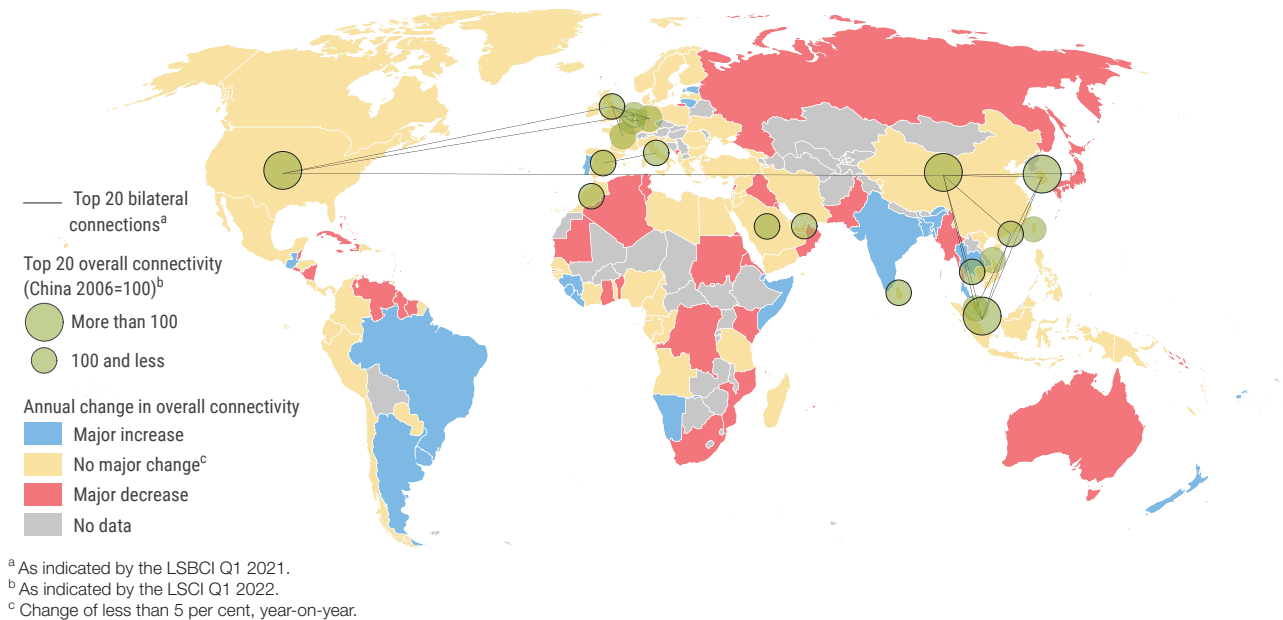




Fact sheet #15: Maritime transport indicators

Map 1 Liner shipping connectivity, 2021–2022



Concepts and definitions

The liner shipping connectivity index (LSCI) indicates a country's position within global liner shipping networks. It is calculated from the number of ship calls, their container carrying capacity, the number of services and companies, the size of the largest ship, and the number of other countries connected through direct liner shipping services.

The liner shipping bilateral connectivity index (LSBCI) is calculated from five components, including the number of transshipments required to trade and the connections available using one transshipment.

Port container traffic is measured in twenty-foot equivalent units (TEUs). One TEU represents the volume of a standard 20-foot long intermodal container.

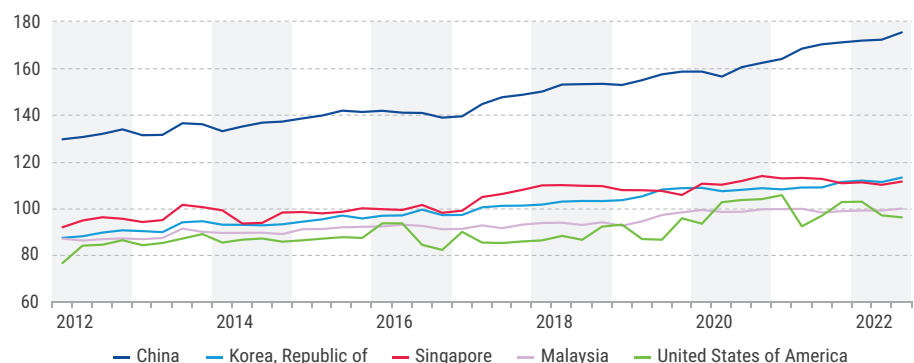
The number of port calls and the time spent in ports are derived from combining automatic identification system data with port mapping intelligence. These data cover ships of 1000 gt and above.

Liner shipping connectivity throughout the world

In the third quarter of 2022, China was the economy best connected to the global liner shipping network, as measured by the LSCI. The Republic of Korea, Singapore, Malaysia and the United States of America followed next in the rankings. Regional leaders included: Spain and the Netherlands in Europe; Panama and Colombia in Latin America and the Caribbean; Morocco and Egypt in Africa; and Sri Lanka and India in Southern Asia. Among the least connected 30 economies, 18 are SIDS, four of which are also LDCs. An additional three are coastal LDCs.

In 2021, 17 of the top 20 bilateral connections were intra-regional within Europe or within Eastern and South-Eastern Asia. The only inter-regional connections among the top 20 were between the United States of America and highly connected economies in the regions mentioned above: China in Asia as well as the Netherlands and the United Kingdom in Europe.

Figure 1 Liner shipping connectivity index, top five economies
(China Q1 2006=100)

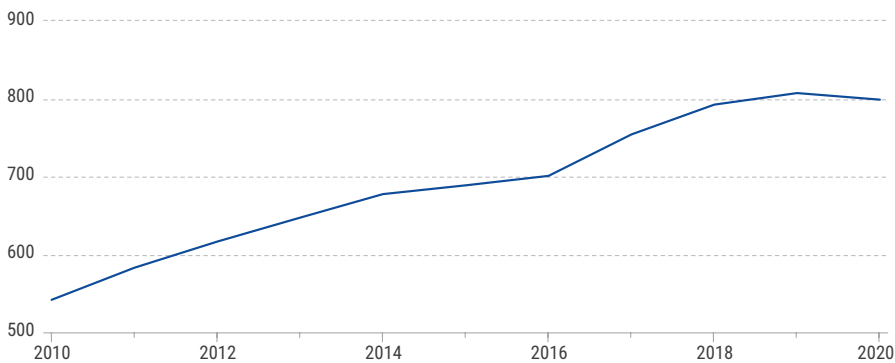




Port container traffic

In 2020, 798.9 million TEUs of containers were handled in ports worldwide. World container port throughput declined by 1.0 per cent between 2019 and 2020. This reduction was moderate in comparison to other shipping market segments and total seaborne trade (see UNCTAD Handbook of Statistics 2022, section 5.1). It reflected the resilience of containerized trade amid the disruption caused by the COVID-19 pandemic.

Figure 2 World container port throughput
(Millions of twenty-foot equivalent units)



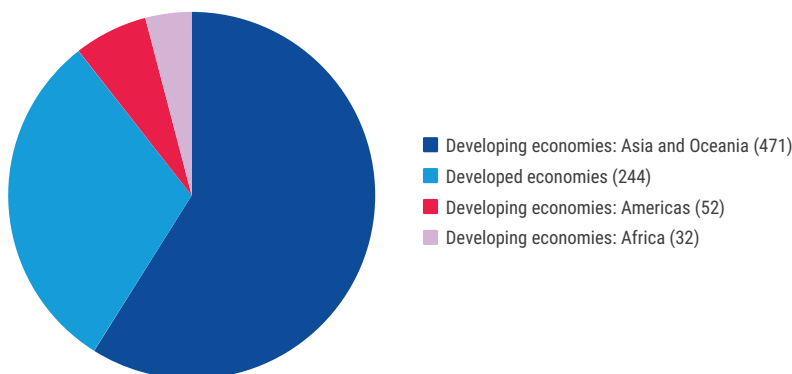
Asia's leading role as a global maritime freight loading and discharging centre (see UNCTAD Handbook of Statistics 2022, section 5.1) and its high liner shipping connectivity is mirrored in the region's high contribution to containerized port throughput. In 2020, ports in developing economies of Asia and Oceania handled 62 per cent of the world port container traffic. The shares of the developing Americas and developing Africa were significantly lower, at less than 7 per cent each.

Port calls

Globally, 4.3 million port calls were recorded in 2021. The economy that recorded most port calls of ships in 2021 was Norway. As a median, cargo-carrying ships left Norwegian ports 10 hours after their arrival.¹

¹ For further analyses on maritime transport, see UNCTAD (2022d).

Figure 3 Containerized port traffic by group of economies, 2020
(Millions of twenty-foot equivalent units)

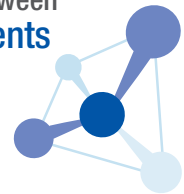


For references, see UNCTAD Handbook of Statistics 2022, annex 6.4

China, Singapore and the Republic of Korea
– the economies most integrated into global liner shipping networks



Bilateral connectivity higher within
than between continents



Developing economies in Asia and Oceania handled 62% of world port container traffic in 2020



In Norway, cargo ships stay on average only 10 hours at port





Table 1 | **Liner shipping connectivity index of most connected economies, by region**
(China Q1 2006 = 100)

	Economy (Ranked by Q3 2022 value)	Q1 2011	Q1 2016	Q1 2021	Q1 2022	Q2 2022	Q3 2022
Northern America and Europe	1. United States of America	78	93	106	103	103	96
	2. Spain	74	82	90	90	90	91
	3. Netherlands	81	83	92	91	91	91
	4. United Kingdom	81	86	91	90	90	89
	5. Belgium	80	86	88	87	87	88
Latin America and the Caribbean	1. Panama	37	50	50	51	51	50
	2. Colombia	33	49	49	48	48	48
	3. Mexico	37	47	49	48	48	47
	4. Brazil	32	35	36	40	40	40
	5. Peru	26	32	39	39	39	40
Africa	1. Morocco	51	58	69	69	69	71
	2. Egypt	47	59	68	67	67	68
	3. South Africa	37	39	41	39	39	40
	4. Ghana	21	22	40	36	36	37
	5. Togo	16	31	37	36	36	37
Asia	1. China	131	142	164	172	172	175
	2. Korea, Republic of	86	97	108	112	112	113
	3. Singapore	94	100	113	111	111	111
	4. Malaysia	80	92	100	99	99	100
	5. China, Hong Kong SAR	96	90	94	87	87	85
Oceania	1. Australia	31	33	38	36	36	36
	2. New Zealand	20	21	29	31	31	31
	3. Papua New Guinea	8	10	11	11	11	11
	4. New Caledonia	12	12	11	10	10	11
	5. Fiji	12	11	9	10	10	11

**Table 2** Time at port, by market segment, in the top 20 economies by port call, 2021

Economy	Number of port calls	Median time at port (days)						
		All market segments	Liquid bulk	Container ship	Dry breakbulk	Dry bulk	LPG carriers	LNG carriers
Norway	696 827	0.4	0.6	0.4	0.3	0.8	0.8	0.3
Japan	272 723	0.4	0.3	0.4	1.2	0.8	0.3	1.0
China	260 464	1.1	1.1	0.7	1.5	2.0	1.0	1.2
United States of America ^a	260 187	1.6	1.6	1.2	2.0	2.2	1.8	1.3
Italy	230 097	1.3	1.3	1.0	2.0	3.5	1.6	..
Türkiye	204 553	1.2	1.2	0.6	1.5	3.9	1.2	1.2
Indonesia	181 658	1.3	1.3	1.1	1.2	2.8	1.1	1.4
United Kingdom ^b	174 726	1.2	1.0	0.8	1.5	3.0	1.1	1.2
Greece	153 559	0.8	0.6	1.0	1.1	0.6	1.0	1.2
Netherlands	121 650	0.6	0.6	0.9	0.4	1.2	1.0	1.0
Spain	118 511	0.9	0.9	0.7	1.2	1.8	1.0	1.0
Canada	111 934	0.7	1.1	1.8	0.8	0.3	1.5	..
Denmark	106 560	0.8	0.7	0.5	0.9	0.8	1.1	..
Germany	95 586	0.8	0.6	1.1	0.9	2.5	0.9	..
Korea, Republic of	94 594	0.9	0.8	0.7	1.2	2.1	0.8	1.0
Croatia	73 290	1.2	0.9	0.6	2.5	2.5	..	1.6
Sweden	67 288	0.8	0.7	0.7	1.0	0.5	0.8	0.7
France ^c	66 103	1.2	1.0	1.0	1.6	3.0	1.1	1.1
Russian Federation	64 406	1.5	1.1	1.6	1.8	2.5	1.5	1.1
Australia	54 859	1.6	1.3	1.6	2.0	1.7	0.9	1.3
World	4 286 204	1.0	1.0	0.8	1.2	2.1	1.0	1.1

Note: Economies are ranked by number of port calls. Number of port calls includes arrivals of ferries, roll-on roll-off and passenger ships, for which the time in port is not computed.

^a Excluding Puerto Rico and United States Virgin Islands.

^b United Kingdom of Great Britain and Northern Ireland excluding Channel Islands and Isle of Man.

^c Excluding French Guiana, Guadeloupe, Martinique, Mayotte, Monaco and Reunion.

Table 3 Liner shipping connectivity of the world's seven most connected economies

Economy (Ranked by LSCI 2021)	Year	LSCI (China Q1 2006=100)	LSBCI vis-à-vis ...						
			China	Singapore	Korea, Rep. of	United States of America	Malaysia	China, Hong Kong SAR	Netherlands
China	2016	142	–	0.554	0.622	0.552	0.562	0.563	0.469
	2021	164	–	0.568	0.634	0.556	0.578	0.551	0.474
Singapore	2016	100	–	–	0.501	0.420	0.580	0.504	0.443
	2021	113	–	–	0.521	0.443	0.588	0.502	0.467
Korea, Republic of	2016	97	–	–	–	0.432	0.504	0.517	0.441
	2021	108	–	–	–	0.461	0.505	0.462	0.460
United States of America	2016	93	–	–	–	–	0.393	0.447	0.442
	2021	106	–	–	–	–	0.463	0.456	0.506
Malaysia	2016	92	–	–	–	–	–	0.507	0.429
	2021	100	–	–	–	–	–	0.488	0.439
China, Hong Kong SAR	2016	90	–	–	–	–	–	–	0.429
	2021	94	–	–	–	–	–	–	0.445
Netherlands	2016	83	–	–	–	–	–	–	–
	2021	92	–	–	–	–	–	–	–

Note: All index values refer to the value at Q1 of the indicated year.