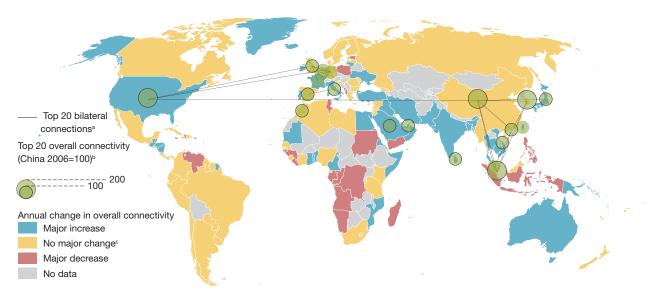


Fact sheet #15: Maritime transport indicators

Map 1 Liner shipping connectivity, 2021



^a As indicated by the LSBCI 2021.

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-feet long intermodal container.

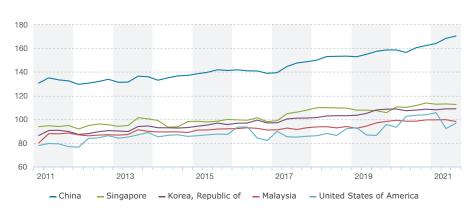
The number of port calls and the time spent in ports are derived from combining automatic identification system data with port mapping intelligence. These data cover ships of 1000 gt and above.

Liner shipping connectivity throughout the world

In the third quarter of 2021, China was the economy best connected to the global liner shipping network, as measured by the LSCI. Singapore, the Republic of Korea, Malaysia and the United States of America followed next in the rankings. Regional leaders included: the Netherlands and Spain in Europe; Panama and Colombia in Latin America and the Caribbean; Egypt and Morocco in Africa; and Sri Lanka and India in Southern Asia. Among the least connected 30 economies, 22 are islands and four are coastal LDCs.

In 2021, nine of the top 10 bilateral connections were intra-regional within Europe or within Eastern and South-Eastern Asia. The only inter-regional connection among the top 20 was between China and the United States of America.

Figure 1 Liner shipping connectivity index, top 5 economies (China Q1 2006 = 100)



b As indicated by the LSCI.

^c Change of less than 5 per cent compared to the value in the previous year.

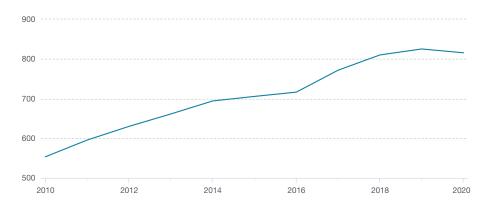


Port container traffic

In 2020, 815.6 million TEUs of containers were handled in ports worldwide. World container port throughput declined by 1.2 per cent between 2019 and 2020. This reduction is moderate in comparison to other shipping market segments and total seaborne trade (see UNCTAD Handbook of Statistics 2021, section 5.1). This reflects 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)

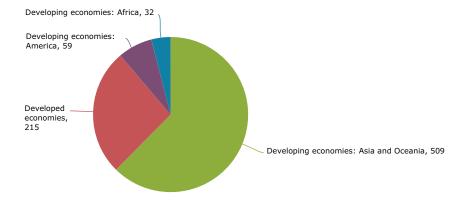


Asia's leading role as a global maritime freight loading and unloading centre (see UNCTAD Handbook of Statistics 2021, section 5.1) and its high liner shipping connectivity are mirrored in the region's high contribution to containerized port throughput. In 2020, ports in the developing economies of Asia and Oceania handled 509 million TEUs of containers, accounting for 62 per cent of world port container traffic. The shares of developing America and developing Africa were significantly lower, at 7 and 4 per cent, respectively. Developed economies accounted for 26 per cent.

Port calls

The economy that recorded most port calls of ships in 2020 was Norway. On average, cargo-carrying ships departed from Norwegian ports less than half a day after their arrival.¹

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



For references, see UNCTAD Handbook of Statistics 2021, annex 6.4.

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







Bilateral connectivity is highest within continents, rather than between

World container port throughput

declined: -1.2 % in 2020



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

¹ For further analyses on that topic, see UNCTAD (2021d).



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

	Economy (Ranked by Q3 2021 value)	Q1 2010	Q1 2015	Q1 2020	Q1 2021	Q2 2021	Q3 2021
	United States of America	75	86	93	106	106	97
	2. Netherlands	80	81	92	92	92	91
Northern America and Europe	3. Spain	74	80	89	90	90	91
	4. United Kingdom	80	85	90	91	91	89
	5. Belgium	80	84	89	88	88	88
	1. Panama	33	42	49	50	50	51
	2. Colombia	29	41	48	49	49	50
Latin America and the Caribbean	3. Mexico	33	41	49	49	49	48
	4. Dominican Republic	25	26	38	38	38	43
	5. Peru	23	31	40	39	39	41
	1. Morocco	45	58	69	69	69	70
	2. Egypt	45	57	61	68	68	67
Africa	3. South Africa	32	38	40	41	41	39
	4. Ghana	20	22	37	40	40	37
	5. Togo	15	26	35	37	37	36
	1. China	118	139	159	164	164	170
	2. Singapore	90	98	110	113	113	113
Asia	3. Korea, Republic of	73	94	109	108	108	109
	4. Malaysia	72	91	99	100	100	98
	5. China, Hong Kong SAR	88	92	94	94	94	93
	1. Australia	29	33	34	38	38	36
	2. New Zealand	19	22	29	29	29	30
Oceania	3. French Polynesia	10	9	14	14	14	15
	4. Papua New Guinea	7	10	10	11	11	11
	5. New Caledonia	12	12	10	11	11	11



Table 2 Time at port, by market segment, in the top 20 economies by port call, 2020

	Number of port calls	Median time at port (days)							
Economy		All market segments	Liquid bulk	Container ship	Dry breakbulk	Dry bulk	LPG carriers	LNG carriers	
1	Norway	584 421	0.4	0.6	0.3	0.3	0.8	0.8	0.3
2	China	261 269	1.1	1.1	0.6	1.3	2.0	1.0	1.2
3	Japan	259 583	0.4	0.3	0.3	1.1	0.8	0.3	1.0
4	United States of America ^a	246 863	1.5	1.6	1.0	1.9	2.0	2.0	1.3
5	Italy	200 074	1.3	1.3	0.9	2.0	3.5	1.6	
6	Turkey	169 964	1.2	1.2	0.6	1.5	3.9	1.3	1.3
7	Indonesia	166 578	1.2	1.2	1.0	1.1	3.1	1.1	1.4
8	United Kingdom ^b	158 231	1.1	1.0	0.7	1.5	2.7	1.1	1.3
9	Greece	136 718	0.8	0.6	1.0	1.2	0.4	1.0	1.2
10	Netherlands	117 420	0.6	0.5	0.8	0.4	0.8	1.0	1.0
11	Spain	105 046	0.9	0.9	0.7	1.2	1.8	1.0	1.0
12	Canada	103 297	0.8	1.1	1.8	0.6	0.4	1.5	
13	Denmark	102 178	0.8	0.7	0.4	0.9	0.9	1.0	
14	Germany	88 445	0.8	0.5	1.0	1.0	2.4	0.8	
15	Korea, Republic of	73 563	0.9	0.8	0.6	1.2	2.0	0.9	1.0
16	Sweden	67 477	0.8	0.7	0.6	1.1	0.5	0.8	0.8
17	Russian Federation	67 438	1.4	1.1	1.3	1.6	2.4	1.4	1.1
18	Croatia	60 198	1.1	0.9	0.6	2.3	2.4		
19	France ^c	58 537	1.1	1.1	0.8	1.6	2.9	1.1	1.2
20	Australia	58 474	1.5	1.3	1.4	2.0	1.6	0.9	1.2

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

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

F	Year	LSCI (China Q1 2006=100)	LSBCI vis-à-vis							
Economy (Ranked by LSCI 2021)			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	
Singapore	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	
Notea, ricpublic of	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.

Excluding Puerto Rico and United States Virgin Islands.
 United Kingdom of Great Britain and Northern Ireland excluding Channel Islands and Isle of Man.
 Excluding French Guiana, Guadeloupe, Martinique, Mayotte, Monaco and Reunion.