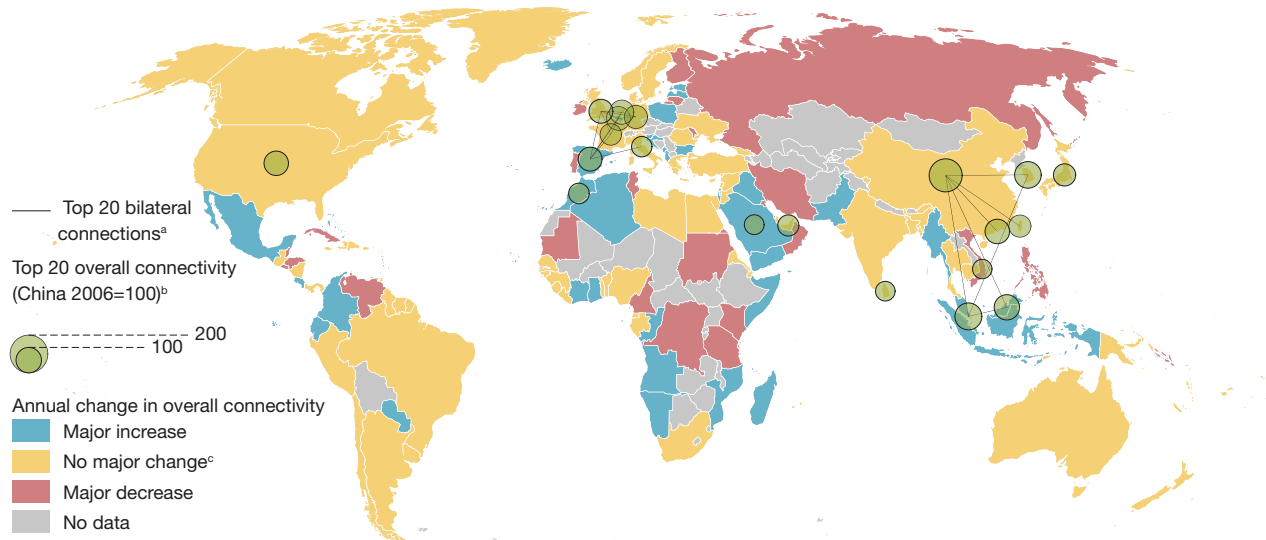




# Fact sheet #15: Maritime transport indicators

Map 1 | Liner shipping connectivity, 2020



<sup>a</sup> As indicated by the LSBCI 2019.  
<sup>b</sup> As indicated by the LSCI.  
<sup>c</sup> Change of less than 5 per cent compared to the value in the previous year.

## 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.

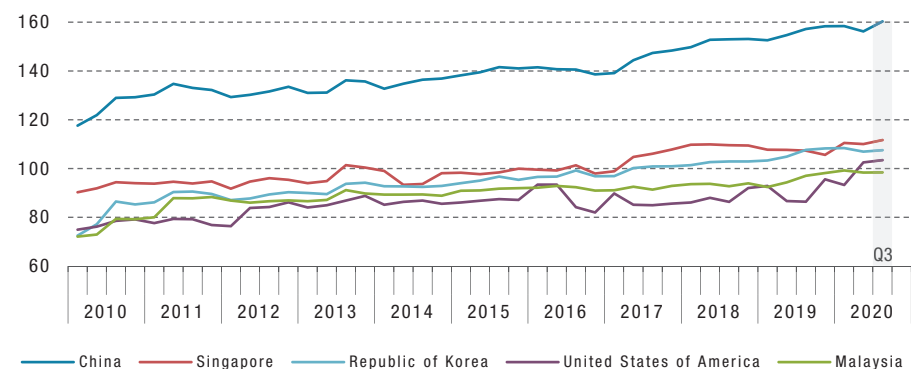
The number of port calls and the time spent in ports are derived from combining automatic identification system data with port mapping intelligence. These data cover ships of 1000 gt and above.

## Liner shipping connectivity throughout the world

In the third quarter of 2020, the economy best connected to the global liner shipping network, as measured by the LSCI, was China. Singapore, the Republic of Korea, the United States of America and Malaysia followed next in the rankings. Sub-regional leaders included: the United Kingdom, the Netherlands and Belgium in Europe; Panama, Colombia and Mexico in Latin America and the Caribbean; Egypt, Morocco and South Africa in Africa; and Sri Lanka and India in South Asia. In 2019, all top-20 bilateral connections were intra-regional, namely within Europe and within Eastern and South-Eastern Asia.

Over the last ten years, the rank order among the most connected economies remained almost unchanged, with China far ahead of the others. During the last year, the United States of America showed a fast increase in its connectivity, allowing the country to move one rank up, before Malaysia.

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

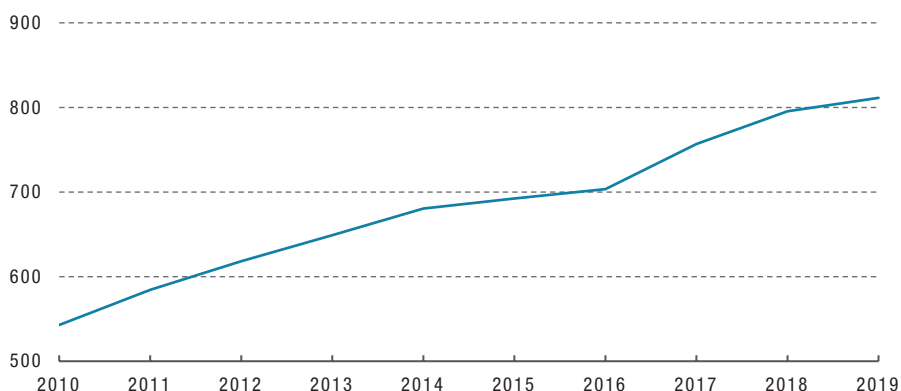




## Port container traffic

In 2019, 811 million TEUs of containers were handled in ports worldwide. World container port throughput grew by 2 per cent between 2018 and 2019. Thus, further momentum was lost – in tandem with world seaborne trade (see UNCTAD Handbook of Statistics 2020, section 5.1) – after a year of firm growth (+5.1 per cent) in 2018.

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



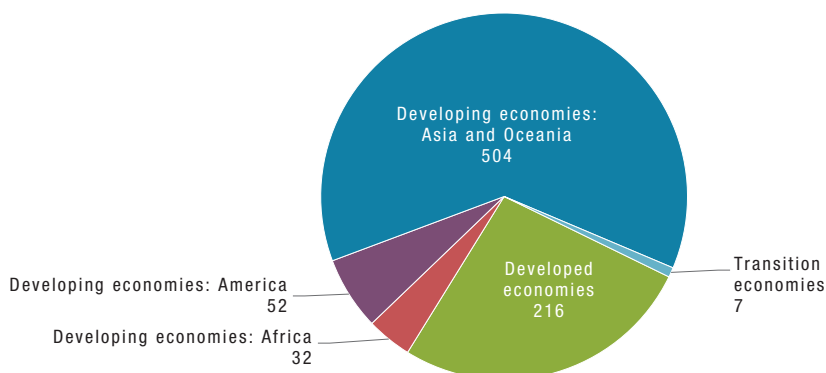
Asia's role as a main port loading and unloading region (see UNCTAD Handbook of Statistics 2020, section 5.1) and its high liner shipping connectivity are reflected by the region's high contribution to containerized port throughput. In 2019, ports in developing economies in Asia and Oceania handled 504 million TEUs of containers, accounting for 62 per cent of world port container traffic. The shares of developing America and developing Africa were less than 10 per cent each. Developed economies accounted for 27 per cent.

## Port calls

The economy that recorded most port calls of ships in 2019 was Norway. On average, cargo-carrying ships departed from Norwegian ports within one half day after their arrival.<sup>1</sup>

<sup>1</sup> For further analyses on that topic, see UNCTAD (2020d).

**Figure 3** | Containerized port traffic by group of economies, 2019  
(Millions of twenty-foot equivalent units)



For references, see UNCTAD Handbook of Statistics 2020, annex 6.4.

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



**Bilateral connectivity is highest within continents, rather than between**



**Growth in container port throughput decelerated in 2019: +2%**



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





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

	Economy (Ranked by Q3 2020 value)	Q1 2010	Q1 2015	Q1 2019	Q1 2020	Q2 2020	Q3 2020
<b>Northern America and Europe</b>	1. United States of America	75	86	93	93	93	103
	2. United Kingdom	80	85	87	90	90	90
	3. Netherlands	80	81	89	92	92	90
	4. Belgium	79	84	85	89	89	88
	5. Spain	74	80	84	89	89	88
<b>Latin America and the Caribbean</b>	1. Panama	33	42	47	49	49	51
	2. Colombia	29	40	45	48	48	49
	3. Mexico	32	41	45	49	49	48
	4. Peru	23	31	39	40	40	39
	5. Ecuador	21	22	33	39	39	39
<b>Africa</b>	1. Egypt	45	57	64	61	61	68
	2. Morocco	45	58	62	69	69	67
	3. South Africa	32	38	40	40	40	42
	4. Ghana	20	22	20	37	37	40
	5. Togo	15	26	35	35	35	36
<b>Asia</b>	1. China	118	138	153	158	158	160
	2. Singapore	90	98	108	110	110	112
	3. Korea, Republic of	73	94	103	108	108	108
	4. Malaysia	72	91	92	99	99	98
	5. China, Hong Kong SAR	88	92	89	94	94	93
<b>Oceania</b>	1. Australia	29	33	34	34	34	37
	2. New Zealand	19	22	29	29	29	29
	3. French Polynesia	10	9	10	14	14	14
	4. New Caledonia	11	12	11	10	10	11
	5. Papua New Guinea	7	10	11	10	10	11

**Table 2** Time at port, by market segment, in the top 20 economies by port call, 2019

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
1 Norway	586 161	0.4	0.6	0.3	0.3	0.8	0.7	0.3
2 United States of America <sup>a</sup>	290 748	1.4	1.6	1.0	1.8	1.9	2.0	1.3
3 Japan	280 874	0.4	0.3	0.3	1.1	0.9	0.3	1.0
4 China	254 868	1.0	1.1	0.6	1.2	2.0	1.0	1.2
5 Italy	233 081	1.3	1.3	0.9	2.0	3.5	1.4	..
6 Turkey	200 494	1.2	1.2	0.6	1.5	3.6	1.3	1.3
7 United Kingdom <sup>b</sup>	197 893	1.1	1.0	0.7	1.5	2.0	1.1	1.3
8 Indonesia	175 242	1.3	1.2	1.0	1.3	3.3	1.1	1.4
9 Greece	159 583	0.7	0.5	1.1	1.1	0.3	0.9	1.1
10 Spain	142 773	0.9	0.9	0.7	1.2	1.9	1.0	1.0
11 Netherlands	124 059	0.6	0.5	0.8	0.4	0.6	0.9	1.1
12 Denmark	113 170	0.8	0.7	0.5	0.9	0.8	1.0	..
13 Germany	108 634	0.5	0.4	0.7	0.3	2.4	0.7	..
14 Canada	104 330	0.8	1.1	1.5	0.4	0.4	1.6	..
15 Korea, Republic of	95 992	0.8	0.7	0.6	1.2	2.0	0.8	1.0
16 Sweden	78 766	0.8	0.7	0.6	1.1	0.4	0.9	..
17 France <sup>c</sup>	72 014	1.1	1.0	0.7	1.6	3.0	1.1	1.1
18 Russian Federation	71 412	1.3	1.0	1.3	1.6	2.2	1.2	1.1
19 Croatia	71 023	1.3	1.1	0.7	2.7	2.5	..	..
20 Australia	66 076	1.4	1.3	1.2	1.7	1.6	0.9	1.2

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

<sup>a</sup> Puerto Rico and the United States Virgin Islands are not considered in median time at port.

<sup>b</sup> The Channel Islands and Isle of Man are not considered in median time at port.

<sup>c</sup> The French overseas departments are not considered in median time at port.

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

Economy (Ranked by LSCI 2020)	Year	LSCI (China Q1 2006=100)	LSBCI vis-à-vis ...						
			China	Singapore	Korea, Rep. of	Malaysia	China, Hong Kong SAR	United States of America	Netherlands
China	2015	138	–	0.780	0.816	0.769	0.835	0.685	0.689
	2020	158	–	0.786	0.853	0.755	0.752	0.679	0.694
Singapore	2015	98	–	–	0.714	0.800	0.734	0.614	0.657
	2020	110	–	–	0.748	0.791	0.669	0.630	0.677
Korea, Republic of	2015	94	–	–	–	0.696	0.746	0.640	0.650
	2020	108	–	–	–	0.709	0.702	0.655	0.669
Malaysia	2015	91	–	–	–	–	0.745	0.619	0.647
	2020	99	–	–	–	–	0.646	0.585	0.644
China, Hong Kong SAR	2015	92	–	–	–	–	–	0.647	0.653
	2020	94	–	–	–	–	–	0.594	0.617
United States of America	2015	86	–	–	–	–	–	–	0.659
	2020	93	–	–	–	–	–	–	0.660
Netherlands	2015	81	–	–	–	–	–	–	–
	2020	92	–	–	–	–	–	–	–

Note: The LSBCI of 2020 is represented by previous year figures.