Concepts and definitions

The UNCTAD liner shipping connectivity index (LSCI) is an indicator of a country’s position within the global liner shipping networks. It is calculated from data on the world’s container ship deployment: 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 that also take into account the number of transshipments required to trade as well as the number of options available to trade with only one transshipment.

Port container traffic is measured in twenty-foot equivalent units (TEU). A TEU represents the volume of a standard 20 feet long intermodal container used for loading, unloading, repositioning and transshipment.

Liner shipping connectivity throughout the world

The economy best connected to the global liner shipping network in 2016 was China, followed by Singapore, the Republic of Korea, Malaysia, Hong Kong SAR, the United Kingdom and the United States of America. Sub-regional leaders include Panama in Latin America, Morocco in Africa, and Sri Lanka in South Asia. The Russian Federation is the best connected transition economy. Within Europe and Eastern and South-Eastern Asia, economies are particularly closely connected with each other by shipping lines.

Trends in port container traffic

In 2016, 701 million TEUs of containers were handled on ports worldwide. World container port throughput has continuously increased over the last six years, since 2014, however, at a slower pace than before.
Trends among the most connected economies

In recent years, liner shipping connectivity of the top-5 economies remained steady, following several years of strong growth. The LSCI of the world leader, China, which from 2004 to 2014 had increased on average by 6.5 points each year, went up by only 2.0 points between 2014 and 2015 and by 3.7 points between 2015 and 2016. Hong Kong SAR (-16.3) and Malaysia (-8.1) recorded a drop in LSCI levels between 2015 and 2016, while the LSCI of the Republic of Korea remained almost unchanged (-0.6).

Port container throughput by group of economies

Asia’s role as an important port loading and unloading area (see UNCTAD Handbook of Statistics 2017, section 5.1) and its high liner shipping connectivity (see above) is also reflected in the region’s high contribution to containerized port throughput. In 2016, ports in developing Asia and Oceania handled 426 million TEUs of containers, thereby accounting for 61 per cent of the 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 one quarter.1

1 For further analyses on that topic, see UNCTAD (2017c).