Maritime freight and vessels statistics

Statistics Explained

" 3.5 billion tonnes of freight were handled in EU ports in 2022. "

" The Netherlands remained the largest maritime freight transport country in Europe in 2022. "

" Rotterdam, Antwerpen and Hamburg maintained their positions as Europe's top 3 ports in 2022. "

**" The average size of vessels calling at main EU ports is estimated at 7 300 gross tonnage per vessel. "**

This article presents the latest statistical data on freight handling and vessels traffic in ports in the European Union (EU) , the EFTA countries Iceland and Norway and the candidate countries Montenegro and Türkiye. It also covers maritime transport flows with the main partner geographical areas, as well as individual results for major European ports. This article contains data for 2022.

Seaborne freight handled in European ports slightly increased in 2022

The total gross weight of goods handled in EU ports was estimated at 3.5 billion tonnes in 2022, slightly increasing compared with 2021 (+0.8 %). Despite the rebound after the substantial fall observed in 2020, most probably due to the COVID-19 pandemic and the subsequent restrictions put in place in the EU and worldwide, the 2022 levels are slightly still lower than those observed in 2018. Before the downturn in 2020, EU port freight activity followed a positive trend from 2014 indicating a slight path towards recovery after the economic crisis in 2009. After the first quarter of 2021 decreased when comparing with the same quarter of the previous year, a clear upturn was observed in the three last quarters of 2021 and the two first quarters of 2022.Then, a downward trend was recorded in the last two quarters of 2022, with -0.1 % in the third quarter and -2.2 % in the fourth quarter (Figure 1).

Gross weight of seaborne freight handled in all ports, EU, 2007-2022
(million tonnes)
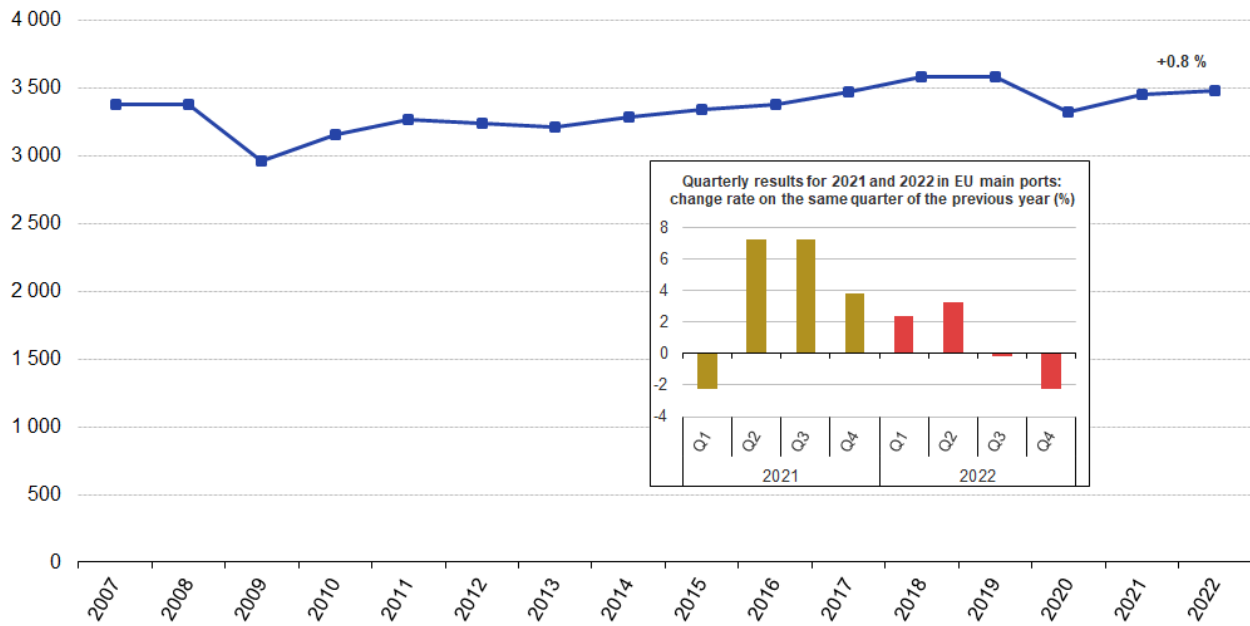
Note: break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.
Source: Eurostat (online data code: mar_mg_aa_cwh and mar_go_qm)

Figure 1: Gross weight of seaborne freight handled in all ports, EU, 2007-2022 (million tonnes) Source: Eurostat (mar_mg_aa_cwh) and (mar_go_qm)

The Netherlands remained the largest maritime freight transport country in Europe in 2022, while Rotterdam, Antwerp-Bruges[1], Hamburg, Amsterdam, Algeciras, HAROPA[2] and Marseille maintained their positions as the seven largest freight ports in the EU.

Among the EU Member States, the seaborne freight-per-capita ratio varied from 33.3 tonnes per inhabitant in the Netherlands to 3.2 tonnes per inhabitant in Poland and Romania in 2022. The EU average was 7.8 tonnes per inhabitant. However, the EFTA country Norway recorded the highest ratio of the countries reporting maritime data to Eurostat, with 39.4 tonnes per inhabitant in 2022 (Figure 2).

---

[1] Starting from 2022, the ports Antwerpen and Zeebrugge have been merged and the data are reported under the new port name Antwerp-Bruges.

[2] Starting from 2022, Le Havre and Rouen have been merged and the data are reported under the new port name HAROPA.

Gross weight of seaborne freight handled in all ports, 2022
(tonnes per capita)
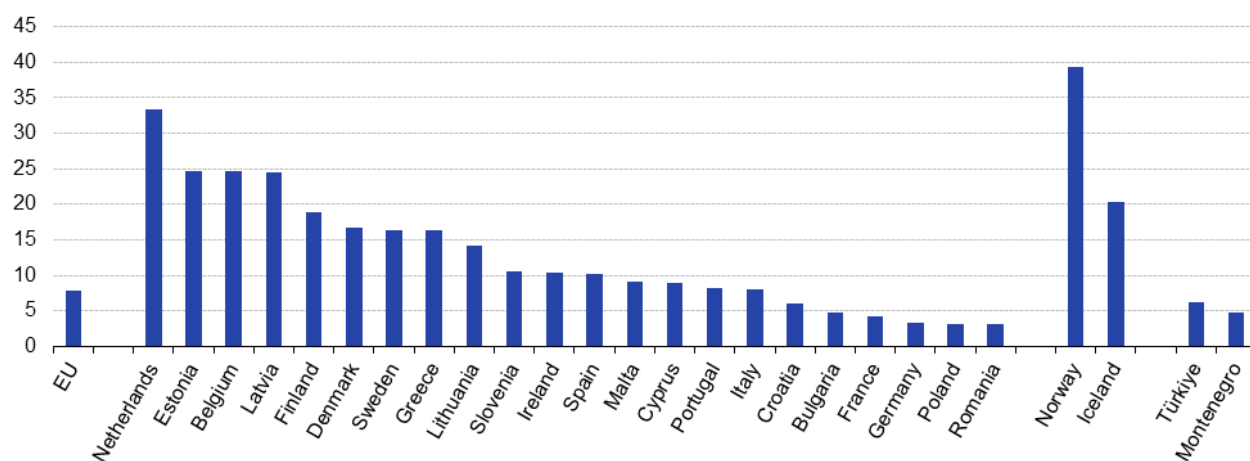
Note: Czechia, Luxembourg, Hungary, Austria, Slovakia and the EFTA countries Liechtenstein and Switzerland have no maritime ports.
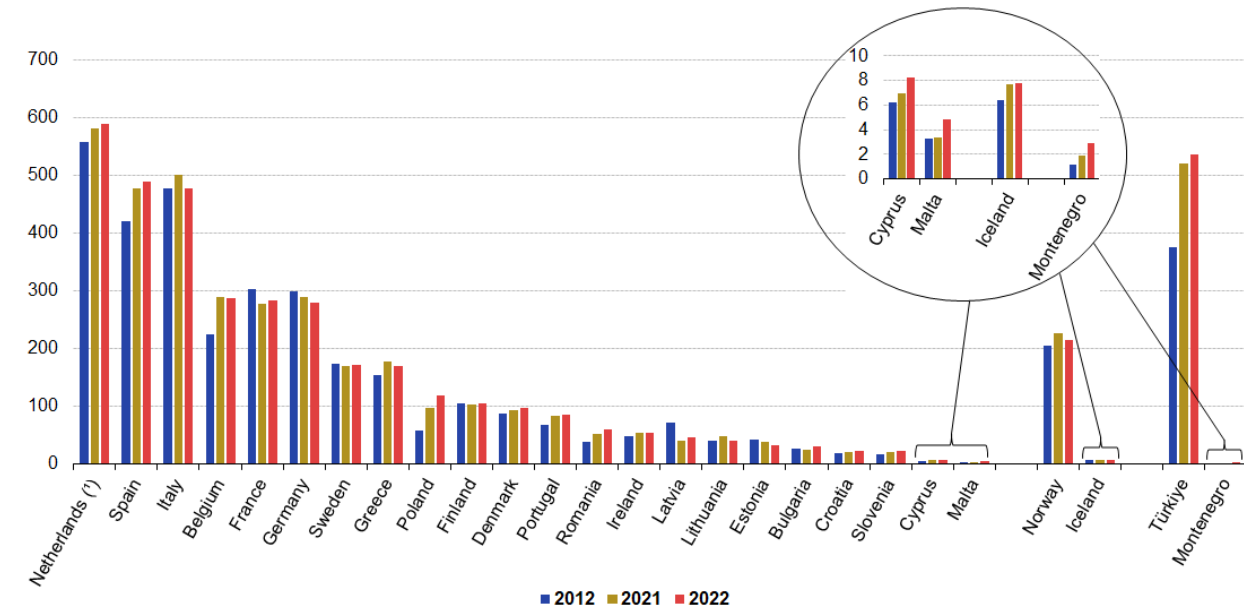*Source:* Eurostat (online data code: mar_mg_aa_cwh)

eurostat

Figure 2: Gross weight of seaborne freight handled in all ports, 2022 (tonnes per capita) Source: Eurostat (mar_mg_aa_cwh)

The Netherlands is EU's largest maritime freight transport country

The Netherlands reported the largest volume of seaborne freight handled in Europe in 2022. At 590 million tonnes, the volume of seaborne goods handled in Dutch ports represented 17.0 % of the EU to-
tal in 2022. The Netherlands was followed by Spain and Italy, with respective shares of 14.1 % and 13.7 % (Figure 3).

Gross weight of seaborne freight handled in all ports, 2012, 2021 and 2022
(million tonnes)

Figure 3: Gross weight of seaborne freight handled in all ports, 2012, 2021 and 2022 (million tonnes) Source: Eurostat (mar_mg_aa_cwh)

Among other countries reporting maritime freight data to Eurostat, the candidate country Türkiye handled 536 million tonnes of goods in 2022, placing this country between the Netherlands and Spain in terms of total tonnage of seaborne goods handled.

Compared with 2021, 15 out of 22 EU Member States registered a growth in port freight activity in 2022. Malta registered the largest relative increase (+45.1 %), followed by Poland (+23.1 %), Bulgaria (+20.2 %), Cyprus (+17.9 %), Latvia (+16.0 %), Romania (+13.4 %) and Slovenia (+11.6 %). Montenegro also reported a noticeable increase of 57.6 %. In contrast, the highest relative falls were observed for Lithuania (-19.0 %) and Estonia (-15.5 %).

All in all, only six Member States, recorded decreases in port freight activity in the ten-year period between 2012 and 2022. The highest relative falls were observed for Latvia (-36.6 %), Estonia (-23.4 %), France (-6.8 %) and Germany (-6.6 %). In contrast, Poland registered the largest relative increase (+102.2 %), followed by Romania (+52.5 %) and Malta (+47.0 %). Five other EU Member States registered growths higher than 24 % over the same period, while five additional countries recorded growths higher than 10 %. Montenegro, Türkiye and Iceland also reported noticeable increases: +151.9 %, +43.0 % and +21.3 %, respectively.

Inward movements of goods to the EU countries increased by 4.7 % to almost than 2.2 billion tonnes in 2022 compared with 2021, whereas outwards movements decreased by 5.0 % to just under 1.4 billion tonnes. Inward movements accounted for 62.2 % of the total tonnes of goods handled in the EU ports (Figure 4). Liquid bulk goods, such as crude oil and oil products, made up a substantial proportion of the inward tonnage.

Gross weight of seaborne freight handled in all ports by direction, 2022
(%, based on tonnes)
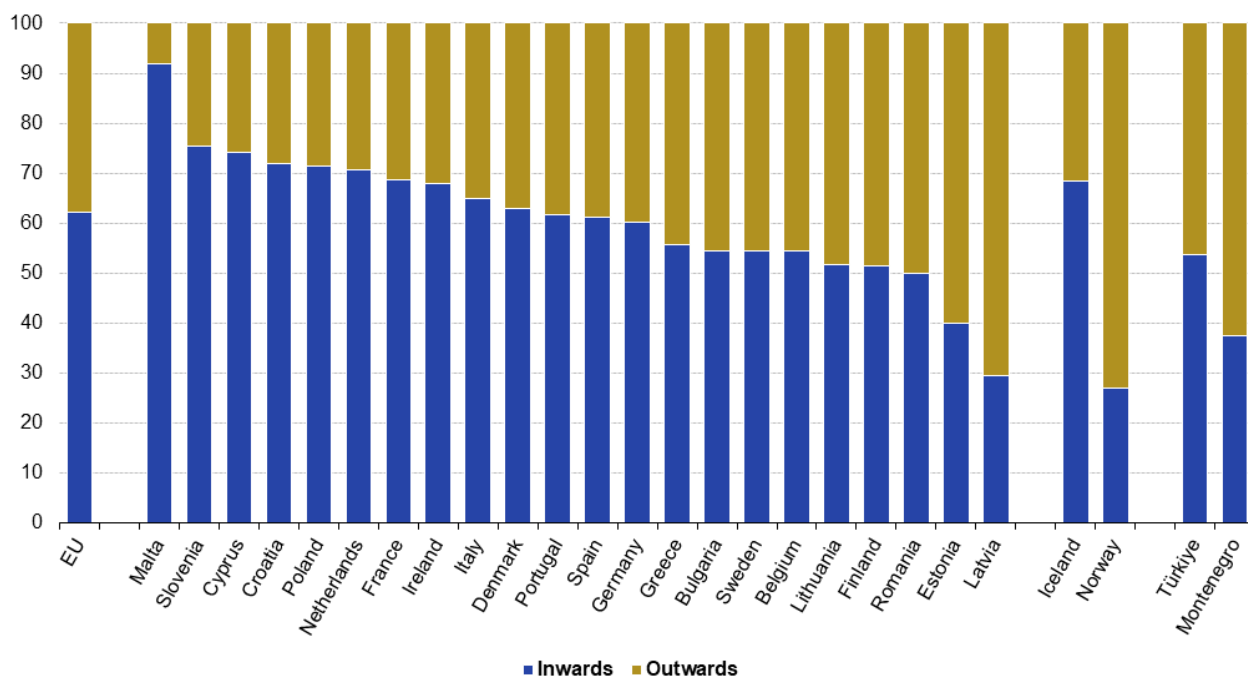
Source: Eurostat (online data code: mar_mg_aa_cwhd)

Figure 4: Gross weight of seaborne freight handled in all ports by direction, 2022 (%, based on tonnes) Source: Eurostat (mar_mg_aa_cwhd)

More seaborne goods are unloaded from vessels than loaded onto vessels in the majority of EU countries. Malta had the highest shares of unloaded goods in 2022, with 92 % of the total tonnes of seaborne goods recorded as inward movements to their ports. In contrast, Estonia, Latvia, the EFTA country Norway as well as the candidate country Montenegro all had more outward movements of goods than inwards movements.

In 2022, liquid bulk made up 37.0 % of the total cargo handled in the main EU ports

Liquid bulk goods accounted for 37.0 % of the total cargo handled in the main EU ports in 2022 (Figure 5), followed by dry bulk goods (22.9 %), containerised goods (22.8 %), and goods transported on Ro-Ro mobile units (11.9 %). The largest volumes of liquid bulk goods were handled in the Netherlands (276 million tonnes), followed by Italy (197 million tonnes) and Spain (181 million tonnes). France recorded the highest share of liquid bulk goods as a percentage of the total tonnages passing through its main ports in 2022 (47.1 %). Liquid bulk goods were predominant in 13 other EU Member states.

Gross weight of seaborne freight handled in main ports by type of cargo, 2022
(%, based on tonnes)
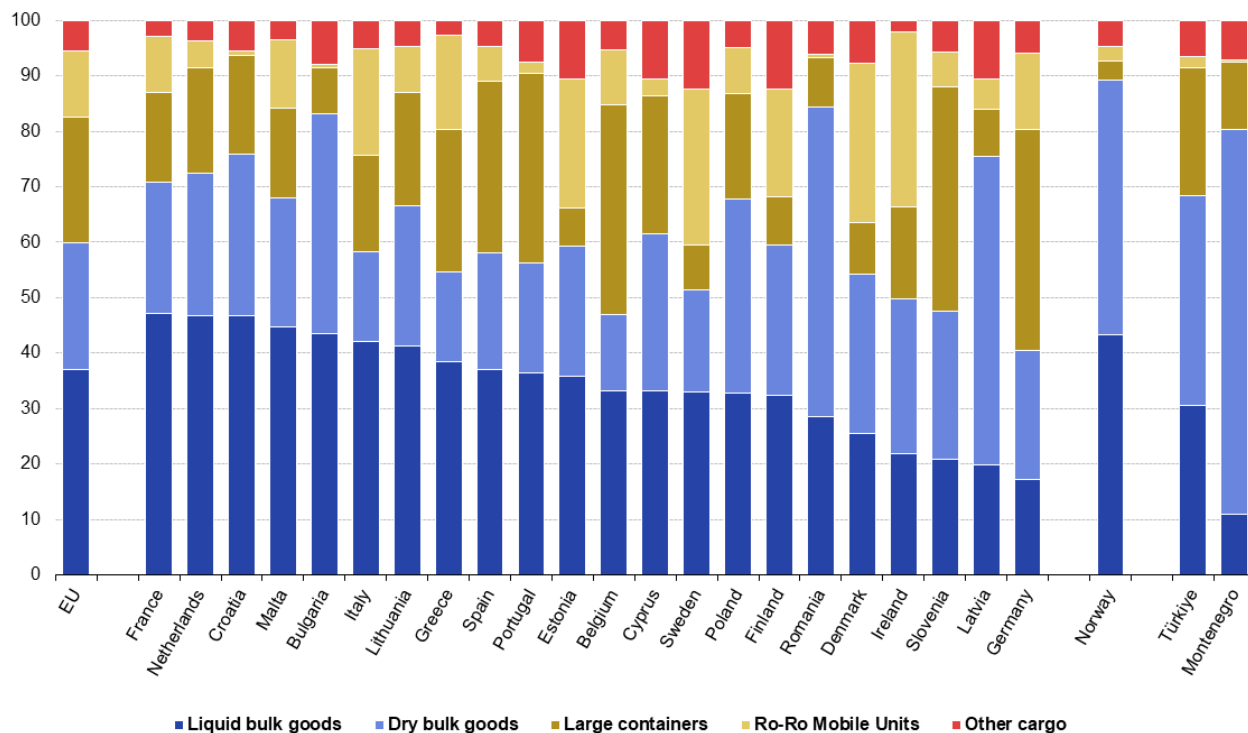
Note: countries are ranked based on the share of liquid bulk goods. Main ports are ports handling more than one million tonnes of goods annually. Data for Iceland are not available.
Source: Eurostat (online data code: mar_mg_am_cwhc)

eurostat

Figure 5: Gross weight of seaborne freight handled in main ports by type of cargo, 2022 (%, based on tonnes) Source: Eurostat (mar_mg_am_cwhc)

With 151 million tonnes in 2022, Dutch ports also handled the largest volumes of dry bulk goods in the EU, followed by Spain with 103 million tonnes. Even so, the tonnages of dry bulk goods handled in both the Netherlands and Spain in 2022 were lower than the 203 million tonnes reported by Türkiye. Romania had the highest share of dry bulk goods as a percentage of the total tonnages in 2022 (55.9 %), mainly reflecting large volumes of outward movements of agricultural products from its ports. Latvia (55.6 %) and Poland (35.0 %) were the other EU Member States where dry bulk goods were predominant. That was also the case in the EFTA country Norway (46.0 %) and in the candidate countries Montenegro (69.5 %) and Türkiye (37.9 %).

Containers were the dominant type of cargo handled in Slovenian, German and Belgian ports in 2022, with shares of 40.3 %, 39.8 % and 37.9 %, respectively, of the total cargo passing through the ports of the three countries. The largest volumes of containerised goods, however, were handled in Spanish and Dutch ports, with 152 million tonnes and 113 million tonnes, respectively. The two top container countries were followed by Germany and Belgium with 111 and 109 million tonnes of containerised, respectively.

The share of Ro-Ro mobile units in the total tonnage of goods was the highest for Ireland (31.6 %) and Denmark (28.8 %), reflecting the importance of Ro-Ro ferry traffic in the seaborne transport of these countries. In tonnage terms, Italy (90 million tonnes) recorded the largest EU volumes of goods transported on Ro-Ro mobile units in 2022.

In 2022, the largest individual goods category handled in the main EU ports was 'Coal and lignite; crude petroleum and natural gas'

Figure 6 presents the share of the type of goods (according to the NST 2007 classification) handled in the main EU ports. It shall be noted that the high share of unidentifiable goods reported has an impact on the results presented.

At EU level, the main types of goods (according to the NST 2007 classification) handled in the main EU ports were 'coal and lignite; crude petroleum and natural gas' (18.9 %) and 'coke and refined petroleum products' (17.1 %), in 2022. These two categories accounted for more than one third of all goods handled in the main EU ports.

Gross weight of seaborne freight handled in main EU ports by type of goods, 2022
(%, based on tonnes)
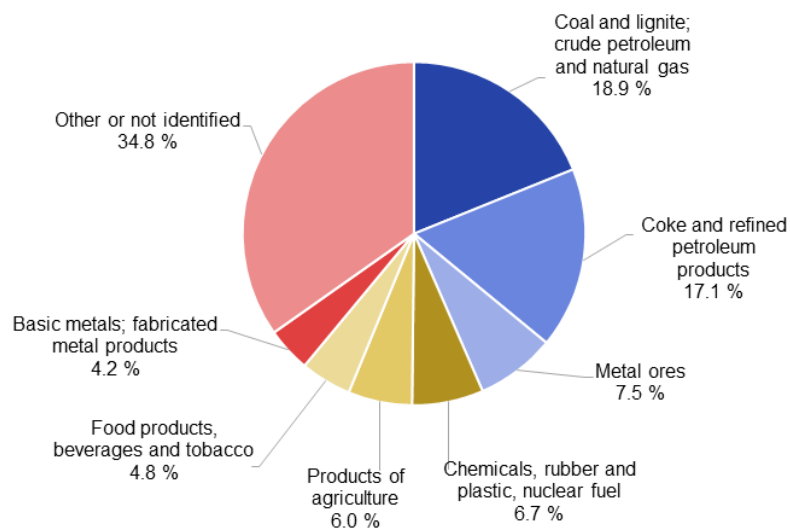
Note: main ports are ports handling more than one million tonnes of goods annually.
Source: Eurostat (online data code: mar_mg_am_cwhg)

eurostat

Figure 6: Gross weight of seaborne freight handled in main EU ports by type of goods, 2022 (%, based on tonnes) Source: Eurostat - (mar_mg_am_cwhg)

The seven largest cargo ports in the EU remained the same in 2022 compared with 2021

Rotterdam, Antwerpen and Hamburg, all located on the North Sea coast, maintained their positions as EU's top three ports in 2022, both in terms of gross weight of goods handled and in terms of volume of containers handled in the ports. The 20 largest cargo ports accounted for half (50.2 %) of the total tonnage of goods handled in the EU ports in 2022. The largest port in Europe, Rotterdam in the Netherlands, on its own accounted for 12.3 % of the total tonnage handled in the EU ports (Figure 7).

The seven largest cargo ports in the EU remained the same in 2022 compared with 2021. Among the top 20 EU ports, the tonnes of goods handled in 2022 decreased in 10 ports compared with 2021. The highest falls were recorded by Piraeus (-8.8 %), Bremerhaven (-8.6 %), Valencia (-7.1 %) and Hamburg (–7.0 %). In contrast, Gdańsk reported the high-
est growth, with ++40.3 %, followed by Cartagena (+17.3 %), Constanţa (+15.2 %) and 'Zeeland Seaports' (+11.0 %).

Top 20 EU ports handling freight, 2012, 2021 and 2022
(million tonnes)
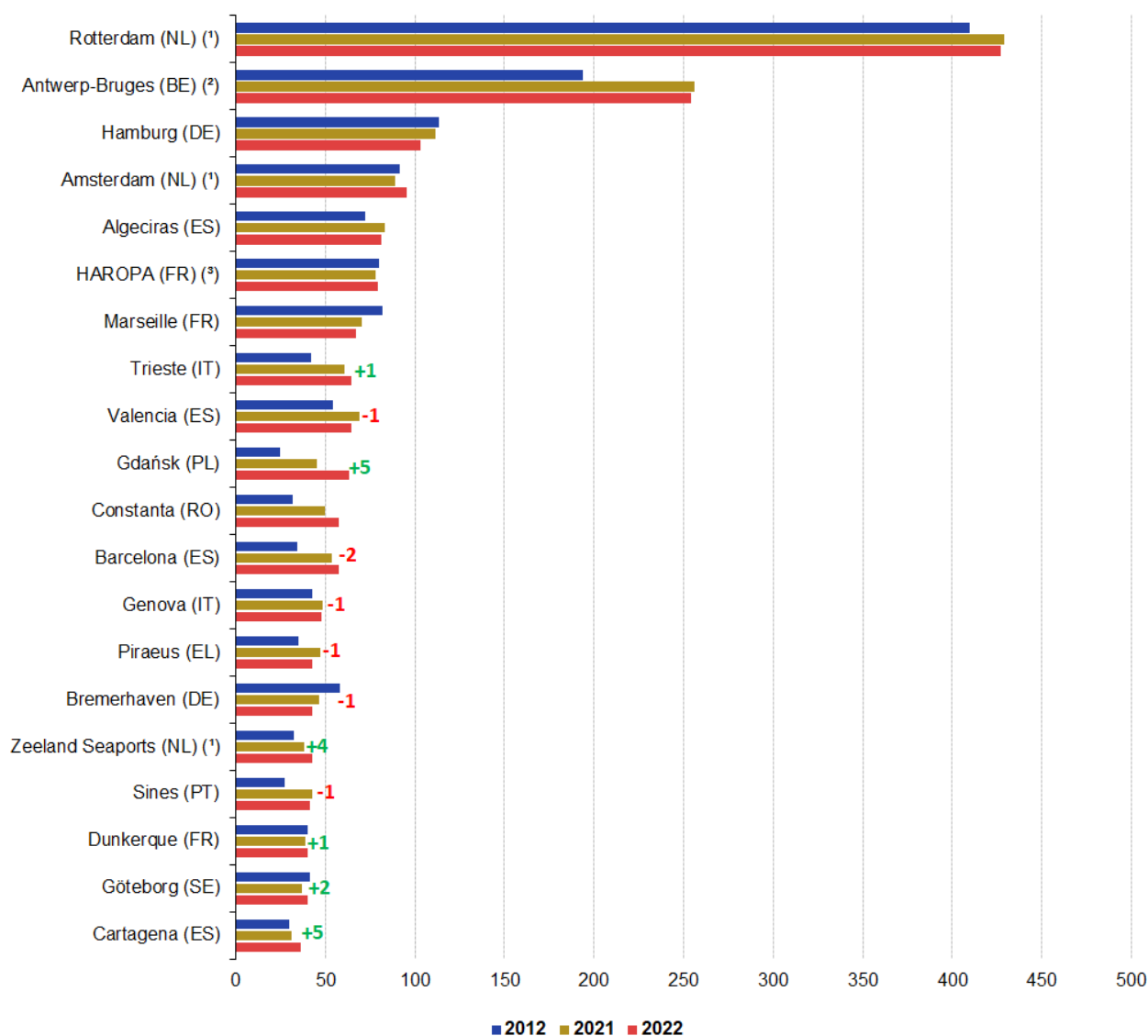
Note: ports are ranked based on gross weight of goods handled in 2022. The number presented indicates the number of positions lost or gained compared to 2021. When no number is displayed, it means that the port maintained the same position compared to 2021.

(¹) Break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.
(²) Starting from 2022, the ports Antwerpen and Zeebrugge have been merged and the data are reported under the new port name Antwerp-Bruges.
(³) Starting from 2022, the ports Le Havre and Rouen have been merged and the data are reported under the new port name HAROPA.

Source: Eurostat (online data code: mar_mg_aa_pwhd)

Figure 7: Top 20 EU ports handling freight, 2012, 2021 and 2022 (million tonnes) Source: Eurostat (mar_mg_aa_pwhd)

It should be noted that Göteborg and Cartagena entered the top 20 EU ports in 2022 in positions, 19 and 20 whilst in 2021 they were in positions 21 and 25.

While inward activity was prevalent in 17 of the top 20 ports, the ports Bremerhaven (55.2 %), Valencia (51.5 %) and Constanța (50.7 %) recorded slightly more outward than inward movements of goods (Figure 8).

Top 20 EU ports handling freight by direction, 2022
(%, based on tonnes)
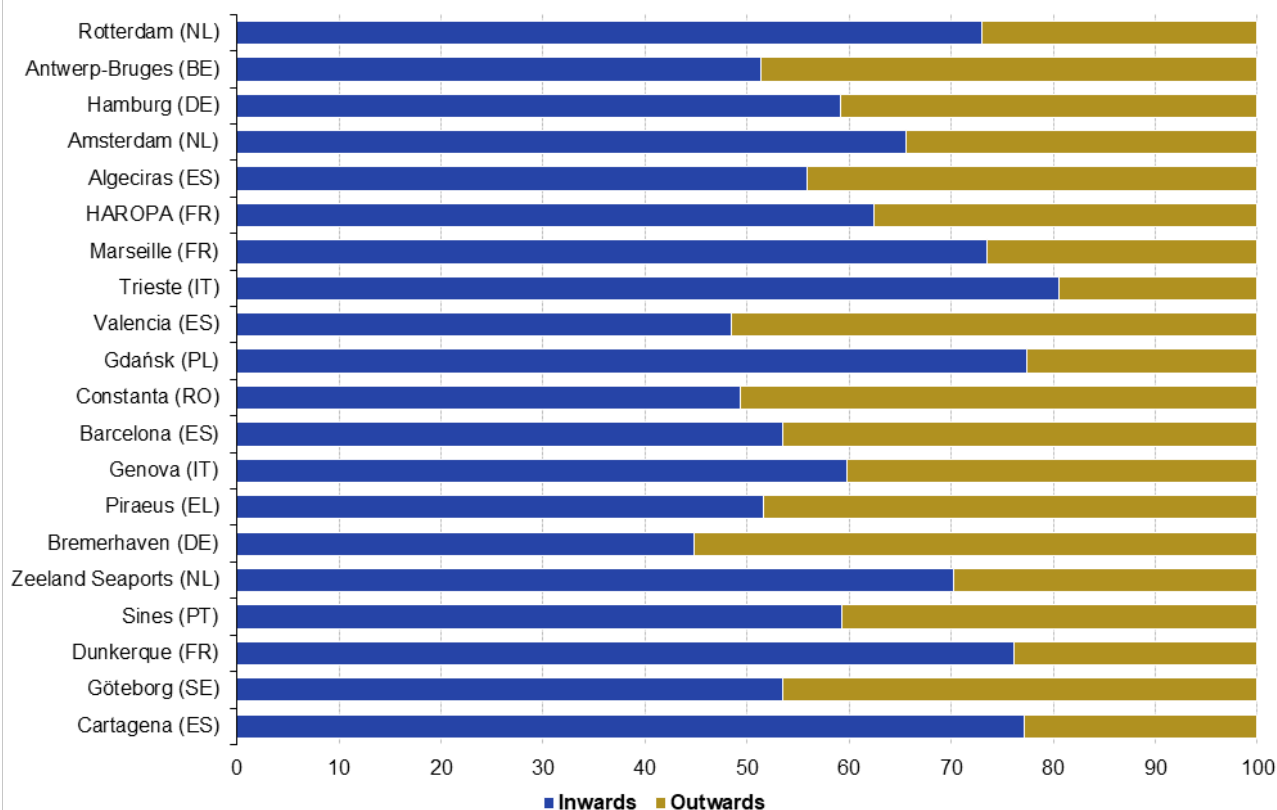
Note: ports are ranked based on total gross weight of goods handled in 2022.
Source: Eurostat (online data code: mar_mg_aa_pwhd)

Figure 8: Top 20 EU ports handling freight by direction, 2022 (%, based on tonnes) Source: Eurostat (mar_mg_aa_pwhd)

The most specialised of the top 20 cargo ports in handling containers were Bremerhaven (88.0 % of the total tonnage handled in the port in 2022), Piraeus (84.4 %) and Valencia (71.0 %). The most specialised in handling liquid bulk goods were Cartagena (77.2 %) and Trieste (64.9 %); the most specialised in handling dry bulk goods were Constanţa (55.6 %) and 'Zeeland Seaports' (54.0 %); the most specialised in handling goods transported on Ro-Ro mobile units was Göteborg (22.3 %) (Figure 9).

Top 20 EU ports handling freight by type of cargo, 2022
(%, based on tonnes)
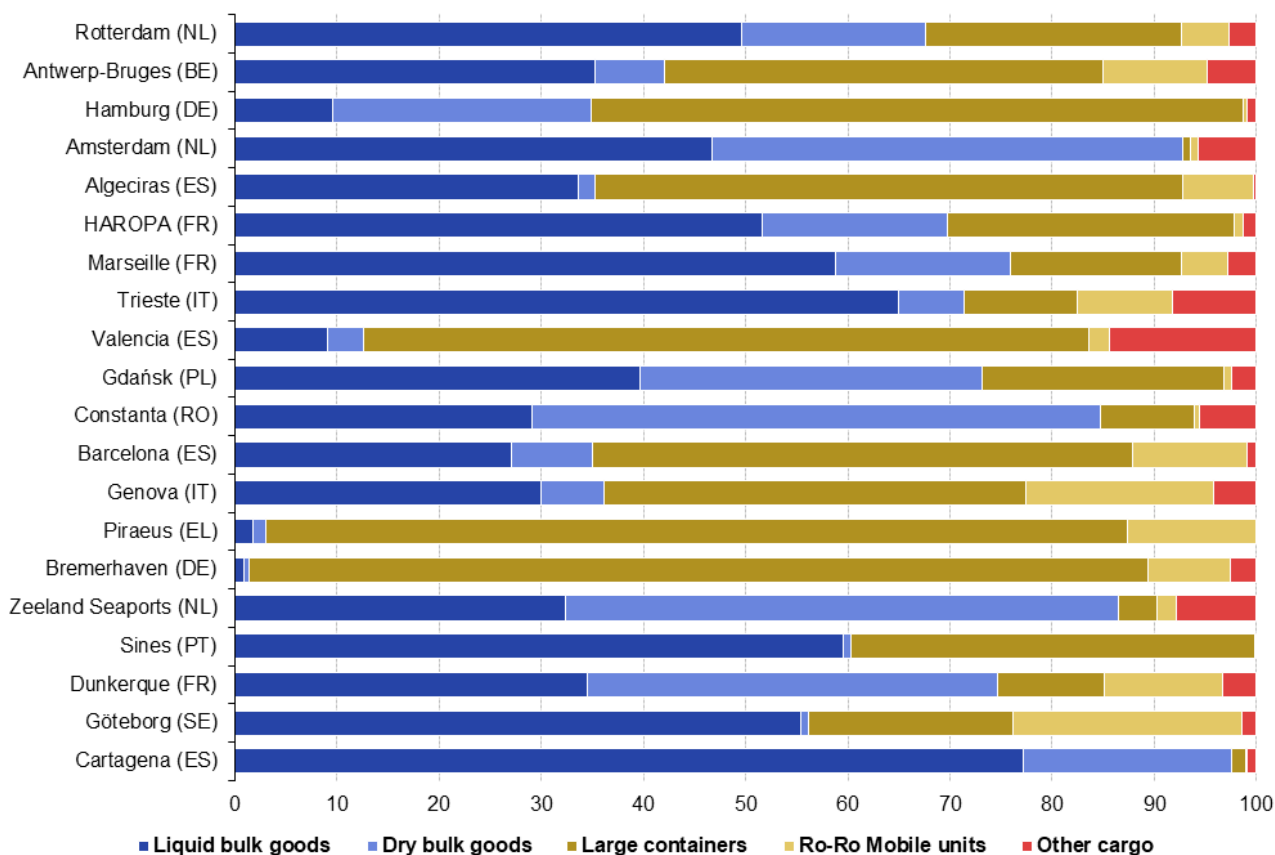
Note: ports are ranked based on total gross weight of goods handled in 2022.
Source: Eurostat (online data code: mar_mg_aa_pwhc)

Figure 9: Top 20 EU ports handling freight by type of cargo, 2022 (% share in tonnes) Source: Eurostat (mar_mg_am_pwhc)

All in all, eight of the top 20 EU cargo ports in 2022 were located on the Mediterranean, seven on the North Sea coast of Europe, three ports on the Atlantic coast, one port in the Baltic Sea and one port in the Black Sea (Map 1). The composition of the national port infrastructure will sometimes determine whether a country is represented in the top 20 list of cargo ports or not. Denmark and Finland, for instance, are countries with a large number of medium-sized ports, all handling volumes of goods lower than the 36 million annual tonnes required to make the top 20 list.

Main cargo ports by gross weight of goods handled, 2022

Million tonnes handled

- 100
- 50

- ● > 20 Mio
- ◉ 10 - 20 Mio
- ◎ 5 - 10 Mio
- ◉ 1 - 5 Mio

Inset maps:
- Canarias (ES) — 0 100
- Guadeloupe (FR) — 0 20
- Martinique (FR) — 0 20
- Guyane (FR) — 0 100
- Réunion (FR) — 0 20
- Mayotte (FR) — 0 10
- Malta — 0 10
- Açores (PT) — 0 50
- Madeira (PT) — 0 20
- Liechtenstein — 0 5
- Svalbard (NO) — 0 100
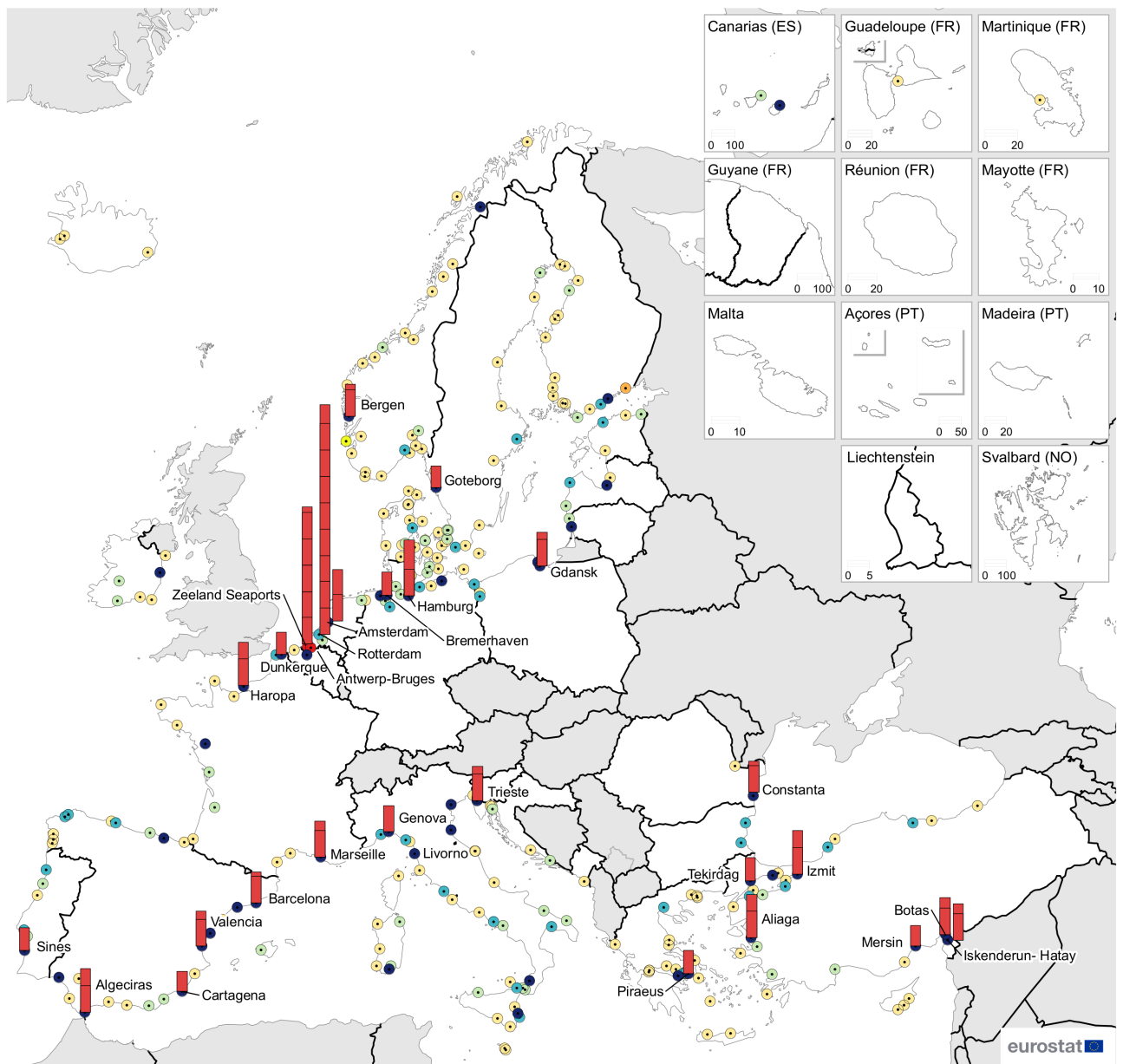
Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat — GISCO, 12/2023

Named ports: Bergen, Goteborg, Gdansk, Hamburg, Bremerhaven, Zeeland Seaports, Amsterdam, Rotterdam, Antwerp-Bruges, Dunkerque, Haropa, Constanta, Trieste, Genova, Livorno, Marseille, Tekirdag, Izmit, Botas, Mersin, Iskenderun- Hatay, Aliaga, Barcelona, Valencia, Sines, Algeciras, Cartagena, Piraeus

Note: Ports reporting more than 36 million tonnes in 2022 are named and their handling activity shown as bars.
Source: Eurostat (online data code: mar_mg_aa_pwhd)

Map 1: Main cargo ports by gross weight of freight handled, 2022 Source: Eurostat (mar_mg_aa_pwhd)

Most EU maritime freight transport is with extra-EU partners

Unlike statistics presented earlier in this article, the data in Table 1 and Figure 10 do not present the total handling of goods in ports (inward movements plus outward movements in the ports), but present the seaborne transport of goods between the main European ports and their partner ports. As far as possible, double-counting of the same goods being reported as outward transport in one port and inward transport in another port is excluded in these figures (see data sources).

Gross weight of seaborne freight transported to/from main ports, in selected years, 2012-2022
(million tonnes)

	2012	2018	2019	2020	2021	2022	Change 2022/2021 (%)	Change 2022/2012 (%)
EU	2 708.6	3 008.5	3 016.0	2 791.4	2 913.1	3 016.3	3.5	11.4
Belgium	222.4	270.1	277.8	268.7	288.2	**288.2**	0.0	29.6
Bulgaria	25.9	27.9	31.0	25.3	25.6	**30.7**	20.2	18.8
Denmark	73.1	81.3	81.1	79.4	81.6	**85.3**	4.5	16.7
Germany	290.4	292.6	291.6	273.0	285.8	**274.9**	-3.8	-5.3
Estonia	40.3	32.4	34.2	34.5	38.3	**32.4**	-15.6	-19.8
Ireland	44.5	52.0	50.3	48.9	51.0	**50.4**	-1.2	13.1
Greece	114.3	150.1	156.8	146.3	145.4	**137.0**	-5.7	19.9
Spain	391.9	467.3	461.1	424.2	443.4	**453.4**	2.3	15.7
France	291.3	297.1	289.4	262.5	267.4	**276.8**	3.5	-5.0
Croatia	14.8	19.3	18.1	19.1	19.4	**20.8**	7.4	40.2
Italy	388.5	399.4	407.1	370.6	405.9	**398.7**	-1.8	2.6
Cyprus	6.2	6.9	7.4	7.5	7.0	**8.2**	17.9	32.0
Latvia	71.0	60.7	57.2	40.3	37.6	**43.9**	16.7	-38.2
Lithuania	41.0	52.5	52.2	51.5	49.4	**40.0**	-19.0	-2.5
Malta	3.3	4.6	5.2	5.7	3.4	**4.9**	45.1	47.2
Netherlands (¹)	557.3	604.0	607.5	557.5	579.7	**588.0**	1.4	5.5
Poland	57.9	90.4	92.4	87.1	94.6	**116.5**	23.1	101.2
Portugal	61.3	84.1	79.1	73.9	77.4	**78.7**	1.6	28.3
Romania	38.4	48.4	51.9	46.4	52.4	**59.6**	13.8	55.0
Slovenia	16.9	23.1	22.1	18.3	20.1	**22.4**	11.6	32.4
Finland	96.4	109.5	112.1	101.6	96.9	**99.1**	2.3	2.8
Sweden	153.2	175.2	165.2	164.1	168.8	**170.3**	0.9	11.1
Iceland	:	:	:	:	:	:	:	:
Norway	168.8	174.2	179.5	191.8	196.6	**186.1**	-5.3	10.2
Montenegro	:	2.0	2.0	2.0	1.8	**2.9**	58.7	:
Türkiye	355.5	428.7	453.2	464.0	492.0	**505.4**	2.7	42.2

(:) not available

Note: main ports are ports handling more than one million tonnes of goods annually.
(¹) Break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.
*Source:* Eurostat (online data code: mar_mg_am_cwt)

eurostat

Table 1: Gross weight of seaborne freight transported to/from main ports, in selected years, 2012-2022 (million tonnes) Source: Eurostat (mar_mg_am_cwt)

At 3.0 billion tonnes, the EU seaborne transport of goods increased between 2021 and 2022 (+3.5 %) (Table 1). The majority of these goods (67.5 %) were transported to or from ports outside the EU (international extra EU transport), making maritime transport the most common mode for long distance transport of goods to or from the EU, in tonnage terms. Cross-border transport between ports in the EU (international intra EU transport) made up 21.2 % of the maritime transport of goods in 2022, while transport of goods between national ports made up 7.5 % of the total EU maritime transport (Figure 10).

Seaborne transport of freight between main ports in the reporting country and their partner ports grouped by main geographical areas, 2022
(%, based on tonnes)
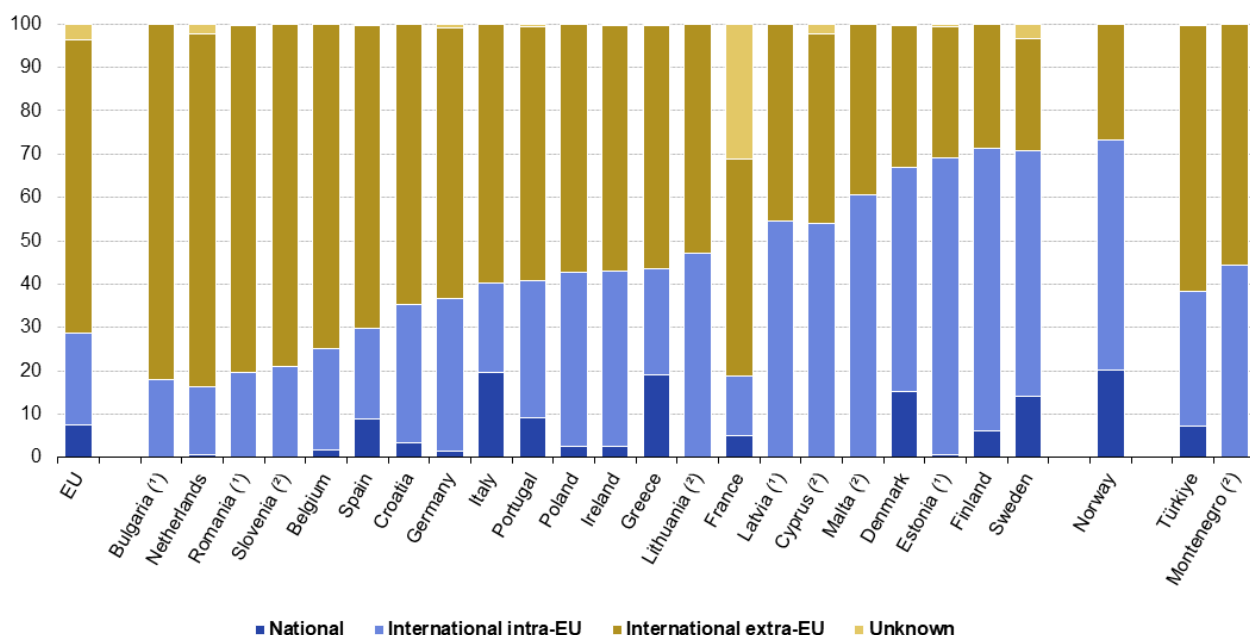
Note: countries are ranked based on the share on 'international extra-EU' transport. The percentages of international 'intra-EU' and 'extra-EU' transport for non-EU countries express the share of total transport with EU and non-EU countries respectively. Main ports are ports handling more than one million tonnes of goods annually. Data for Iceland are not available.
(¹) Less than 0.7 %.
(²) No national transport.
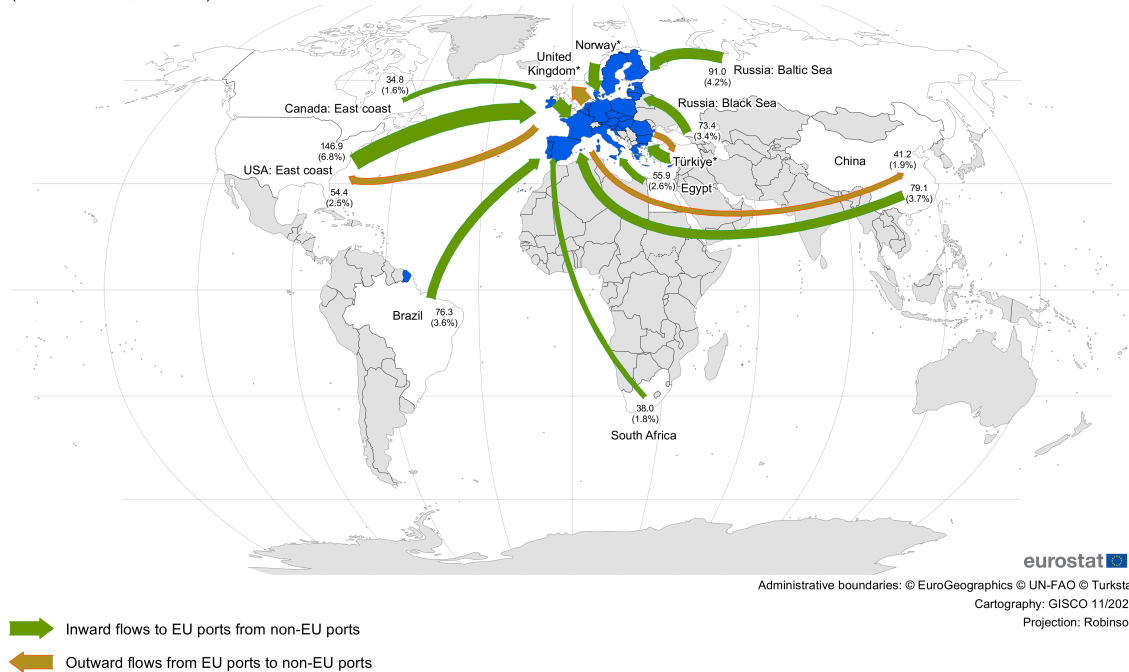*Source*: Eurostat (online data code: mar_mg_am_cwtt)

Figure 10: Seaborne transport of freight between main ports in the reporting country and their partner ports grouped by main geographical areas, 2022 (%, based on tonnes) Source: Eurostat (mar_mg_am_cwtt)

In countries with long shorelines or a large number of islands, like Italy and Greece, as well as Norway, the share of national seaborne transport tends to be relatively high (19-20 % in 2022). Countries like Estonia, Finland, Malta, Sweden, Latvia, Cyprus and Denmark on the other hand, had high shares of international intra-EU transport (above 50 % in 2022), because their main maritime freight transport partners are found within the EU. Other countries, like Bulgaria, the Netherlands, Romania, Slovenia, Belgium, Spain, Croatia and Germany (above 60 % in 2022), have high shares of extra-EU transport, based on their geographical position or the "deep sea" nature of the transport activities prevailing in their main ports.

Map 2 illustrates the largest maritime transport flows between the EU and the main international partners. As shown in the map, all of the EU's top 10 maritime flows of goods in 2022 were inward flows, with the exception of the outward flow to the United Kingdom. In declining order, these were the inward flows of goods from the East Coast of the USA (6.8 % of the total extra-EU seaborne transport in 2022), the outward flow to the United Kingdom (5.3 %), the inward flows from the United Kingdom (5.0 %), the Baltic Sea area of Russia (4.2 %), Türkiye (4.2 %), Norway (4.2 %) , China (3.7 %), Brazil (3.6 %), the Black Sea area of Russia (3.4 %) and Egypt (2.6 %).

Top 15 main extra EU flows by gross weight of freight handled in main ports, EU, 2022
(million tonnes, % share)

Canada: East coast
34.8 (1.6%)

USA: East coast
146.9 (6.8%)
54.4 (2.5%)

Norway*

United Kingdom*

Russia: Baltic Sea
91.0 (4.2%)

Russia: Black Sea
73.4 (3.4%)

Türkiye*
55.9 (2.6%)
Egypt

China
41.2 (1.9%)
79.1 (3.7%)

Brazil
76.3 (3.6%)

South Africa
38.0 (1.8%)

➡ Inward flows to EU ports from non-EU ports

➡ Outward flows from EU ports to non-EU ports

* United Kingdom, inward: 106.6 (5.0%), outward: 113.1 (5.3%); Norway, inward: 89.7 (4.2%); Türkiye, inward: 90.8 (4.2%), outward 46.1 (2.1%)

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the European Union.
Kosovo: This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.
Palestine: This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.

Map 2: Main extra-EU flows by gross weight of freight handled in main ports, EU, 2022 Source: Eurostat - Maritime transport - Goods (mar_go)

In 2022, 96.0 million TEUs of containers were handled in the main EU ports

In 2022, 96.0 million twenty-foot equivalent units (TEUs) were handled in the main EU ports (Figure 11), decreasing by 4.0 % compared with 2021. When looking at loaded containers, the decrease in 2022 was more substantial (-6.6 %) whereas the handling of empty containers substantially grew by 9.1 %.

Volume of containers handled in main ports, EU, 2007-2022
(million TEUs)
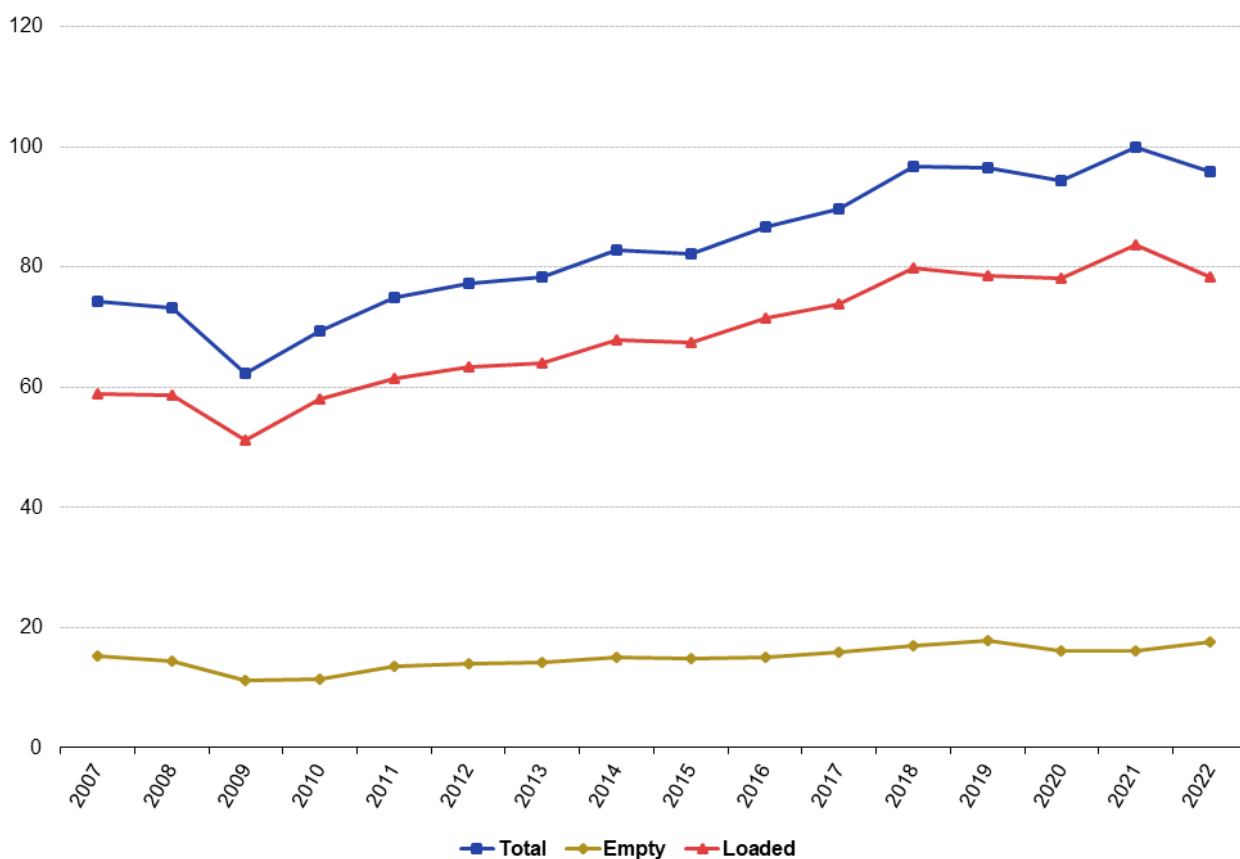
Note: main ports are ports handling more than one million tonnes of goods annually. TEU: Twenty-foot Equivalent Unit (unit of volume equivalent to a 20 foot ISO container). Break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.
Source: Eurostat (online data code: mar_mg_am_cvh)

Figure 11: Volume of containers handled in main ports, EU, 2007-2022 (million TEUs) Source: Eurostat (mar_mg_am_cvh)

Spain reported the largest volumes of containers handled in Europe in 2022. At 17.1 million TEUs, the volume of containers handled in Spanish ports represented 17.8 % of the EU total in 2022 (Figure 12). Spain was followed by the Netherlands (15.4 %), Germany (14.4 % of the EU total), Belgium (12.8 %) and Italy (11.1 %). All together, these five countries had almost 72 % of the containers handled in main EU ports in 2022.

Volume of containers handled in main ports, 2012, 2021 and 2022
(million TEUs)
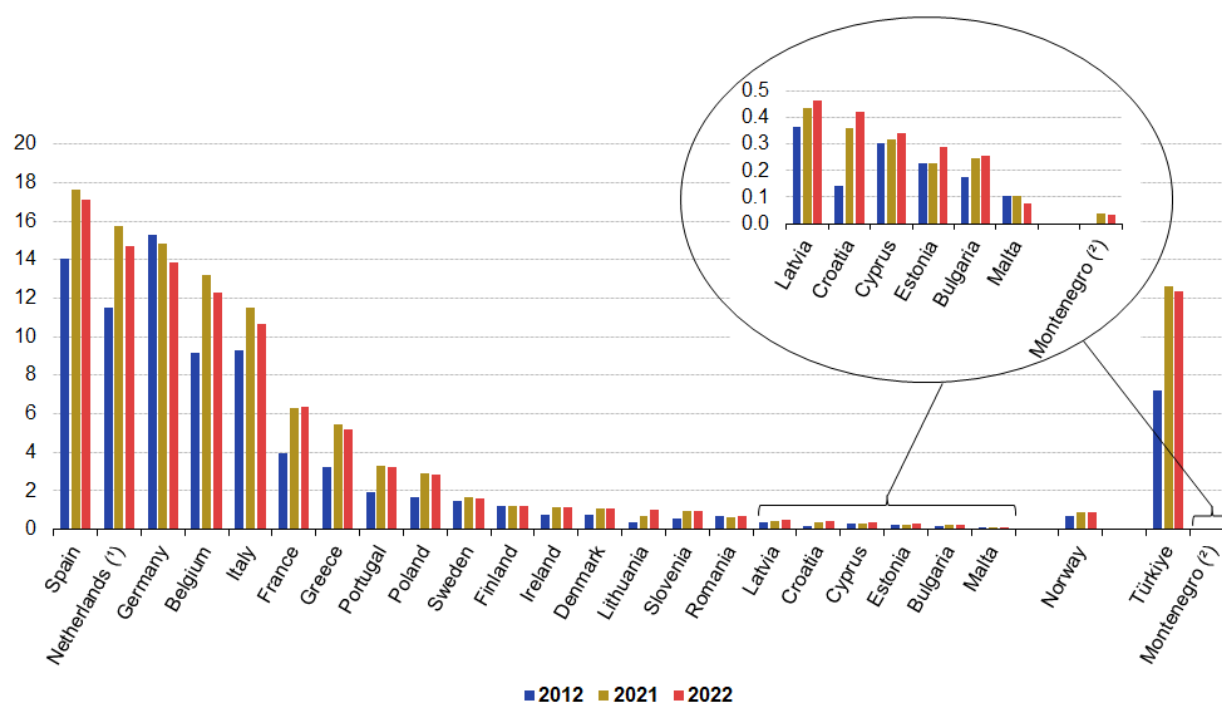
Note: countries are ranked based on 2022 data. Main ports are ports handling more than one million tonnes of goods annually. TEU: Twenty-foot Equivalent Unit (unit of volume equivalent to a 20 foot ISO container). Data for Iceland are not available.
(¹) Break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.
(²) 2012 data not available.
Source: Eurostat (online data code: mar_mg_am_cvh)

**Figure 12: Volume of containers handled in main ports, 2012, 2021 and 2022 (million TEUs) Source: Eurostat (mar_mg_am_cvh)**

All countries reported more loaded containers than empty containers. The share of empty containers handled was the lowest in Malta and Italy (0.5 % and 2.1 % of the containers handled in the main ports of the country, respectively) and the highest in Finland (36.1 %) (Figure 13).

Volume of containers handled in main ports by loading status, 2022
(%, based on TEUs)
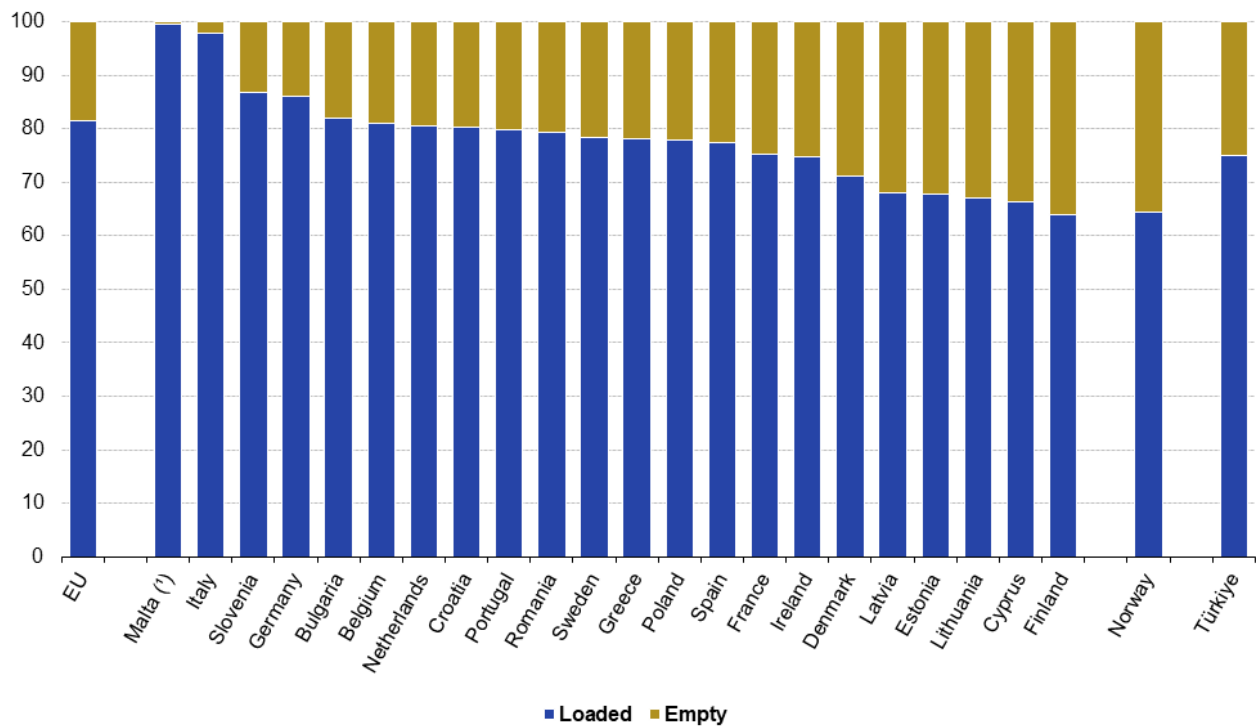
Note: main ports are ports handling more than one million tonnes of goods annually. TEU: Twenty-foot Equivalent Unit (unit of volume equivalent to a 20 foot ISO container). Data for Iceland and Montenegro are not available.
(¹) Empty containers: 0.5%.
Source: Eurostat (online data code: mar_mg_am_cvh)

eurostat ▣

Figure 13: Volume of containers handled in main ports, 2022 (%, based on TEUs) Source: Eurostat (mar_mg_am_cvh)

With 14.0 million TEUs handled, Rotterdam was EU's largest container port in 2022 (Figure 14). Rotterdam was followed by Antwerp-Bruges with 12.3 million TEUs and Hamburg with 8.4 million TEUs handled in total. All in all, five of the top 20 container ports recorded increases in the number of TEUs handled compared with 2021. In relative terms, the largest growth was observed for Klaipėda (+57.1 %), which entered the top 20 EU container ports gaining 12 positions compared with 2021. Trieste also recorded a large increase by 23.1 %, allowing the port to reach the 19th position of the ranking after gaining four places compared to 2021. In contrast, the largest relative falls amongst the top 20 EU container ports were recorded by La Spezia (20.2 %), Valencia (-9.9 %), Sines (-8.8 %), Bremerhaven (-8.2 %) and Rotterdam (-7.1 %).

Top 20 EU ports handling containers, 2012, 2021 and 2022
(million TEUs)
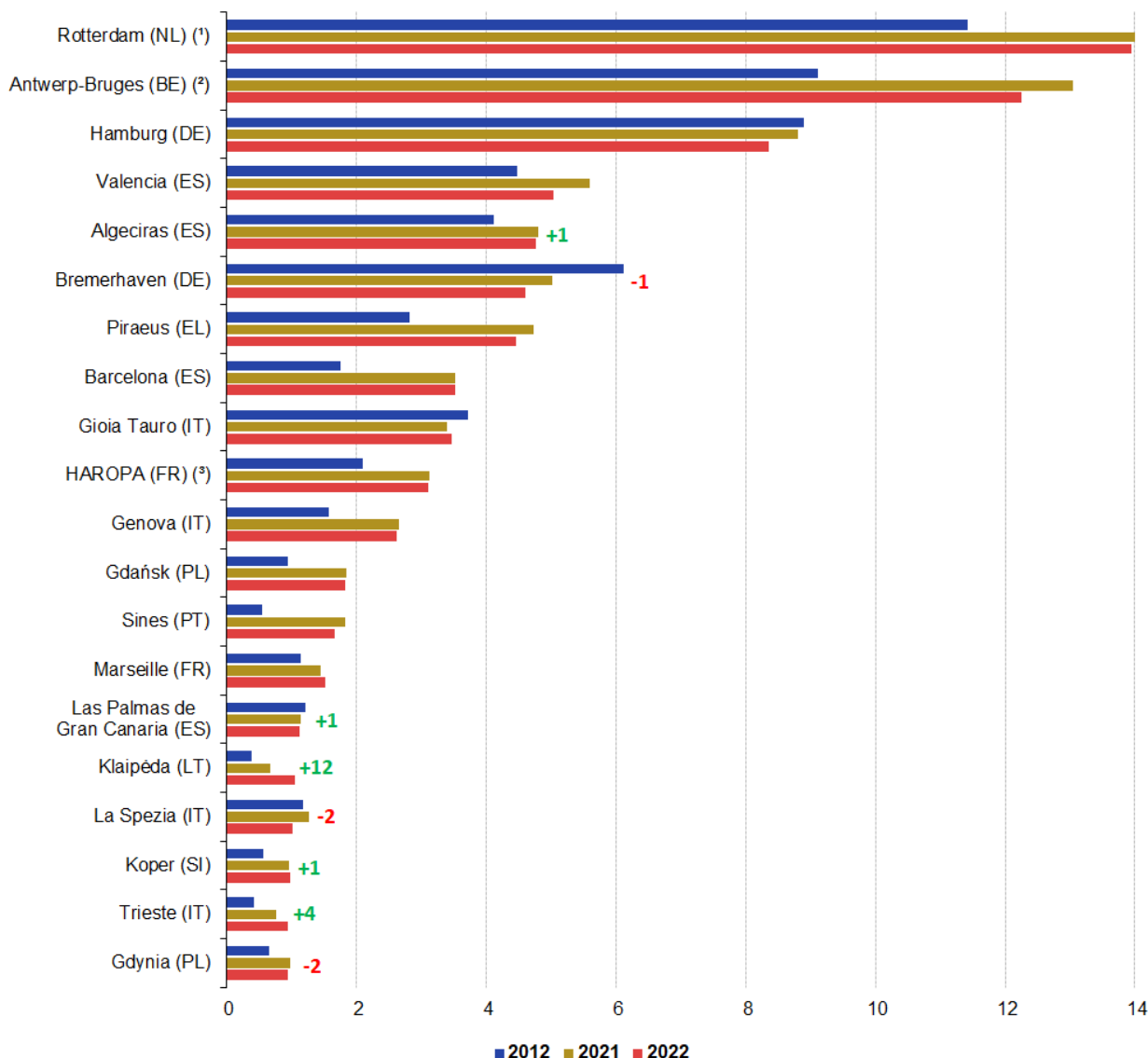
Note: ports are ranked based on TEUs handled in 2022. TEU: Twenty-foot Equivalent Unit (unit of volume equivalent to a 20 foot ISO container). The number presented indicates the number of positions lost or gained compared to 2021. When no number is displayed, it means that the port maintained the same position compared to 2021.

(1) Break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.
(2) Starting from 2022, the ports Antwerpen and Zeebrugge have been merged and the data are reported under the new port name Antwerp-Bruges.
(3) Starting from 2022, the ports Le Havre and Rouen have been merged and the data are reported under the new port name HAROPA.
Source: Eurostat (online data code: mar_mg_am_pvh)

Figure 14: Top 20 EU ports handling containers, 2012, 2021 and 2022 (million TEUs) Source: Eurostat (mar_mg_am_pvh)

All top 20 EU container ports reported more loaded containers than empty containers. The share of empty containers handled was the lowest in Trieste (0.9 % of the containers handled in the main ports of the country) and the highest in Klaipėda (32.9 %) (Figure 15).

Top 20 EU ports handling containers by loading status, 2022
(%, based on TEUs)

Note: ports are ranked based on TEUs handled in 2022. TEU: Twenty-foot Equivalent Unit (unit of volume equivalent to a 20 foot ISO container).
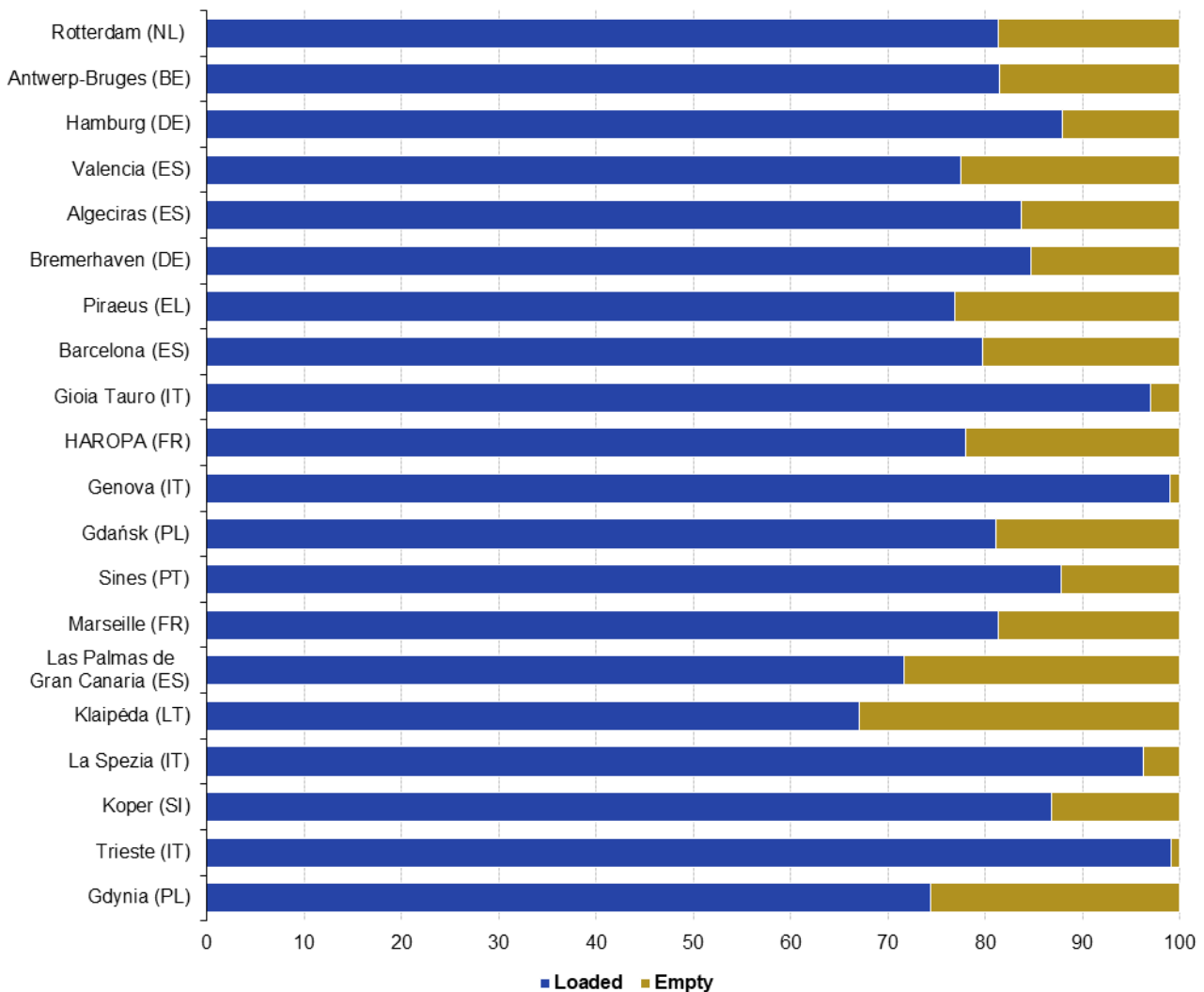*Source:* Eurostat (online data code: mar_mg_am_pvh)

Figure 15: Top 20 EU ports handling containers by loading status, 2022 (%, based on TEUs) Source: Eurostat (mar_mg_am_pvh)

The average size of vessels calling at main EU ports is estimated at 7 300 gross tonnage per vessel

In 2022, the number of vessels calling (handling freight or embarking and disembarking passengers) in main EU ports was estimated at 2.2 million, an increase of 12.0 % from the previous year. Italy had the highest number of port calls in 2022 (504 000 vessels), followed by Greece (448 000 vessels), Denmark (324 000 vessels), Croatia (274 000 vessels), Spain (200 000 vessels) and Germany (117 000 vessels) (Table 2).

Vessels in main ports, in selected years, 2012-2022

(number)

	2012	2018	2019	2020	2021	2022	Change 2022/2021 (%)	Change 2022/2012 (%)
EU	**2 096 398**	**2 189 422**	**2 278 469**	**1 944 030**	**1 993 617**	**2 232 354**	**12.0**	**6.5**
Belgium	26 795	25 758	25 726	23 679	24 707	23 079	-6.6	-13.9
Bulgaria	3 648	3 121	3 451	3 161	3 101	3 257	5.0	-10.7
Denmark	348 391	325 283	322 427	323 819	328 192	324 241	-1.2	-6.9
Germany	111 989	112 825	110 374	104 925	106 307	117 120	10.2	4.6
Estonia	28 474	30 276	30 774	28 730	31 335	32 091	2.4	12.7
Ireland	11 378	12 587	12 384	11 428	12 346	12 147	-1.6	6.8
Greece	511 951	478 567	515 899	362 036	424 557	448 495	5.6	-12.4
Spain	148 794	198 948	204 514	136 661	159 416	199 957	25.4	34.4
France	44 800	64 092	63 003	41 967	51 099	58 939	15.3	31.6
Croatia	205 040	279 916	285 456	198 116	246 266	274 255	11.4	33.8
Italy	437 058	427 551	472 540	505 968	381 820	504 411	32.1	15.4
Cyprus	2 324	2 250	2 263	1 833	1 818	2 201	21.1	-5.3
Latvia	7 404	6 680	6 428	5 824	5 629	5 740	2.0	-22.5
Lithuania	4 857	4 932	5 075	5 033	5 123	4 484	-12.5	-7.7
Malta	22 600	27 308	30 202	31 676	39 611	43 569	10.0	92.8
Netherlands (¹)	36 637	37 276	36 308	32 864	41 575	42 264	1.7	15.4
Poland	15 300	18 678	17 725	15 599	17 211	16 732	-2.8	9.4
Portugal	11 137	14 116	14 189	12 002	12 153	12 710	4.6	14.1
Romania	4 678	4 044	4 123	4 100	5 232	5 356	2.4	14.5
Slovenia	1 980	1 878	1 649	1 397	1 527	1 812	18.7	-8.5
Finland	33 818	31 145	31 968	25 297	26 213	26 641	1.6	-21.2
Sweden	77 345	82 191	81 991	67 915	68 379	72 853	6.5	-5.8
Iceland	:	:	:	:	:	:	:	:
Norway	66 268	58 379	59 442	60 953	64 389	71 189	10.6	7.4
Montenegro	:	580	614	510	595	977	64.2	:
Türkiye	65 008	59 446	55 081	48 685	51 031	57 792	13.2	-11.1

(:) not available
Note: main ports are ports handling more than one million tonnes of goods or 200 000 passengers annually. Data are based on inward declarations.
(¹) Break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.
Source: Eurostat (online data code: mar_mt_am_csvi)

eurostat◼

Table 2: Vessels in main ports, in selected years, 2012-2022 (number) Source: Eurostat (mar_mt_am_csvi)

In 2022, the estimated gross tonnage (GT) of the vessels calling in EU ports increased to 16.4 billion GT (+14.0 % from the previous year). Italy and Spain recorded the largest gross tonnage of vessels calling at its main ports in 2022 with 2.7 billion GT, each (Table 3).

Gross Tonnage of vessels in main ports, in selected years, 2012-2022

(thousand)

	2012	2018	2019	2020	2021	2022	Change 2022/2021 (%)	Change 2022/2012 (%)
EU	**13 905 003**	**16 173 588**	**16 288 379**	**13 250 266**	**14 352 821**	**16 367 829**	**14.0**	**17.7**
Belgium	554 009	667 387	680 107	645 642	661 972	676 591	2.2	22.1
Bulgaria	28 701	30 790	33 707	28 663	28 195	33 677	19.4	17.3
Denmark	1 072 400	1 171 854	1 167 870	1 027 885	1 082 187	1 167 250	7.9	8.8
Germany	1 172 132	1 393 212	1 269 318	1 017 685	1 050 216	1 115 822	6.2	-4.8
Estonia	310 969	375 603	381 652	324 529	361 273	366 773	1.5	17.9
Ireland	223 203	257 896	268 515	252 425	270 794	287 485	6.2	28.8
Greece	1 101 625	1 380 496	1 421 921	1 021 539	1 219 655	1 364 450	11.9	23.9
Spain	1 881 947	2 313 521	2 399 647	1 774 177	2 009 170	2 697 722	34.3	43.3
France	1 157 591	1 564 819	1 511 425	1 148 977	1 285 215	1 581 023	23.0	36.6
Croatia	263 616	376 426	380 376	287 666	347 561	401 867	15.6	52.4
Italy	2 765 166	2 680 190	2 865 883	2 419 168	2 386 643	2 730 906	14.4	-1.2
Cyprus	32 758	33 359	35 733	28 565	33 427	35 377	5.8	8.0
Latvia	90 074	88 143	84 542	65 051	57 983	74 495	28.5	-17.3
Lithuania	60 336	75 145	74 082	73 802	75 048	86 101	14.7	42.7
Malta	197 257	298 977	268 415	266 702	291 814	280 380	-3.9	42.1
Netherlands (¹)	718 774	824 066	774 100	683 169	916 009	965 229	5.4	34.3
Poland	164 421	259 334	242 962	225 572	241 299	266 454	10.4	62.1
Portugal	177 259	252 558	253 461	189 692	189 486	236 787	25.0	33.6
Romania	50 191	55 186	56 825	52 036	76 924	69 468	-9.7	38.4
Slovenia	39 366	51 979	50 517	40 999	42 734	49 398	15.6	25.5
Finland	710 893	764 477	781 577	588 068	618 974	696 916	12.6	-2.0
Sweden	1 132 317	1 258 170	1 285 745	1 088 255	1 106 243	1 183 657	7.0	4.5
Iceland	:	:	:	:	:	:	:	:
Norway	312 370	331 134	329 330	337 402	347 617	526 896	51.6	68.7
Montenegro	:	5 452	6 545	4 748	7 235	29 671	310.1	:
Türkiye	658 668	803 300	794 199	789 947	828 717	871 945	5.2	32.4

(:) not available

Note: main ports are ports handling more than one million tonnes of goods or 200 000 passengers annually. Data are based on inward declarations.

(¹) Break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.

Source: Eurostat (online data code: mar_mt_am_csvi)

eurostat

Table 3: Gross Tonnage of vessels in main ports, in selected years, 2012-2022 (thousand) Source: Eurostat (mar_mt_am_csvi)

In 2022,
the average size of vessels calling in the main EU ports increased by 1.8 % to slightly more than 7 300 GT (Figure 16).

Average size of vessels calling at main ports, EU, 2007-2022
(gross tonnage per vessel)

Note: main ports are ports handling more than one million tonnes of goods or 200 000 passengers annually. Data are based on inward declarations. Break in time series from 2021 due to methodological improvement in the data reported by the Netherlands.
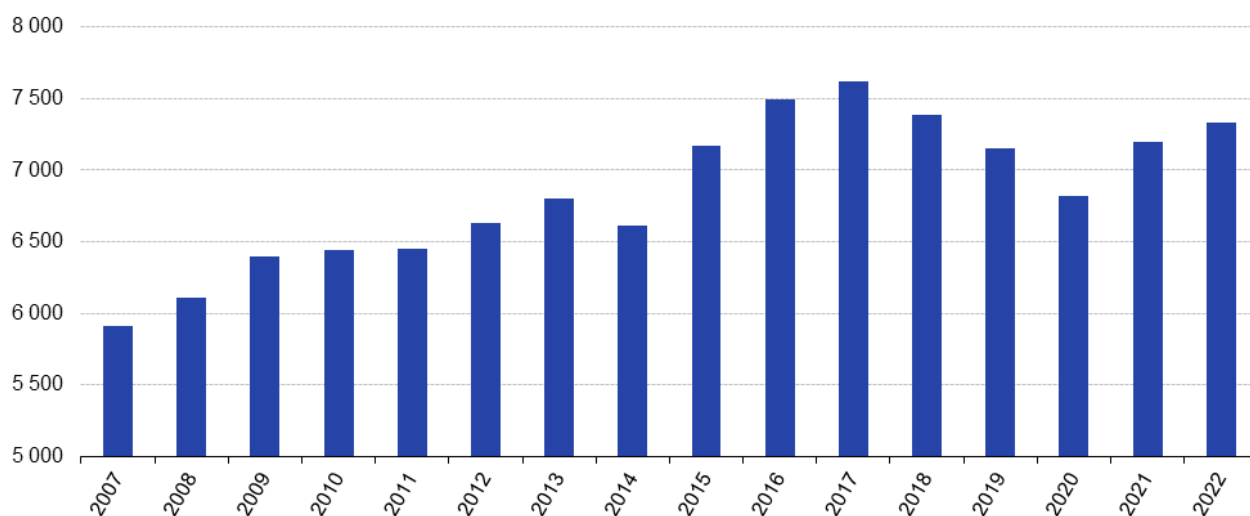*Source:* Eurostat (online data code: mar_mt_am_csvi)

eurostat▣

Figure 16: Average size of vessels calling at main ports, EU, 2007-2022 (gross tonnage per vessel) Source: Eurostat (mar_mt_am_csvi)

Vessels in the category "Cargo, non-specialised" (which includes Ro-Ro vessels) made the highest share of calls in main EU ports in 2022 (69.6 % of the vessels and 55.1 % of the gross tonnage). When based on the number of vessels, the next category was passenger (excluding cruise passengers) vessels (14.2 %), followed by cruise passenger vessels (6.4 %), liquid bulk vessels (3.6 %) and container vessels (2.9 %) (Figure 17). When looking at the shares based on gross tonnage, container vessels came second, with 14.7 %, followed by cruise passenger vessels (11.2 %), liquid bulk vessels (8.4 %) and dry bulk vessels (4.1 %). Passenger vessels represented only 2.9 % based on gross tonnage, indicating their lower size compared with the other types of vessels.

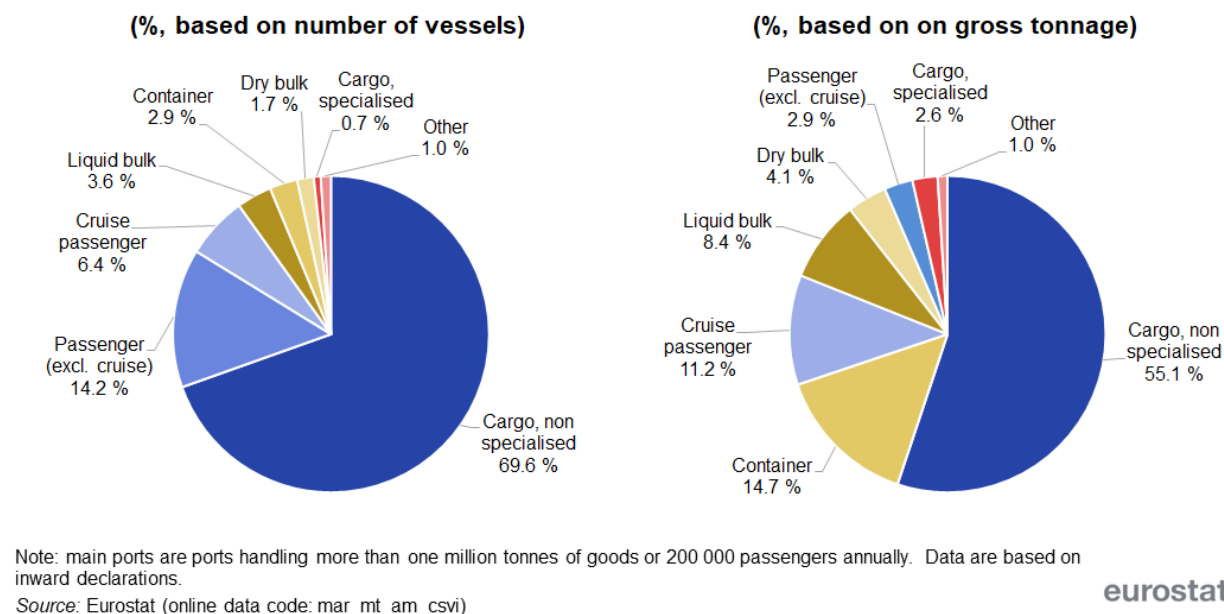## Vessels in main ports by type of vessel, EU, 2022

(%, based on number of vessels)

Container 2.9 %
Dry bulk 1.7 %
Cargo, specialised 0.7 %
Other 1.0 %
Liquid bulk 3.6 %
Cruise passenger 6.4 %
Passenger (excl. cruise) 14.2 %
Cargo, non specialised 69.6 %

(%, based on on gross tonnage)

Passenger (excl. cruise) 2.9 %
Cargo, specialised 2.6 %
Other 1.0 %
Dry bulk 4.1 %
Liquid bulk 8.4 %
Cruise passenger 11.2 %
Container 14.7 %
Cargo, non specialised 55.1 %

Note: main ports are ports handling more than one million tonnes of goods or 200 000 passengers annually. Data are based on inward declarations.
Source: Eurostat (online data code: mar_mt_am_csvi)

eurostat

Figure 17: Vessels in main ports by type of vessel, EU, 2022 Source: Eurostat (mar_mt_am_csvi)

Source data for tables and graphs

- Maritime ports freight and passenger statistics: tables and figures

Data sources

This article presents the trends in freight transport and vessel traffic in European Union (EU) ports and also includes figures for Iceland, Norway, Montenegro and Türkiye. The content is based on data collected within the legal framework for EU maritime transport statistics, i.e. Directive 2009/42/EC of the European Parliament and of the Council of 6 May 2009 on statistical returns in respect of carriage of goods and passengers by sea and later amendments. Directive 2009/42/EC is a recast of the original Council Directive 95/64/EC of 8 December 1995.

The EU aggregates in the statistics refer to the total of 22 maritime Member States . Czechia, Luxembourg, Hungary, Austria and Slovakia have no maritime ports. Norway and Iceland provide Eurostat with data as members of the European Economic Area (EEA) . The EEA country Liechtenstein has no maritime ports. Montenegro and Türkiye provide data as candidate countries .

"Main ports" are ports handling more than one million tonnes of goods or more than 200 000 passengers annually (however, data for some smaller ports may be included in the published results). Data are presented at level of " statistical ports ". A statistical port consists of one or more ports, normally controlled by a single port authority, able to record ship and cargo movements.

Explanatory notes:

Please note that data can be subject to revision and latest data are available in Eurostat's online database.

Basic results and derived indicators (such as growth rates and shares in % of total) in the tables are rounded. However, the figures are based on the non-rounded original data. As a result, the sum of shares in % of total, as shown in the tables, is not necessarily equal to 100%.

Explanatory notes for countries are available in the metadata on the Eurostat website .

Starting from 2011, the figures for Spain include data for a number of minor regional ports outside the state-controlled port system. There is a break in time series from 2021 due to methodological improvement in the

data reported by the Netherlands. Montenegro started to report data on seaborne transport in 2012. Data have been partially estimated by Eurostat for a number of French ports for the period 2009-2016. Detailed data on main ports are not available for Iceland.

Type of cargo (Figures 5 and 9):

- Liquid bulk: liquefied gas, crude oil, oil products, other liquid bulk goods.

- Dry bulk: ores, coal, agricultural products (e.g. grain, soya, tapioca), other dry bulk goods.

- Large containers: 20 ft freight units, 40 ft freight units, freight units > 20 ft and < 40 ft, freight units > 40 ft.

- Ro-Ro mobile units:

a) Mobile self-propelled units: road goods vehicles and accompanying trailers, passenger cars, motorcycles and accompanying trailers/caravans, passenger buses, trade vehicles (including import/export motor vehicles), live animals on the hoof, other mobile self-propelled units.

b) Mobile non-self-propelled units: unaccompanied road goods trailers and semi-trailers, unaccompanied caravans and other road, agricultural and industrial vehicles, rail wagons, shipborne port-to-port trailers and shipborne barges engaged in goods transport, other mobile non-self-propelled units

- Other cargo: forestry products, iron and steel products, other general cargo.

The category "large containers" includes containers having a length of 20 feet or more. Smaller containers are included in the category "other cargo". As a general rule, the container figures are limited to lift-on lift-off containers (Lo-Lo).

Transport calculation (Table 1 and Figure 10): In order to estimate maritime transport of goods between ports, the issue of "double counting" (the transport of the same goods being declared by both the port of loading (as outward movements) and the port of unloading (as inward movements) has to be addressed. Generally, when both the port of loading and the port of unloading are situated within the same statistical aggregate, only the incoming flows of goods declared by ports are summed up to determine the total maritime transport within the aggregate ("elimination of double counting"). The algorithm for the elimination of double counting is applied at statistical port level. Thus, the total maritime transport per country excludes the double counting of maritime transport within the country. Similarly, the total maritime transport for the EU excludes the double counting of national and international intra-EU maritime transport (see metadata on the Eurostat website for more information).

Please note that the recording of unknown port of loading or unloading may have influenced the transport figure calculations, as well as the shares of maritime transport allocated to intra-EU, extra-EU and National maritime transport.

Type of vessel (Figure 17):

- Liquid bulk: oil tanker, chemical tanker, LG tanker, tanker barge, other tanker.

- Dry bulk: bulk/oil carrier, bulk carrier.

- Container: full container.

- Cargo, specialised: barge carrier, chemical carrier, irradiated fuel, livestock carrier, vehicle carrier, other specialised.

- Cargo, non-specialised: reefer, Ro-Ro passenger, Ro-Ro container, other Ro-Ro cargo, combination carrier general cargo/passenger, combination carrier general cargo/container, single-decker, multi-decker.

- Passenger: passenger (excluding cruise passenger vessels).

- Other: cruise ships, offshore supply, dry cargo barges, tugs, miscellaneous, unknown type of vessel.

Special symbols used in the tables

':' not available

'-' not applicable

Context

The content of this statistical article is based on data collected within the framework of the EU maritime transport statistics Directive, i.e. Directive 2009/42/EC of the European Parliament and of the Council of 6 May 2009 on statistical returns in respect of carriage of goods and passengers by sea (OJ L141 of 6.6.2009, page 29), which is a recast of the original Council Directive 95/64 (EC) of 8 December 1995.

The basic legal act (Directive 2009/42/EC) was amended by:

- Commission Decision 2010/216/EC of the European Parliament and of the Council of 14 April 2010, OJ L 94, 15.4.2010, p. 33-40

- Regulation (EU) No 1090/2010 of the European Parliament and of the Council of 24 November 2010, OJ L 325, 9.12.2010, p. 1-3

- Commission Delegated Decision 2012/186/EU of 3 February 2012 OJ L 101 of 11.4.2012 pp. 5-14.

The following legal acts include respectively the last official version of the list of ports and some dissemination aspects:

- Commission Decision 2001/423/EC of 22 May 2001 (on dissemination) OJ L 151 of 07.06.2001 p. 41

- Commission Delegated Decision (EU) 2018/1007 of 25 April 2018 supplementing Directive 2009/42/EC of the European Parliament and of the Council as regards the list of ports and repealing Commission Decision 2008/861/EC (Text with EEA relevance.) OJ L 180, 17.7.2018, p. 29–71

Other articles

- Freight transport statistics - modal split

- Maritime transport of goods - quarterly data

- Maritime transport statistics - short sea shipping of goods

Publications

- All transport publications online

- Key figures on European transport - 2022 edition

- Energy, transport and environment statistics - 2020 edition

Database

- Transport , see detailed datasets:

Maritime transport (mar)

 Maritime transport - main annual results (mar_m)

 Maritime transport - short sea shipping - main annual results (mar_s)

 Maritime transport - passengers (mar_pa)

 Maritime transport - goods (mar_go)

 Maritime transport - vessel traffic (mar_tf)

 Maritime transport - regional statistics (mar_rg)

Dedicated section

- Transport

Methodology

- Maritime transport (ESMS metadata file — mar_esms)

- Reference Manual on Maritime Transport Statistics

- Glossary for transport statistics - 5th edition - 2019