Dock, Lancaster	England	No
Larne	Wharves within Larne Harbour	Northern Ireland	Yes
Lerwick	Wharves within Lerwick Harbour and other harbours on Shetland Islands excluding Sullom Voe and Scalloway	Scotland	No
Littlehampton	Wharf within Littlehampton Harbour	England	No
Liverpool	Wharves along the River Mersey eastwards to and excluding Garston and the Manchester Ship Canal (includes Seaforth Dock, Bromborough and Tranmere Oil Terminal)	England	Yes
Llandulas	Wharves at Llandulas	Wales	No
Lochaline	Wharf at Lochaline	Scotland	No
Loch Ryan	Stranraer port closed in November 2011. Its operations were transferred to neighbouring Loch Ryan Port.	Scotland	Yes
London	The Port of London Authority area of the River Thames between Teddington and the North Sea (excluding the River Medway). Includes Tilbury, London gateway, Purfleet, Dartford and Dagenham.	England	Yes
Londonderry	Wharves within Londonderry Harbour	Northern Ireland	Yes
Lowestoft	Wharves within Lowestoft Harbour	England	No
Macduff	Wharves within Macduff Harbour	Scotland	No
Magheramorne	Wharf at Magheramorne Harbour	Scotland	No
Maldon	Wharves on River Blackwater	England	No
Manchester	Wharves along Manchester Ship Canal	England	Yes
Medway	Rivers Medway and Swale and their tributaries: about 29 wharves, including those at Sheerness, Thamesport, Rochester, Chatham, Ridham Dock and Queenborough	England	Yes
Milford Haven	Wharves at Milford Haven, including Pembroke Dock and Pembroke Port	Wales	Yes
Mistley	Wharf on River Stour (Mistley Quay)	England	No
Montrose	Wharves within Montrose Harbour	Scotland	No
Mostyn	Wharves within Mostyn Harbour	Wales	No
Neath	Wharves on River Neath	Wales	No
Newhaven	Wharves within Newhaven Harbour	England	Yes
Newlyn	Wharves within Newlyn Harbour	England	No

United Kingdom Port	Description	Country of the United Kingdom	Major port for freight
Newport	Alexandra Dock and Newport Harbour: wharves on Alexandra Dock and River Usk	Wales	Yes
Newport IOW	Wharf at Newport, on River Medina (Isle of Wight)	England	No
Orkney	All wharves on the Orkney Islands including Kirkwall, Flotta (oil terminal), Scapa Flow and Stromness	Scotland	Yes
Padstow	Wharf at Padstow Harbour	England	No
Par	Wharf at Par Harbour	England	No
Penryn	Wharf at Penryn on the River Fal above Falmouth	England	No
Penzance	Wharves within Penzance Harbour	England	No
Perth	Wharves within Perth Harbour	Scotland	No
Peterhead	Wharves within the whole of Peterhead Harbour including the off-shore wharves	Scotland	Yes
Plymouth	Wharves at Millbay Docks and within Cattewater Harbour	England	Yes
Poole	Wharves within Poole Harbour	England	Yes
Port Askaig	Wharves on Islay island	Scotland	No
Port Penrhyn	Wharf within Port Penrhyn	Wales	No
Port Talbot	Wharves at Port Talbot Harbour	Wales	Yes
Porthoustock	Wharf at Porthoustock Quarry	England	No
Portrush	Wharf at Portrush Harbour	Northern Ireland	No
Portsmouth	Wharves within Portsmouth Harbour	England	Yes
Ramsgate	Wharves within Ramsgate Harbour	England	Yes
River Ouse	Wharves on River Ouse, including Selby but excluding Goole	England	No
River Trent	Wharves on River Trent, including Kingsferry, Flixborough, Neap House and Gunness	England	Yes
Rivers Hull & Humber	Wharves on River Hull and River Humber, including those at New Holland and Tetney (oil terminal) but excluding Hull and Grimsby & Immingham	England	Yes
Rye	Wharf within Rye Harbour	England	No
Sandwich	Wharf at Richborough on the River Stour	England	No
Scalloway	Wharves at Scalloway Harbour	Scotland	No
Scrabster	Wharf within Scrabster Harbour	Scotland	No
Seaham	Wharves at Seaham Harbour	England	No
Sharpness (including Gloucester)	Wharves at Sharpness and Gloucester (River Severn upstream to Gloucester)	England	No
Shoreham	Wharves within Shoreham Harbour	England	Yes
Shotton	Wharf on River Dee	England	No
Silloth	Wharves within Silloth Harbour	England	No

United Kingdom Port	Description	Country of the United Kingdom	Major port for freight
Southampton	Wharves on Southampton Water and Rivers Itchen and Test, including Fawley and Hamble (oil refinery and terminal) and Southampton Container Terminals	England	Yes
Stornoway	Wharves within Stornoway Harbour	Scotland	No
Stranraer	Wharf is now above Cairnryan (still on Loch Ryan). Stranraer port closed in November 2011. Its operations were transferred to neighbouring Loch Ryan Port.	Scotland	Yes
Sullom Voe	Sullom Voe oil terminal	Scotland	Yes
Sunderland	Wharves within Sunderland Harbour	England	Yes
Sutton Bridge	Wharves at Sutton Bridge on River Nene	England	No
Swansea	Wharves within Swansea Harbour	Wales	Yes
Tees & Hartlepool	Wharves along River Tees, including Middlesbrough, Billingham and Redcar, and at Hartlepool Harbour	England	Yes
Teignmouth	Wharves within Teignmouth Harbour	England	No
Torquay	Wharf at Torquay Harbour	England	No
Troon	Wharves within Troon Harbour	Scotland	No
Truro	Wharves at Truro on the River Fal above Falmouth	England	No
Tyne	Wharves along River Tyne, including Newcastle	England	Yes
Wallasea	Wharves on River Crouch and River Roach	England	No
Warrenpoint	Wharves within Warrenpoint Harbour	Northern Ireland	Yes
Watchet	Wharf within Watchet Harbour	England	No
Wells	Wharves within Wells Harbour	England	No
Weymouth & Portland	Wharves within Weymouth Harbour and at Portland Port	England	No
Whitby & Scarborough	Wharves at Scarborough and Whitby	England	No
Whitehaven	Wharf within Whitehaven Harbour	England	No
Whitstable	Wharves within Whitstable Harbour	England	No
Wick	Wharves within Wick Harbour	Scotland	No
Wisbech	Wharves on River Nene excluding Sutton Bridge	England	No
Workington	Wharves within Workington Harbour	England	No

Ports, port groups and freight waterways



MAJOR WATERWAYS
(downstream of the points indicated):

1 River Thames
2 River Medway
3 River Severn
4 River Mersey
5 Manchester Ship Canal
6 River Clyde
7 River Forth
8 River Humber
9 River Ouse
10 Aire and Calder Navigation
11 River Trent
12 River Orwell

Annex B: Cargo classification

Classification of port freight traffic for the EC Directive on statistical returns in respect of the carriage of goods and passengers by sea (2009/42/EC)

Unitised traffic

Category	***Description***	***Code***	*Statistics required for major ports*			
			Number of units			*Weight of goods*
			Loaded	*Empty*	*Total*	
Containers	20 ft freight units	31	✓	✓	✓	✓
	40 ft freight units	32	✓	✓	✓	✓
	Freight units > 20 ft & < 40 ft	33	✓	✓	✓	✓
	Freight units > 40 ft	34	✓	✓	✓	✓
Roll-on/Roll-off (self- propelled)	Road goods vehicles with or without accompanying trailers	51	✓	✓	✓	✓
	Passenger cars, motorcycles and accompanying trailers/caravans	52			✓	
	Passenger buses	53			✓	
	Import/Export motor vehicles	54			✓	✓
	Live animals on the hoof	56			✓	✓
	Other mobile self-propelled units	59	✓	✓	✓	✓
Roll-on/Roll-off (non self-propelled)	Unaccompanied road goods trailers & semi-trailers	61	✓	✓	✓	✓
	Unaccompanied caravans and other road, agricultural and industrial vehicles	62			✓	✓
	Rail wagons, shipborne port to port trailers, and shipborne barges engaged in goods transport	63	✓	✓	✓	✓
	Other mobile non self-propelled units	69	✓	✓	✓	✓

Non-unitised traffic

Category	***Description***	***Code***	*Statistics required for major ports*
			Weight of goods
Liquid Bulk	Liquefied gas	11	✓
	Crude oil	12	✓
	Oil products	13	✓
	Other liquid bulk products	19	✓
Dry Bulk	Ores	21	✓
	Coal	22	✓
	Agricultural products	23	✓
	Other dry bulk	29	✓
Other general cargo	Forestry products	91	✓
	Iron and steel products	92	✓
	Other general cargo & containers < 20 ft	99	✓

The following flowchart is provided to data suppliers to aid in the correct classification of cargo:

Department for Transport

Port Freight Statistics (last update December 2019)
Categorisation Flowchart

For more details, please check the complete notes and definitions.

Common miscoding errors!

- **Check the content of the liquid bulk**, not everything is "other liquid bu k".
- **Bulk agricultural products (23)** only include grains and not processed or fertilised.
- **Wood pulp is a forestry product (91)**, not a bu k agricultural products or other dry bulk.
- Similarly, **wood pellets and chip are considered other dry bulk (29)**.
- **Check if the iron and steel** is a product (92) or metal ore and/or scrap (21).
- **Any vehicle** being shipped **for trade is 54**.

What does the cargo look like?
How is the cargo carried on the ship?

Load on-Load off Container

What is the size of the container?
The cargo inside is not of interest here, but its weigtht. Do not include the weight of the container.

- **99 -** less than 20 foot containers
- **31 -** 20 foot containers
- **32 -** 40 foot containers
- **33 -** Freight containers between 20 and 40 foot in length
- **34 -** Freight containers over 40 foot in length

Liquid Bulk

What is it?

- **11 -** Liquified gas, e.g. butane, propane and LNG
- **12 -** Crude oil. If weight is unavailable, 1 barrel of oil = 0.14 tonnes
- **13 -** Oil products (i.e. derivatives of petroleum), including diesel, gasoil, aviation fuel, reformate, gas conden sate and benzene heat cut.
- **19 -** Other liquid bulk, **not related to petrochemicals** e.g. molasses, juices, ethanol, liquid fertilizer

Dry Bulk
(can be scooped)

What is it?

- **21 -** Ores and scrap, e.g. iron ores, metal scraps, rutile sand.
- **22 -** Coal, coke, coke breeze and coke foundry ***but not coal by-products (e.g. gypsum, fly ash and slag)***.
- **23 -** Bu k agricultural products, e.g. grain, soya or tapioca. Only grains ***but not fertilizer or processed, grains (rape or soya meal/pellets) or animal feeds.***
- **29 -** Other dry bulk, e.g. coal by-products, ash, fertiliser products, cement, aggregates, wood pellets or wood chip ***but not wood pulp***.

Roll-On Roll-Off
(vehicle or other container rolled onto ship)

Only include the tonnage of the cargo, not the weight of the vehicle/carrying unit

Is it self-propelled?
Was it transported on the vessel by itself?

- **51 -** Road goods vehicles with or without accompanying trailers, ***not import/export motor vehicles***
- **52 -** Passenger cars, motorcycles with or without any accompanying trailers/caravans, ***not import/export motor vehicles***
- **53 -** Passenger buses, which are not for trade.
- **54 -** Import/export motor vehicles
- **59 -** Other mobile self-propelled units, e.g. a mobile crane that is being moved but not traded.

Is it not self-propelled?

- **61 -** Unaccompanied road goods trailers and semi-trailers.
- **62 -** Unaccompanied caravans and other road, agricultural or industrial vehicles
- **63 -** Rail wagons, shipborne port-to-port trailers and shipborne barges. e.g. containers/cargo loaded onto MAFI's or lash barges. One MAFI loaded with cargo is recorded as one unit and the weight is entered.
- **69 -** Other mobile non self-propelled units, e.g. large industrial vehicles carrying goods which are pulled on to the vessel.

Other
(none of the above)

- **56 -** Live animals on the hoof
- **91 -** Forestry products, ***including timber, paper and pulp (when shipped as break bulk).***
- **92 -** Iron and steel products, e.g. steel coils, uncoated metal pipes and strip but not manufactured products
- **99 -** Other general cargo (none of the previous categories or less than 20 foot containers). This includes any goods that are transported in bags, barrels, on pallettes, etc.

Annex C: Historical changes affecting these statistics

Port freight statistics have been collected in various forms for many years, with the current statistics including data back to the 1960's (e.g. table PORT0101). The current collection methodology for the core port freight statistics was established in 2000, following the introduction of the EU Maritime Statistics Directive. Although the published data series from before 2000 are considered to be largely comparable with the current system, the change in collection methodology resulted in some discontinuities in the data between 2000 and previous years.

Port freight statistics: previous data collection systems

Annual statistics on freight handled at GB ports have been collected by the Department for Transport since 1980. Statistics for Northern Ireland ports were collected by the Department for Economic Development, Northern Ireland from 1988 to 1999, and have been collected by DfT within the UK system since 2000. Prior to this, similar statistics were collected by the National Ports Council from 1965. There were various relatively modest changes to the collection system during this period; these notes relate mainly to the data collection system from 1995 to 1999.

Prior to 2000 all freight information was collected from ports annually. There was no quarterly collection and no collection from shipping agents. A PS4 form was sent to major ports asking for detailed information on weight of traffic in and out, by cargo category and whether these were foreign, coastwise or one port cargoes. A detailed commodity analysis was also required for bulk traffic, and a broad commodity analysis for coastwise traffic. Separate information was required on unitised traffic i.e. the number of units in and out by unitised cargo categories and by broad route. The current system includes more detail than previously on vessels and routes (in terms of the port of loading/unloading) used, and on unitised traffic by weight; but less commodity detail for non-unitised traffic.

The major ports covered by the PS4 were taken to be ports with at least 2 million tonnes of cargo a year. A few selected ports with smaller volumes were also included, which were required to provide only total weight of cargo, in and out, in a simplified form.

Main differences between the freight collection systems in 1995–1999 and from 2000

Difference	Freight collection system from 2000	Freight collection system in 1995–1999
Traffic breakdown	More detail on unitised traffic by weight (e.g. by size of container) but less commodity detail on non-unitised traffic. Change to definition of containers on Roll-on/Roll-off services (see table below for full comparison)	Less detail on unitised traffic by weight but more commodity detail on non-unitised traffic (see table below for full comparison)
Route and vessel information	Information on individual trips from shipping lines and agents, including port of load and unload, so geographic information should be more accurate. Also vessel details available e.g. LRN and flag. Summary data only from ports, on traffic in and out of ports, quarterly.	No information from shipping lines and agents and no vessel data. Detailed information annually from ports, but aggregated – no individual trips identified, so geographic information is likely to be less accurate.
Definition of major port	Major ports (52 in 2000) are defined as ports with annual cargo volumes of at least 1 million tonnes, plus a few selected ports with less tonnage. Otherwise ports are classified as minor ports.	Major ports (39 in 1999) defined as ports with annual cargo volumes of at least 2 million tonnes, plus a few selected ports with less tonnage. Otherwise ports classified as minor ports.

Comparison of cargo categories used in port statistics up to 1999 and from 2000

1) Weight of unitised cargo

Cargo categories in use until 1999	***Cargo categories in use from 2000***	
Containers on Lift-on/Lift-off or conventional services	Containers	20 ft freight units 40 ft freight units Freight units > 20 ft & < 40 ft Freight units > 40 ft
Containers on Roll-on/Roll-off services	Containers	*Only if lifted on or off vessel by crane*. Container sub-categories as above.
	Roll-on/ Roll-off (non self-propelled)	*If loaded aboard using any type of roll-on/roll-off trailer.* Rail wagons, shipborne port to port trailers, and shipborne barges engaged in goods transport
Powered road goods vehicles and unaccompanied road goods trailers	Roll-on/ Roll-off (self-prop)	Road goods vehicles with or without accompanying trailers
	Roll-on/ Roll-off (non self-prop)	Unaccompanied road goods trailers & semi-trailers
Rail wagons and barges carried on ships	Roll-on/ Roll-off (non self-prop)	Rail wagons, shipborne port to port trailers, and shipborne barges engaged in goods transport
Vehicles for import and export on Roll-on/Roll-off services	Roll-on/ Roll-off (self- prop)	Import/Export motor vehicles
Other wheeled and Roll-on/Roll-off freight	Roll-on/ Roll-off (self- prop)	Other mobile self-propelled units
	Roll-on/ Roll-off (non self-prop)	Unaccompanied caravans and other road, agricultural and industrial vehicles Other mobile non self-propelled units

2) Weight of non-unitised cargo

Cargo categories in use until 1999		***Cargo categories in use from 2000***	
Liquid bulks	Crude petroleum	Liquid bulks	Crude oil
	Petroleum products and gas		Oil products
			Liquefied gas
	Animal and vegetable oils and fats, beverages, chemicals, chemical fertilisers, crude minerals, material shipped for dumping at sea, sugar and sugar preparations, and other liquid bulks		Other liquid bulks
Dry bulks	Ores and scrap	Dry bulks	Ores
	Coal, coke and briquettes		Coal
	Foodstuffs and tobacco (including animal feeding stuff, dairy products and eggs, fruit and vegetables, meat and meat preparations, milled cereals and cereal preparations, sugar and sugar preparations and unmilled cereals), animal and vegetable oils and fats, and oil seeds and nuts		Agricultural products
	Cement lime etc, chemicals, crude and manufactured fertilisers, crude minerals, iron and steel, material shipped for dumping at sea, non-ferrous metals, other non-metallic mineral manufactures, petroleum products and gas, sea dredged aggregates, wood lumber and cork, and other dry bulks		Other dry bulks
Semi-bulks	Unitised forest products	Other general cargo	Forestry products
	Other semi-bulk traffic (for example, iron and steel, and palletised cargo)		Iron and steel products
Conventional traffic			General cargo and containers < 20 ft
Non-oil traffic with UK offshore installations			

3) Number of units

Cargo categories in use until 1999		*Cargo categories in use from 2000*	
Containers on Lift-on/Lift-off or conventional services	20 ft	Containers	20 ft freight units
	30/40 ft	Containers	40 ft freight units Freight units > 20 ft & < 40 ft Freight units > 40 ft
Containers on Roll-on/Roll-off services	20 - 40 ft	Roll-on/ Roll-off (non self-propelled)	Rail wagons, shipborne port to port trailers, and shipborne barges engaged in goods transport (including containers loaded using special port trailers/shipborne port to port trailers). *Note – number of roll-on/roll-off units is counted, as opposed to the number of containers carried (change from 2000)*
Powered road goods vehicles		Roll-on/ Roll-off (self-prop)	Road goods vehicles with or without accompanying trailers
Unaccompanied road goods trailers		Roll-on/ Roll-off (non self-propelled)	Unaccompanied road goods trailers & semi-trailers
Rail wagons and barges carried on ships		Roll-on/ Roll-off (non self-propelled)	Rail wagons, shipborne port to port trailers, and shipborne barges engaged in goods transport
Vehicles for import and export on Roll-on/Roll-off services		Roll-on/ Roll-off (self-prop)	Import/Export motor vehicles
Accompanied passenger cars		Roll-on/ Roll-off (self-prop)	Passenger cars, motorcycles and accompanying trailers/caravans
Accompanied passenger buses and coaches		Roll-on/ Roll-off (self-prop)	Passenger buses

Port freight statistics: unitised traffic category changes from 2000

The following effects of an important change to the categorisation of ‘containers’ and ‘shipborne port-to-port trailers’ between 1999 and 2000 should be noted.

Containers can be lifted onto ships using conventional services at container ports (Lift-on/Lift-off or Lo-Lo) or they can be loaded onto Roll-on/Roll-off (Ro-Ro) vessels – used principally for road goods vehicles, road goods trailers or passenger cars etc. The latter method often employs ‘port-to-port trailers’ used only within the port and which may return to the quay after loading or stay with the ship (either returning empty from the destination port or with another load).

Until 1999, Lo-Lo containers were included in ‘containers on Lo-Lo and conventional services’ whilst Ro-Ro containers were classified to ‘containers on Ro-Ro services’. From 2000 the category ‘containers on Ro-Ro services’ was discontinued and a new category introduced called ‘rail wagons, shipborne port-to-port trailers and barges’. Most containers previously recorded by respondents as Ro-Ro containers were subsequently recorded as ‘rail wagons, shipborne port-to-port trailers and barges’ but it is believed others were recorded as containers on Lo-Lo services. The effect of this definitional change can be seen in PORT0103.

It was evident by 2005 that some respondents operating at Ro-Ro ports were indeed incorrectly reporting containers transported on port-to-port trailers as Lo-Lo containers and had been doing so since the start of the new data system in 2000. This was corrected for 2005 when data providers were given further guidance.

Revised estimates for 2000 to 2004 for containers and shipborne trailers etc are provided in the

table below.

The adjustment shown was calculated using updated information obtained from ports together with information from shipping lines and published sources. Comparative data is shown for 2005-07. Note that the original figures for 2000-2004 have not been adjusted in the published tables.

It should be noted that in both the previous and current data collection systems containers carried by road goods vehicle or road goods trailer are correctly classified as 'road goods vehicles' or 'unaccompanied trailers' and not as containers.

Containers and shipborne trailers, etc: 2000–2007 (thousand units)

	2000	2001	2002	2003	2004	2005	2006	2007
Containers (original)	4,325	4,464	4,506	4,533	4,919	4,754	4,883	5,381
Shipborne trailers, etc. (original)	361	344	348	374	383	665	668	744
Ro-Ro containers[1]								
Adjustment to containers	-116	-157	-230	-265	-299			
of which London	32	-74	-173	-158	-166			
Adjustment to shipborne trailers, etc.	116	157	230	265	299			
of which London	-32	74	173	158	166			
Containers (adjusted)	4,209	4,307	4,276	4,268	4,620	4,754	4,883	5,381
Shipborne trailers, etc. (adjusted)	477	501	578	639	682	665	668	744

1 Not separately identified after 1999

Ship arrivals statistics: previous methods

The approach used to produce the ship arrivals statistics has changed several times since they were first published. The current approach was established for the 2018 statistics. Details of previous approaches are given here.

Method until 2009: The scope of these estimates was cargo carrying trading vessels. The primary source used was commercially obtained vessel movement data from Lloyds List Intelligence (LLI). LLI maintain a global vessel movement database, based on a variety of sources, principally daily reports from an established network of Lloyd's Agents and sub-agents, and increasingly also vessel tracking data from transponders which most vessels are now required to carry under maritime safety rules. LLI aim to cover "the deployment of all self-propelled sea going merchant vessels over 99gt engaged in international seaborne trade". The data obtained by DfT certainly includes domestic movements between UK ports, but it may be reasonable to suppose that data coverage could be less comprehensive in this category, particularly for small vessels, and/or those on very local or inshore routes.

The LLI data do not cover individual movements on frequent services (those with more than one call per day at the same port – mainly ferry services), so information on the number of these movements was compiled for DfT by a separate contractor and added to the total.

Method from 2009 to 2017: In 2012, new tables were released for 2009 and 2010, using a similar but revised method. These changes replaced a source of information on 'frequent services' no longer available, made better use of information already held, and expanded the scope of the table to cover non-cargo vessels. In table PORT0602, historical data are retained to allow comparisons to be made between the previous and revised approaches. The new method added about 5,000 vessel movements not identified by the old method (a 4% increase in the total) from the 'fully cellular container' to the 'other general cargo' category. This also applied to over 13,000 movements by vessel types not previously included, and over 1,000 arrivals of general cargo ships with container capacity, many of which were probably running container services.

LLI data continued to be an important basis of the method. However, it was merged with other information on ship movements obtained by DfT through the port freight collection system (all cargo or passenger carrying movements at major ports) and its sea passenger survey (movements on regular seagoing ferry services). The three data sources are merged at the level of individual vessels calling at each port. The maximum number of calls from any of the three sources is taken as the final estimate. In the small proportion of cases where it is not possible to match vessels to other sources, these movements are also included in the total for the relevant port.

A further difference in the method used from 2009 is that in nearly all cases vessel type is based on IHS Global world fleet data. Under the old method (figures to 2009) vessel type information came largely from LLI, except for those vessels on frequent services which did not appear in the LLI data set. This change was made because data were being merged from more data sets. In general LLI and IHS Global sources agree on vessel type, but there are some cases where they differ – since some vessels can be employed in a variety of roles. Generally this does not make a significant difference to the overall results, but one relatively major change is for smaller container ships. The old method classified LLI's 'General cargo with container capacity' category as container vessels. In general the vessels in question were employed on container services. However, they were not 'fully cellular' – that their container cell guides were not fixed, allowing the vessels to be configured for other cargoes. Therefore these vessels appear under the 'other general cargo' category in the new tables. Consideration was given to whether vessels identified by IHS Global as having container capacity should be included under the 'container' category, but this would have lead to much larger discontinuities in the opposite direction, with the probability that many vessels operating as general cargo ships would be misclassified as container ships.

Between 2009 and 2010, LLI increased the coverage of their data. The impact of this on the DfT tables results is probably significantly reduced, because many of the additional movements recorded by LLI would already have been captured in one of the other sources used in the DfT statistics.