



Development of the Common Standard Curricula on International Transport and Logistics Basic Training for ASEAN Member States under Sustainable Human Resource Development in Logistics Services



**CHAPTER 5 :
Transport Geography, Shipping Routes & Major Ports**

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Learning Objective

After completion of this training, you should understand the following :

- Transport Geography
- Shipping Routes
- Major Ports



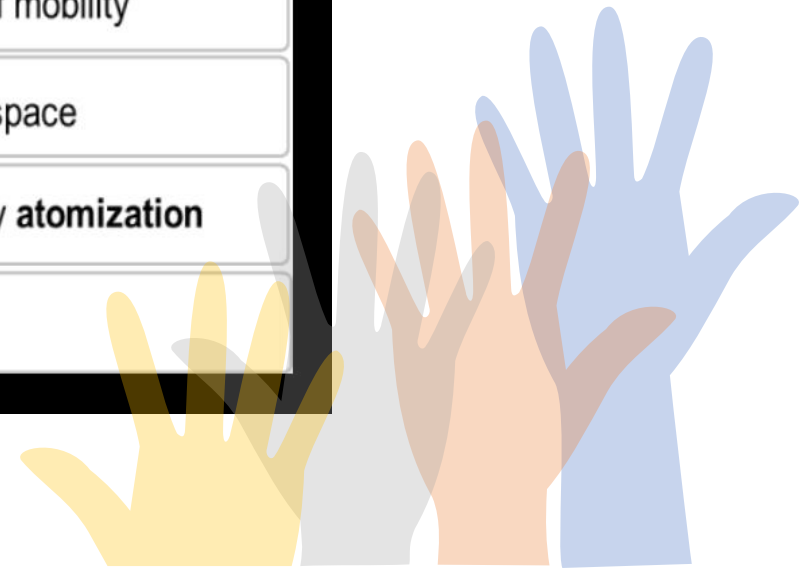
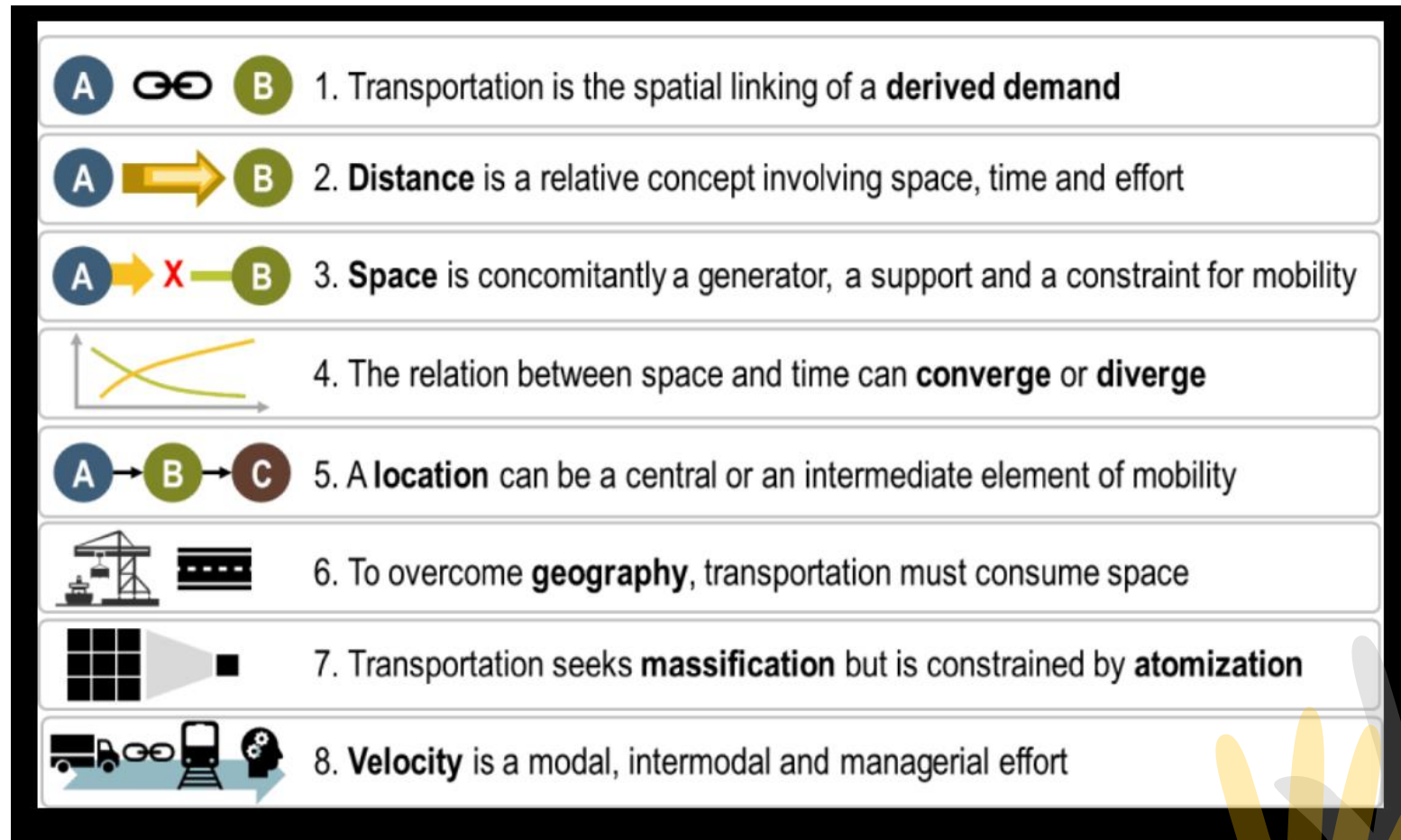
Transport Geography

Transport geography can be understood from a series of [core principles](#) :

1. Transportation is the spatial linking of a derived demand.
2. Distance is a relative concept involving space, time and effort.
3. Space is at the same time the generator, support and a constraint for mobility.
4. The relation between space and time can converge or diverge.
5. A location can be central, where it generates and attract traffic, or an intermediate element where traffic transits through.
6. To overcome geography, transportation must consume space.
7. Transportation seeks massification but is constrained by atomization.
8. Velocity is a modal, intermodal and managerial effort.



Transport Geography



International Maritime Routes

1. International trade routes

- Main traffic routes
- Location of ports
- Transshipment points ; and
- Inland centre

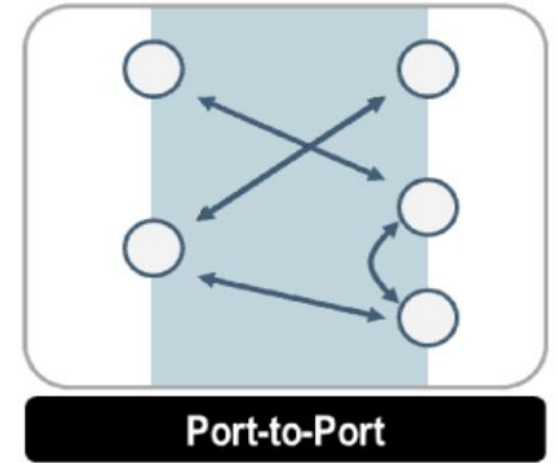


International Maritime Routes

2. Types of maritime routes

1. Port-to-Port

- Involves a more or less regular service between two ports, often moving back and forth with unidirectional freight flows, which involves an empty backhaul. This structure has the disadvantage of offering limited connectivity and mainly represents movements of raw materials such as oil, minerals and grain, between zones of extraction and main consumption markets. They are usually chartered ships that load in one port and discharge their cargo in one to three ports in proximity. Tramp ships (for hire) do not have a specific network structure and service ports according to fluctuations in the demand.

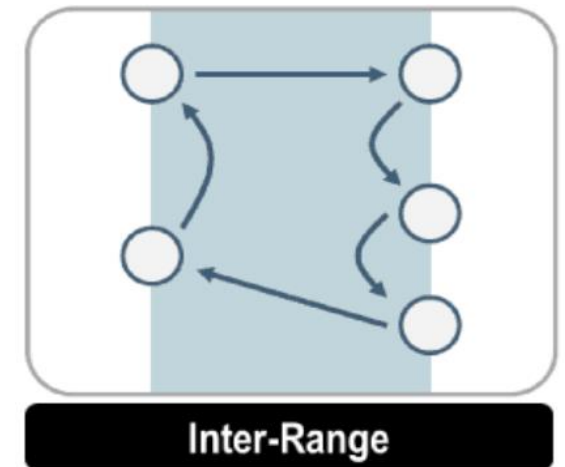


- Point to point services.
- Empty backhauls.
- Common for bulk freight.

International Maritime Routes

2. Inter Range

- This configuration is characterizing containerized cargo and involves a regular itinerary between a sequence of ports where the maritime shipping line seeks to optimize their ship use by electing to service ports having important trade relations. A set of ports along one [range](#) (seaboard) are serviced and then an ocean is crossed with the process being repeated along another range. The most significant [inter-range routes](#) are between East Asia, North America and Western Europe, the three main poles of the global economy.

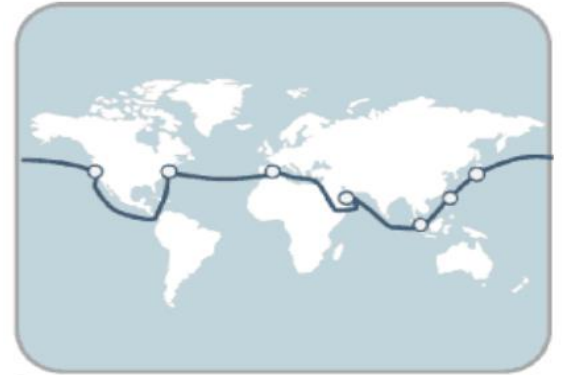


- Sequential shipping service between two maritime ranges (seaboards).
- Balancing the number of port calls and the frequency of services.
- Can rely on transshipment hubs between ranges.

International Maritime Routes

3. Multi Ranges

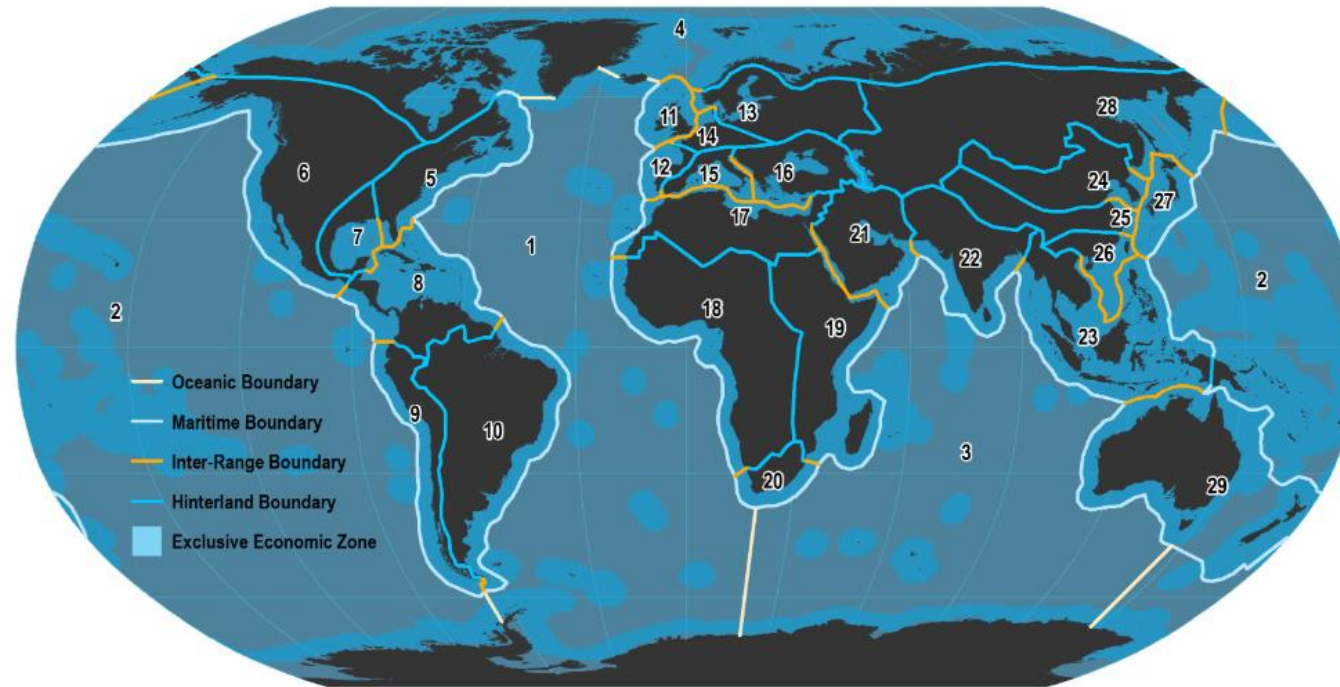
- This configuration is characterizing containerized cargo and involves a regular itinerary between a sequence of ports where the maritime shipping line seeks to optimize their ship use by electing to service ports having important trade relations. A set of ports along one range (seaboard) are serviced and then an ocean is crossed with the process being repeated along another range. The most significant inter-range routes are between East Asia, North America and Western Europe, the three main poles of the global economy.



Multi-Ranges

- Servicing a sequence of ports along several ranges.
- Pendulum services.
- Round-the-world services..
- Small number of ports per range are serviced.
- A series of transshipment hubs connecting with regional services.

Major Maritime Routes



- | | | | | |
|------------------------------|-------------------------------|----------------------------|------------------------|-----------------------------|
| 1. Atlantic | 7. Gulf Coast | 13. Baltic | 19. East African Coast | 25. Central China |
| 2. Pacific | 8. Caribbean Basin | 14. Northern Europe | 20. South Africa | 26. Southern China / Taiwan |
| 3. Indian | 9. South American West Coast | 15. Western Mediterranean | 21. Middle East | 27. Japan |
| 4. Arctic | 10. South American East Coast | 16. Eastern Mediterranean | 22. South Asia | 28. Russian Far East |
| 5. North American East Coast | 11. British Isles | 17. Southern Mediterranean | 23. Southeast Asia | 29. Oceania |
| 6. North American West Coast | 12. Europe Atlantic | 18. West African Coast | 24. Yellow Sea | |

Major Shipping Routes

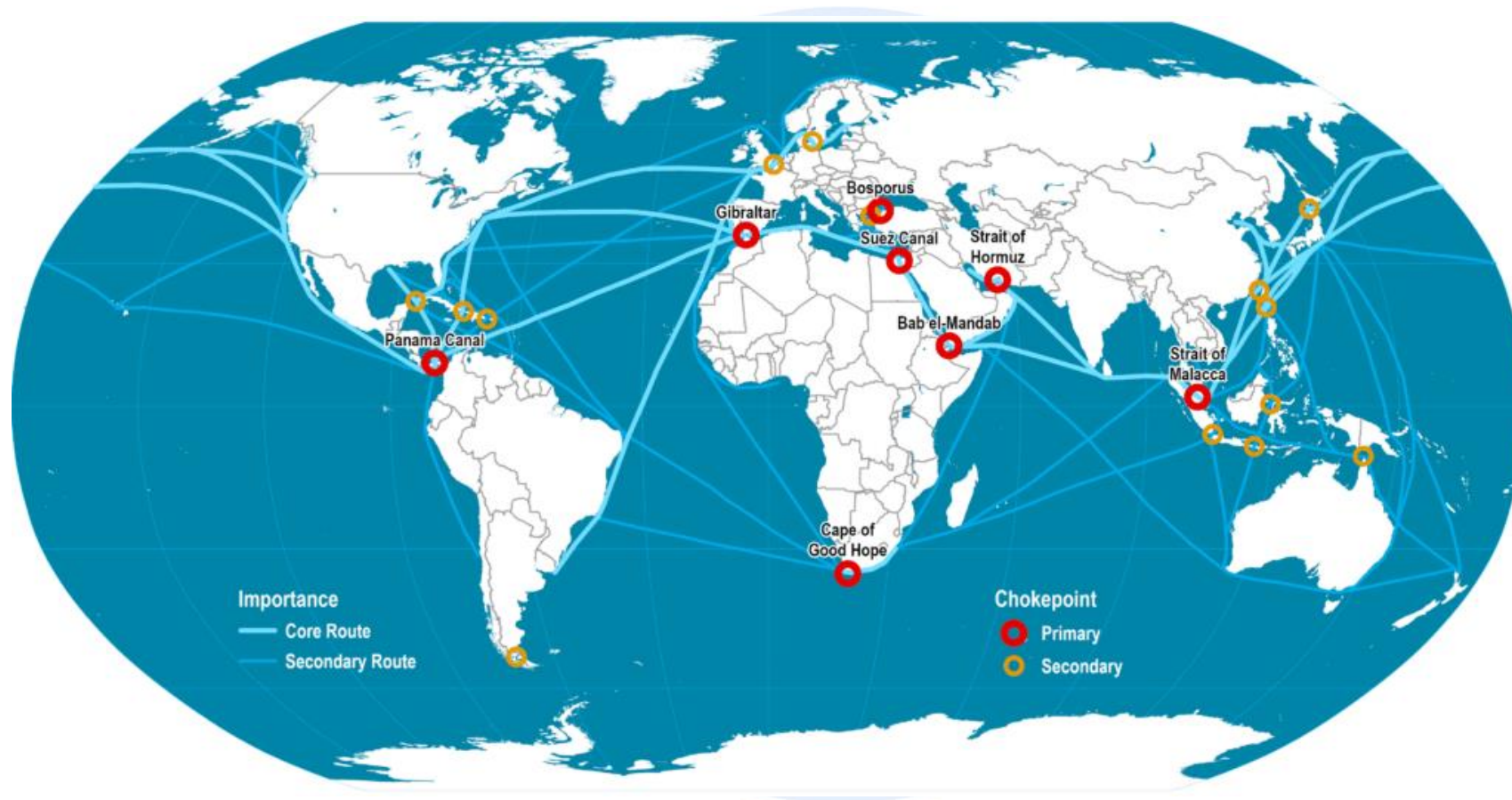
The major shipping routes around the world include :

- Far East to Europe
- Trans – Atlantic
- Trans – Pacific
- Far East to Mediterranean

The two routes that are considered the most important by the major shipping lines are the Far East – Europe and the USA trade routes.



Shipping Routes



Shipping Routes

- **Trans-Pacific Eastbound** - East Asia to USA and Canada
- **Trans-Pacific Westbound** - USA/Canada to Asia, Arabian Gulf, Red Sea and Indian Subcontinent
- **Eastern Mediterranean** - Cyprus, Greece, Lebanon, Syria, Israel, Palestine, Turkey, Egypt, Libya, and Jordan
 - ✓ *North-eastern Mediterranean* could sometimes include Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece (usually included within Eastern Mediterranean countries), Slovenia, North Macedonia, Serbia, Kosovo, Montenegro, Romania, and Ukraine

https://en.wikipedia.org/wiki/Eastern_Mediterranean
- **Western Mediterranean** - the Mediterranean coastlines belonging to Spain, France and Malta, as well as the portion of Italian coastlines along the Thyrrenian Sea and Strait of Sicily.

<https://www.msp-platform.eu/sea-basins/west-mediterranean>



Shipping Routes

- **Greater China** - Mainland China, Macau, Hong Kong and Taiwan
https://en.wikipedia.org/wiki/Greater_China
- **Indian Subcontinent** – Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
https://en.wikipedia.org/wiki/Indian_subcontinent
- **Australasia** - Australia, New Zealand, and some neighbouring islands
<https://en.wikipedia.org/wiki/Australasia>
- **Pacific Islands** - the islands of the Pacific Ocean : Polynesia, Micronesia, and Melanesia.
https://en.wikipedia.org/wiki/List_of_islands_in_the_Pacific_Ocean
- **Caribbean Island** – the Caribbean Sea, its islands (some surrounded by the Caribbean Sea and some bordering both the Caribbean Sea and the North Atlantic Ocean) and the surrounding coasts. The region is southeast of the Gulf of Mexico and the North American mainland, east of Central America, and north of South America.
<https://en.wikipedia.org/wiki/Caribbean>



Top 50 World Ports (2018)

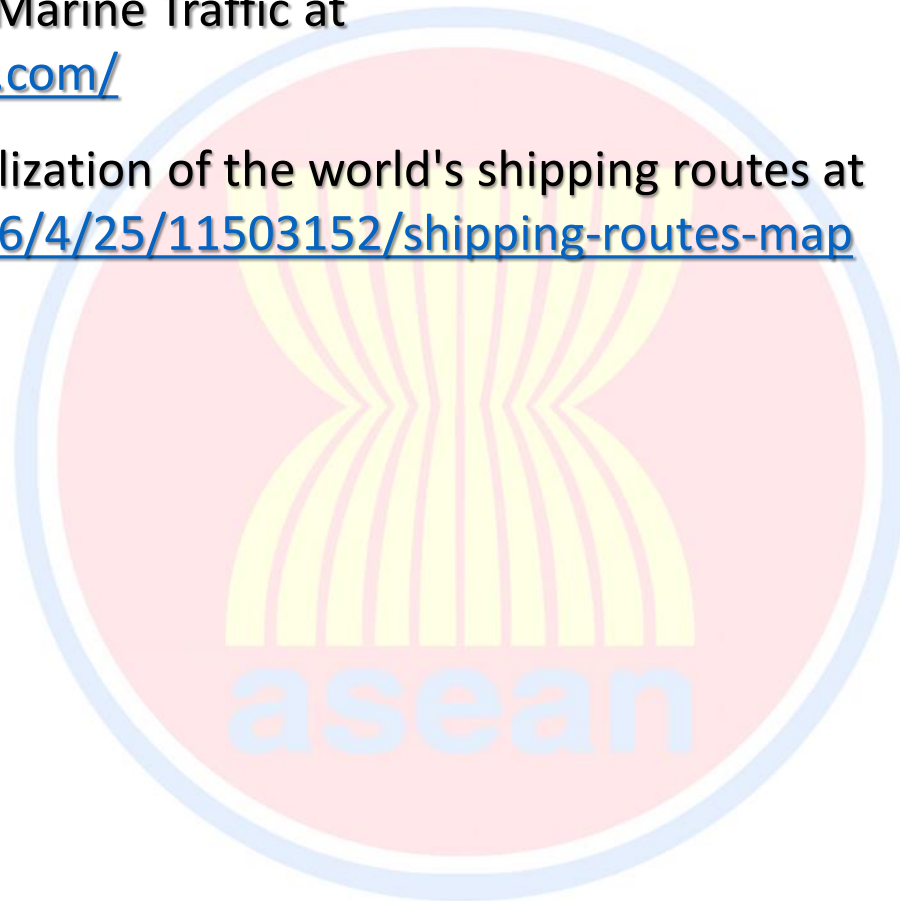
Rank	Port	Volume 2018 (Million TEU)
1	Shanghai, China	42.01
2	Singapore	36.6
3	Shenzhen, China	27.74
4	Ningbo-Zhoushan, China	26.35
5	Guangzhou Harbor, China	21.87
6	Busan, South Korea	21.66
7	Hong Kong, S.A.R, China	19.6
8	Qingdao, China	18.26
9	Tianjin, China	16
10	Jebel Ali, Dubai, United Arab Emirates	14.95
11	Rotterdam, The Netherlands	14.51
12	Port Klang, Malaysia	12.32
13	Antwerp, Belgium	11.1
14	Kaohsiung, Taiwan, China	10.45
15	Xiamen, China	10
16	Dalian, China	9.77
17	Los Angeles, U.S.A	9.46
18	Tanjung Pelepas, Malaysia	8.96

Rank	Port	Volume 2018 (Million TEU)
19	Hamburg, Germany	8.73
20	Long Beach, U.S.A.	8.09
21	Laem Chabang, Thailand	8.07
	Keihin Ports, Japan*	
22	Tanjung Priok, Jakarta, Indonesia	7.64
23	New York-New Jersey, U.S.A.	7.2
24	Colombo, Sri Lanka	7.05
25	Yingkou, China	6.5
26	Ho Chi Minh City, Vietnam	6.33
27	Bremen/Bremerhaven, Germany	5.42
	Hanshin Port, Japan**	
28	Manila, Philippines	5.05
29	Jawaharlal Nehru Port (Nhava Sheva), India	5.05
30	Piraeus, Greece	4.91
31	Algeciras, Spain	4.77
32	Lianyungang, China	4.75
33	Tokyo, Japan	4.57
34	Mundra, India	4.44
35	Savannah, U.S.A	4.35

Rank	Port	Volume 2018 (Million TEU)
36	Jeddah, Saudi Arabia	4.12
37	Santos, Brazil	4.12
38	Rizhao, China	4
39	Colon, Panama	3.89
40	Felixstowe, U.K.	3.85
41	Seattle-Tacoma NW Seaport Alliance, U.S.A.	3.8
42	Dongguan, China	3.5
43	Tanger Med, Morocco	3.47
44	Barcelona, Spain	3.42
45	Vancouver, Canada	3.4
46	Salalah, Oman	3.39
47	Fuzhou, China	3.34
48	Marsaxlokk, Malta	3.31
49	Nanjing, China	3.23
50	Cai Mep, Vietnam	3.2

Reference Links

- Free AIS Ship Tracking of Marine Traffic at <https://www.vesselfinder.com/>
- This is an incredible visualization of the world's shipping routes at <http://www.vox.com/2016/4/25/11503152/shipping-routes-map>





Any Questions ?



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