Map 1

Fact sheet #15: Maritime transport indicators



^a As indicated by the LSBCI. ^b As indicated by the LSCI.

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

Liner shipping connectivity, 2019

Concepts and definitions

The liner shipping connectivity index (LSCI) is an indicator of a country's position within the global liner shipping networks. It is calculated from the number of ships, their container carrying capacity, the number of services and companies, and the size of the largest ship.

The liner shipping bilateral connectivity index (LSBCI) is calculated from five components, including the number of transshipments required to trade and the number of options available to use only 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 used for loading, unloading, repositioning and transshipment.

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

Liner shipping connectivity throughout the world

In 2019, the economy best connected to the global liner shipping network, as measured by the LSCI, was China. Singapore, the Republic of Korea, Malaysia and the United States of America followed next in the rankings. Sub-regional leaders comprised: Belgium, Netherlands and the United Kingdom in Europe; Panama, Mexico and Colombia in Latin America and the Caribbean; Egypt, Morocco and South Africa in Africa; and Sri Lanka in South Asia. The Russian Federation and Ukraine were the best-connected transition economies. All top-20 bilateral connections were intra-regional, namely within Europe and within Eastern and South-Eastern Asia.

Over the last ten years, China and the Republic of Korea have developed particularly strong improvements in connectivity, allowing China to maintain their lead and the Republic of Korea to approach second place.



Port container traffic

In 2018, 793 million TEUs of containers were handled in ports worldwide. World container port throughput grew by 4.7 per cent between 2017 and 2018. Thus some momentum was lost – in tandem with world seaborne trade (see UNCTAD Handbook of Statistics 2019, section 5.1) – after a year of significant growth (+6.7 per cent) from 2016 to 2017.





Bilateral connectivity is highest within continents, rather than between

Growth in

throughput

moderated

in 2018: +**4.7%**

container port



Regional activity

Asia's role as a main port loading and unloading region (see UNCTAD Handbook of Statistics 2019, section 5.1) and its high liner shipping connectivity is reflected in the region's high contribution to containerized port throughput. In 2018, ports in developing economies in Asia and Oceania handled 485 million TEUs of containers, accounting for 61 per cent of world port container traffic. The shares of developing economies in America (7 per cent) and Africa (4 per cent) were much smaller. Developed economies accounted for about 25 per cent and transition economies for less than one per cent.

The economy that recorded most port calls of ships, including ferries, roll-on roll-off and passenger ships, in 2018, was Norway.¹

¹ For further analyses on that topic, see UNCTAD (2019c).



Developing economies in Asia and Oceania handled 61% of world port container traffic

For references, see UNCTAD Handbook of Statistics 2019, annex 6.4.

Table 1

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

		Economy (Ranked by 2019 value)	2009	2014	2018	2019
	1.	United States of America	78	88	91	90
	2.	Belgium	85	79	88	88
Northern America and Europe	3.	Netherlands	81	82	89	88
	4.	United Kingdom	77	77	89	85
	5.	Spain	76	83	86	84
	1.	Panama	32	42	50	49
	2.	Mexico	35	39	46	45
Latin America and the Caribbean	3.	Colombia	29	39	48	45
	4.	Peru	21	32	39	39
	5.	Dominican Republic	25	28	40	39
	1.	Egypt	46	57	62	67
	2.	Могоссо	37	58	65	58
Africa	3.	South Africa	33	38	38	35
	4.	Djibouti	22	21	35	31
	5.	Тодо	14	19	32	29
	1.	China	117	135	151	152
	2.	Singapore	84	94	111	108
Asia	3.	Korea, Republic of	75	94	102	105
	4.	Malaysia	78	91	94	94
	5.	China, Hong Kong SAR	89	93	94	89
	1.	Australia	31	34	34	34
	2.	New Zealand	23	24	23	32
Oceania	3.	Papua New Guinea	11	12	13	13
	4.	Fiji	14	14	13	11
	5.	New Caledonia	14	14	12	11

Note: Beginning of year figures.



Table 2

Time at port, by market segment, in the top 20 economies by port call, 2018

Economy	Number of arrivals	Median time at port (days)							
		All market segments	Wet bulk	Container ship	Dry breakbulk	Dry bulk	LPG carriers	LNG carriers	
1 Norway	524 469	0.4	0.6	0.3	0.3	0.9	0.8	0.3	
2 United States of America ^a	280 332	1.4	1.6	1.0	1.8	1.8	2.0	1.3	
3 Japan	265 518	0.4	0.3	0.4	1.1	0.9	0.3	1.0	
4 China	240 385	1.0	1.1	0.6	1.2	2.0	1.0	1.2	
5 Italy	229 930	1.3	1.3	0.8	1.9	3.6	1.4		
6 United Kingdom ^b	193 462	1.1	1.1	0.7	1.5	2.7	1.1	1.4	
7 Turkey	184 169	1.2	1.1	0.6	1.5	4.0	1.4	1.3	
8 Greece	155 072	0.7	0.5	1.0	1.1	0.4	0.9	1.0	
9 Indonesia	150 429	1.3	1.3	1.1	1.3	3.6	1.1	1.4	
10 Spain	139 717	0.9	0.8	0.7	1.1	2.3	1.0	1.1	
11 Netherlands	123 726	0.6	0.5	0.8	0.4	0.8	0.9	1.3	
12 Denmark	113 642	0.7	0.7	0.5	0.8	0.9	1.1		
13 Germany	106 613	0.6	0.4	0.8	0.5	2.5	0.8		
14 Canada	86 533	0.7	1.1	1.5	0.3	0.3			
15 Russian Federation	81 187	1.3	1.0	1.4	1.6	2.5	1.3	1.1	
16 Sweden	79 238	0.8	0.7	0.6	1.0	0.5	0.8	0.6	
17 Korea, Republic of	71 602	0.8	0.8	0.6	1.3	2.3	0.7	1.0	
18 France ^c	68 739	1.1	1.1	0.8	1.5	3.1	1.1	1.2	
19 Croatia	68 378	1.2	1.0	0.6	2.6	1.8			
20 Australia	62 029	1.5	1.3	1.2	1.8	1.7	0.9	1.2	

^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.

° Excluding French Guiana, Guadeloupe, Martinique, Mayotte, Monaco and Reunion.

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

Table 3

Liner shipping bilateral connectivity indices of the world's seven most connected economies

Economy (Ranked by LSCI 2019)	Year	LSCI (China 2006=100)	Liner shipping bilateral connectivity index vis-à-vis							
			China	Singapore	Korea, Rep. of	Malaysia	United States of America	China, Hong Kong SAR	Belgium	
China	2014	135	_	0.747	0.816	0.777	0.692	0.811	0.690	
	2019	152	_	0.786	0.853	0.755	0.679	0.752	0.716	
Singapore	2014	94		_	0.668	0.773	0.608	0.686	0.645	
	2019	108		_	0.748	0.791	0.630	0.669	0.698	
Korea, Republic of	2014	94			_	0.698	0.644	0.727	0.619	
	2019	105			_	0.709	0.655	0.702	0.659	
Malaysia	2014	91				_	0.600	0.732	0.654	
	2019	94				_	0.585	0.646	0.651	
United States of America	2014	88					_	0.642	0.636	
	2019	90					-	0.594	0.680	
China, Hong Kong SAR	2014	93						_	0.644	
	2019	89						_	0.627	
Belgium	2014	79							_	
	2019	88								