

Shipping and Connectivity

between China and Southeast Asian Countries

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Haikou, China, 19 Nov. 2018

Shipping and Connectivity

- Shipping and Ports
- Connectivity under BRI
- China and Southeast Asia

Shipping and Connectivity

- Shipping and Ports
- Connectivity under BRI
- China and Southeast Asia

Shipping and Ports

The theme of World Maritime Day for 2017 was to enable us to shine a spotlight on the existing cooperation between ports and ships to maintain and enhance a safe, secure and efficient maritime transportation system.

(Source : IMO Secretary-General Mr. Ki-tack Lim)

Shipping and Ports

World Maritime Day 2017



Shipping and Ports

- Shipping is the most international of all the world's great industries;
- It is also one of the most dangerous.



Shipping and Ports

Shipping integrates with new and advancing technologies

AIS -
Automatic
Identification
Systems



LRIT -
Long
Range
Identification
Tracking

Shipping and Ports



ECDIS -
Electronic
Chart
Display and
Information
Systems

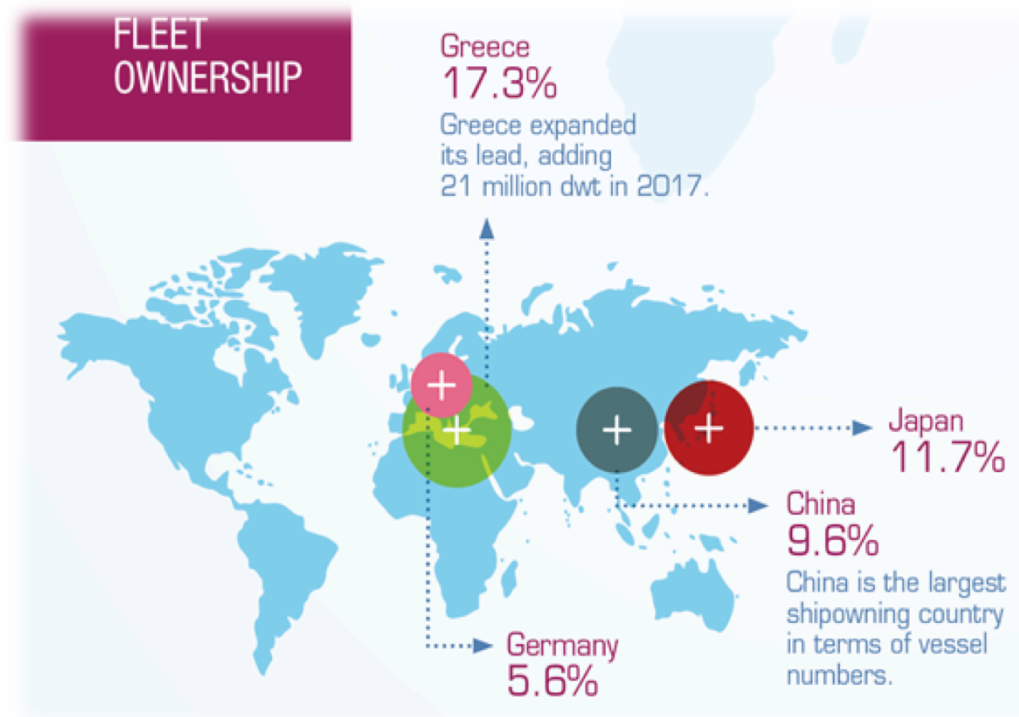
Shipping and Ports

Safety of ships
is vital concern

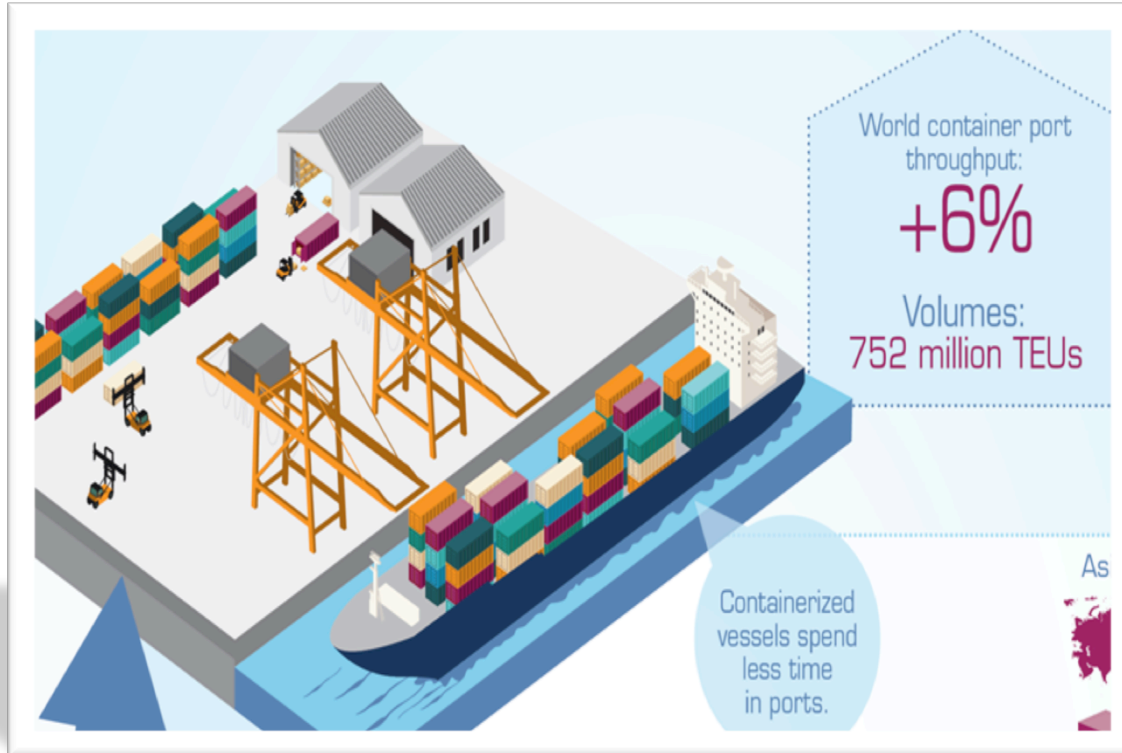


Shipping and Ports

- What does the global shipping look like?



Shipping and Ports



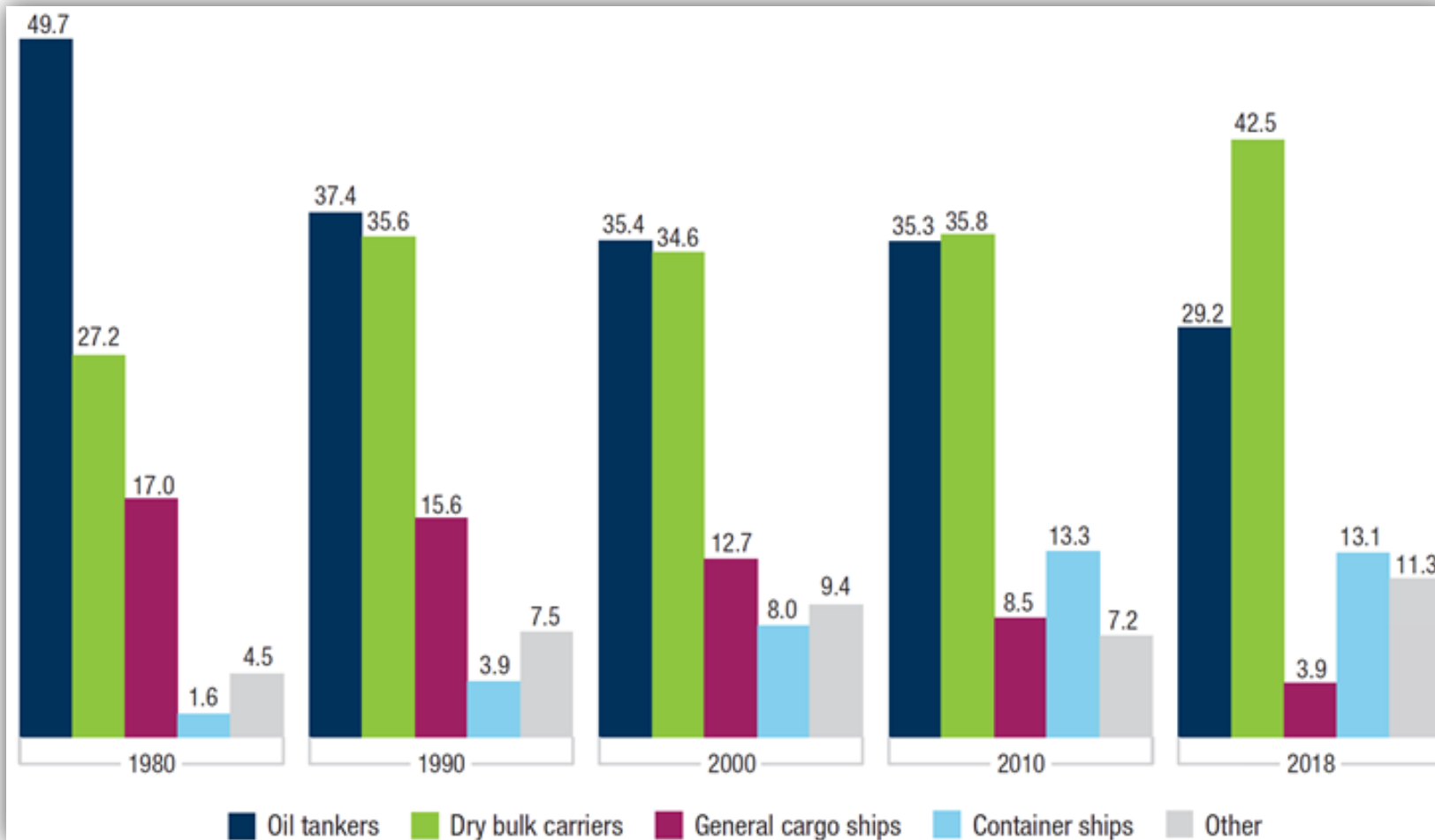
- What are the functions the ports perform?

Shipping and Ports

- How does the global shipping contribute to the world seaborne trade?



Shipping and Ports



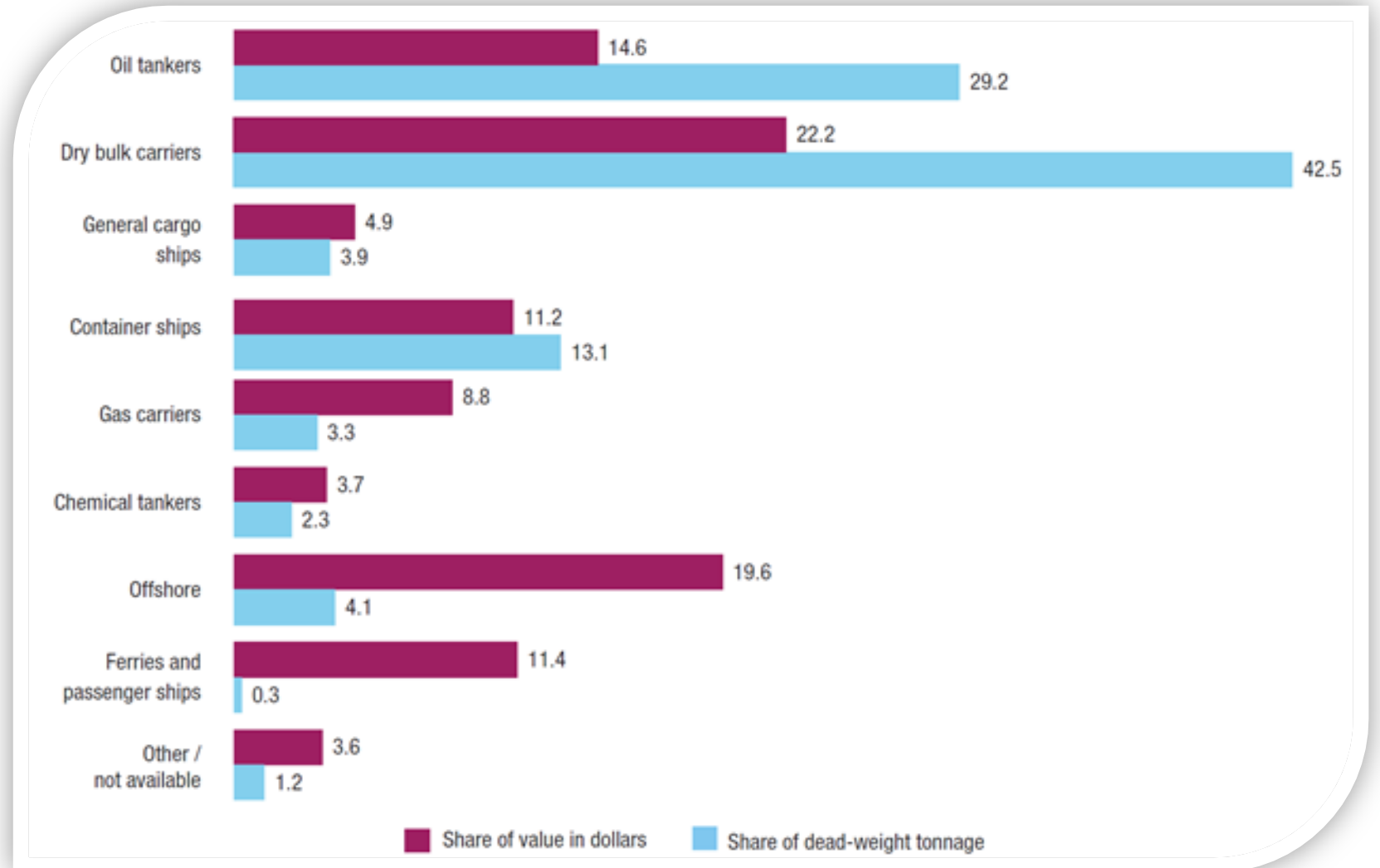
World Fleet 1980-2018

Share in dead-weight tonnage (%)

Shipping and Ports

World Fleet 2018

Principal Vessel Type (%)



Shipping and Ports

	Country or territory	Number of vessels			Dead-weight tonnage (thousands of tons)			
		National flag	Foreign or international flag	Total	National flag	Foreign or international flag	Total	National flag as percentage of total (dead-weight tonnage)
1	Greece	774	3 597	4 371	64 977	265 199	330 176	19.7
2	Japan	988	2 853	3 841	38 053	185 562	223 615	17.0
3	China	3 556	1 956	5 512	83 639	99 455	183 094	45.7
4	Germany	319	2 550	2 869	11 730	95 389	107 119	11.0
5	Singapore	240	2 389	2 629	2 255	101 327	103 583	2.2
6	Hong Kong (China)	95	1 497	1 592	2 411	95 396	97 806	2.5
7	Republic of Korea	801	825	1 626	14 019	63 258	77 277	18.1
8	United States	943	1 128	2 071	13 319	55 611	68 930	19.3
9	Norway	549	1 433	1 982	4 944	54 437	59 380	8.3
10	Bermuda	21	473	494	1 215	53 036	54 252	2.2

World Fleet 2018

Who owns
most ships?
by DWT
Top 10

Shipping and Ports

World Fleet 2018

Top 10 container fleet

Country or territory	20-foot equivalent units	Market share (percentage)	Number of ships	Average age per ship (years)	Size of largest ship (20-foot equivalent units)	Average size per ship (20-foot equivalent unit)
Germany	4 207 388	20.22	1 131	10.6	18 800	3 720
Denmark	2 220 911	10.68	317	10.5	20 568	7 006
China	2 150 700	10.34	485	10.8	19 224	4 434
Greece	1 891 234	9.09	418	11.7	14 424	4 524
Hong Kong (China)	1 583 036	7.61	258	8.8	21 413	6 136
Japan	1 455 580	7.00	278	8.7	20 150	5 236
Switzerland	1 260 807	6.06	207	15.5	14 000	6 091
France	1 038 824	4.99	135	9.4	17 722	7 695
Taiwan Province of China	985 495	4.74	255	13.1	8 626	3 865
United Kingdom	870 632	4.18	199	10.8	15 908	4 375

Shipping and Ports

World Fleet 2018

Top 10 flags of registration by DWT

	Number of vessels	Vessel share of world total (percentage)	Dead-weight tonnage (thousands of tons)	Share of world total dead-weight tonnage (percentage)	Cumulated share of dead-weight tonnage (percentage)	Average vessel size (dead-weight tons)	Dead-weight tonnage change, 2017–2018 (percentage)
Panama	7 914	8.40	335 888	17.46	17.46	42 442	-2.04
Marshall Islands	3 419	3.63	237 826	12.36	29.82	69 560	9.91
Liberia	3 321	3.53	223 668	11.63	41.44	67 350	3.10
Hong Kong (China)	2 615	2.78	181 488	9.43	50.88	69 403	4.60
Singapore	3 526	3.74	127 880	6.65	57.52	36 268	2.93
Malta	2 205	2.34	108 759	5.65	63.18	49 324	7.45
China	4 608	4.89	84 184	4.38	67.55	18 269	6.79
Bahamas	1 418	1.51	76 659	3.98	71.54	54 061	-4.14
Greece	1 343	1.43	72 345	3.76	75.30	53 868	0.14
Japan	5 299	5.63	37 536	1.95	77.25	7 084	7.88

Shipping and Ports

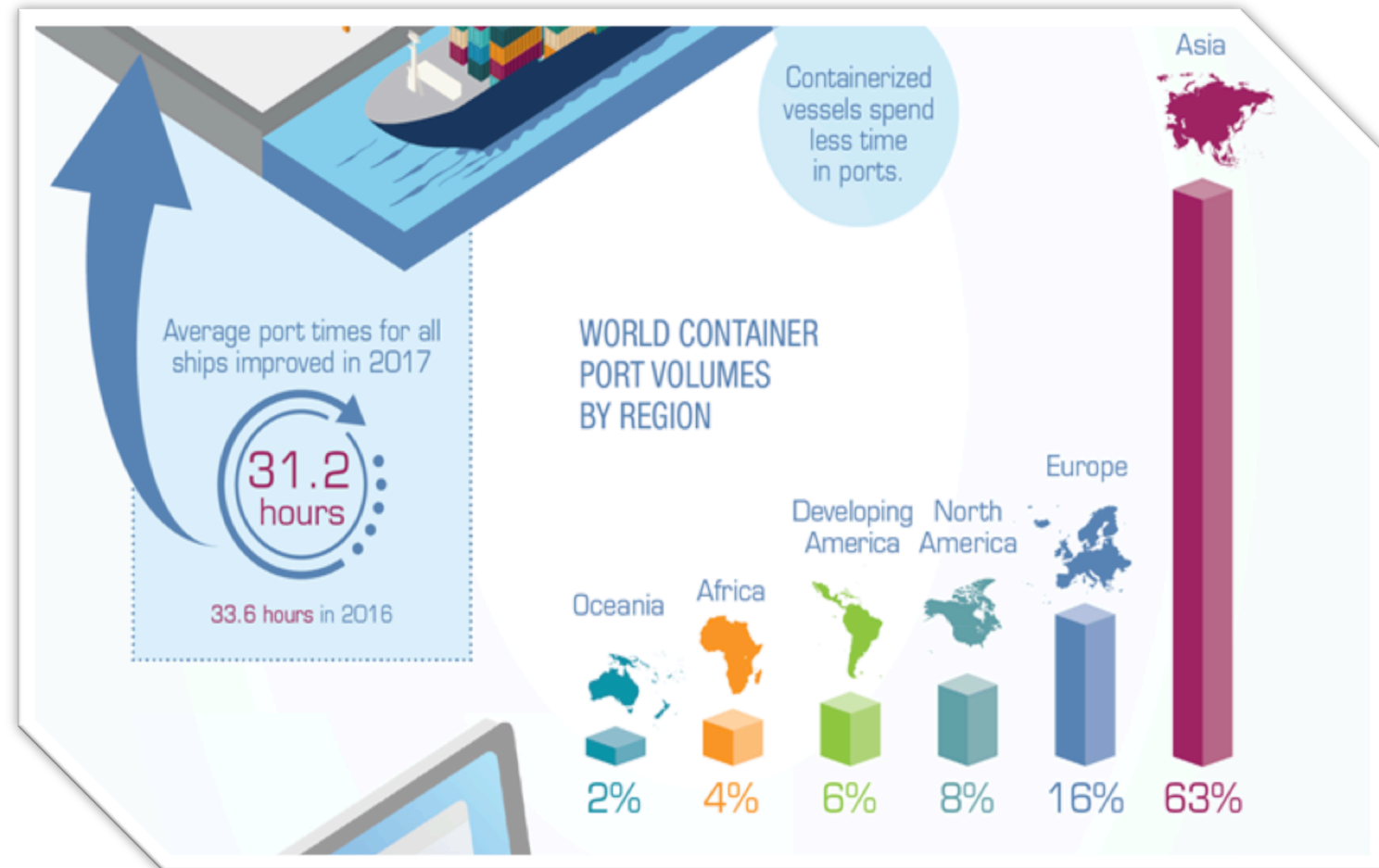
World Fleet 2018

New buildings
by vessel type
and countries of
construction
(K DWT)

	China	Republic of Korea	Japan	Philippines	Rest of world	Total
Oil tankers	5 330	10 859	1 835	472	1 213	19 709
Dry bulk carriers	11 982	640	7 713	480	236	21 052
General cargo ships	588	75	186	—	233	1 082
Container ships	3 105	5 873	1 408	974	451	11 813
Gas carriers	708	3 973	439	52	12	5 185
Chemical tankers	654	6	531	—	137	1 329
Offshore vessels	409	473	145	0	647	1 675
Ferries and passenger ships	166	—	197	1	1 174	1 537
Other	395	609	482	—	121	1 607
Total	23 339	22 509	12 937	1 980	4 224	64 989

Shipping and Ports

World Ports 2018



Shipping and Ports

World Ports 2018

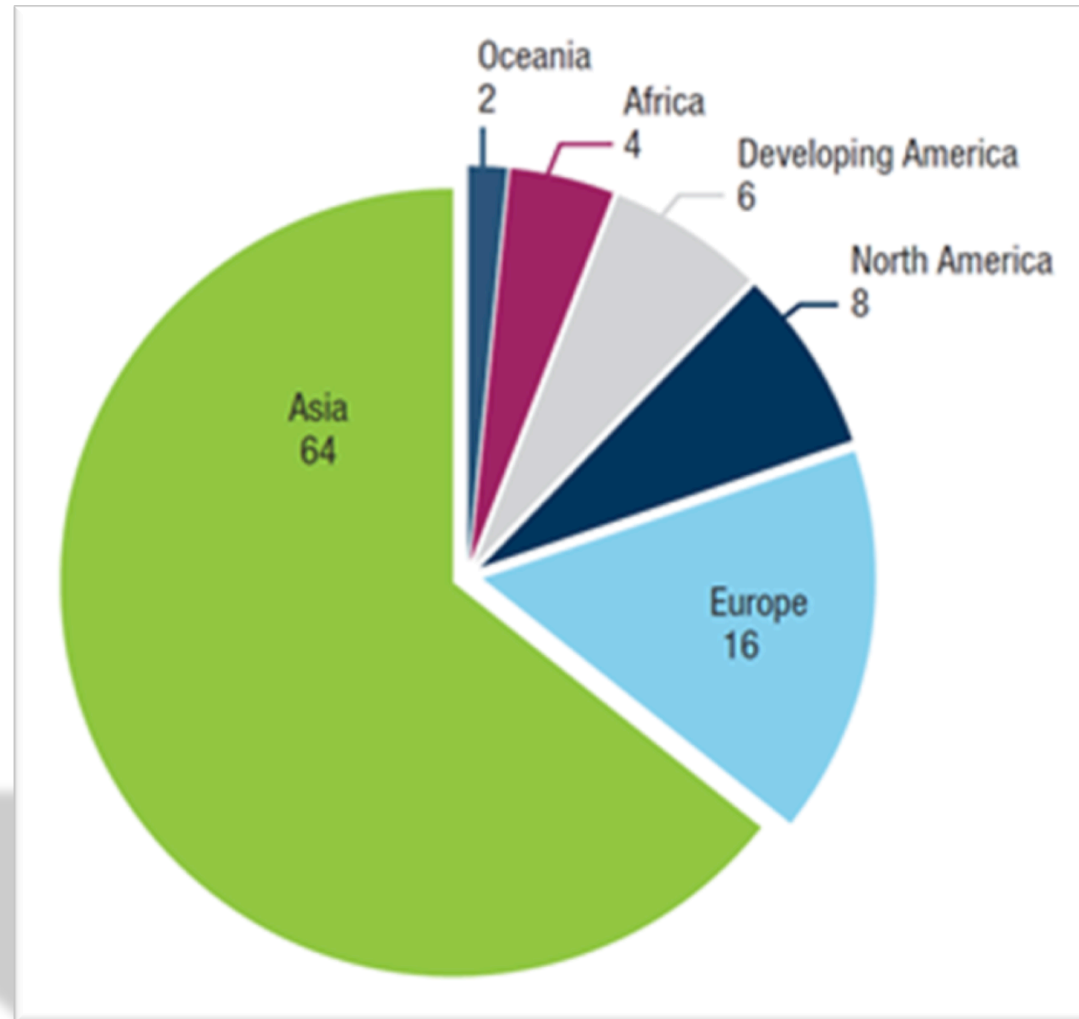
Top 10 ports by cargo throughput (m tons)

Rank 2017	Port	Cargo throughput		Percentage change
		2016	2017	2017-2016
1	Ningbo-Zhoushan	918	1 007	9,7
2	Shanghai	700	706	0,8
3	Singapore	593	626	5,5
4	Suzhou	574	608	5,9
5	Guangzhou	522	566	8,5
6	Tangshan	516	565	9,6
7	Qingdao	501	508	1,4
8	Port Hedland	485	505	4,3
9	Tianjin	549	503	-8,4
10	Rotterdam	461	467	1,3

Shipping and Ports

World Ports 2018

World container
port throughput
percentage share
(20 TEU)



Shipping and Ports

World Ports 2018 Top 10 container ports (20 TEU,%)

Port	Economy	Throughput 2017	Throughput 2016	Percentage change 2016-2017	Rank 2017
Shanghai	China	40 230	37 133	8,3	1
Singapore	Singapore	33 670	30 904	9,0	2
Shenzhen	China	25 210	23 979	5,1	3
Ningbo-Zhoushan	China	24 610	21 560	14,1	4
Busan	Republic of Korea	21 400	19 850	7,8	5
Hong Kong	Hong Kong SAR	20 760	19 813	4,8	6
Guangzhou (Nansha)	China	20 370	18 858	8,0	7
Qingdao	China	18 260	18 010	1,4	8
Dubai	United Arab Emirates	15 440	14 772	4,5	9
Tianjin	China	15 210	14 490	5,0	10

Shipping and Ports

World Ports 2018

Automation trends in ports

Port	Terminal	Operational level of automation ^a
Brisbane, Australia	Container terminals, Fisherman Island Container Terminal	Semi
	Fisherman Island berths 8–10	Fully
Melbourne, Australia	Victoria International Container Terminal	Fully
Sydney, Australia	Sydney International Container Terminals	Semi
	Brotherson Dock North	Fully
Antwerp, Belgium	Gateway	Semi
Qingdao, China	New Qianwan	Fully
Shanghai, China	Yangshan, phase 4	Fully (trial vessels handled end-2017)
Tianjin, China	Dong Jiang	Not confirmed; in development
Xiamen, China	Ocean Gate Container Terminal ^b	Fully (phase 1 operational; phases 2 and 3 in development)
Hamburg, Germany	Altenwerder Container Terminal	Fully
	Burchardkai	Semi

Shipping and Ports

World Ports
2018

Top 10
container ports
by Lloyd's List



Shipping and Ports

World Ports 2018



Shanghai



Singapore



Shenzhen



Ningbo-Zhoushan



Hong Kong



Busan

Shipping and Ports

World Ports 2018



Guangzhou



Qingdao



Dubai



Tianjin

Shipping and Ports

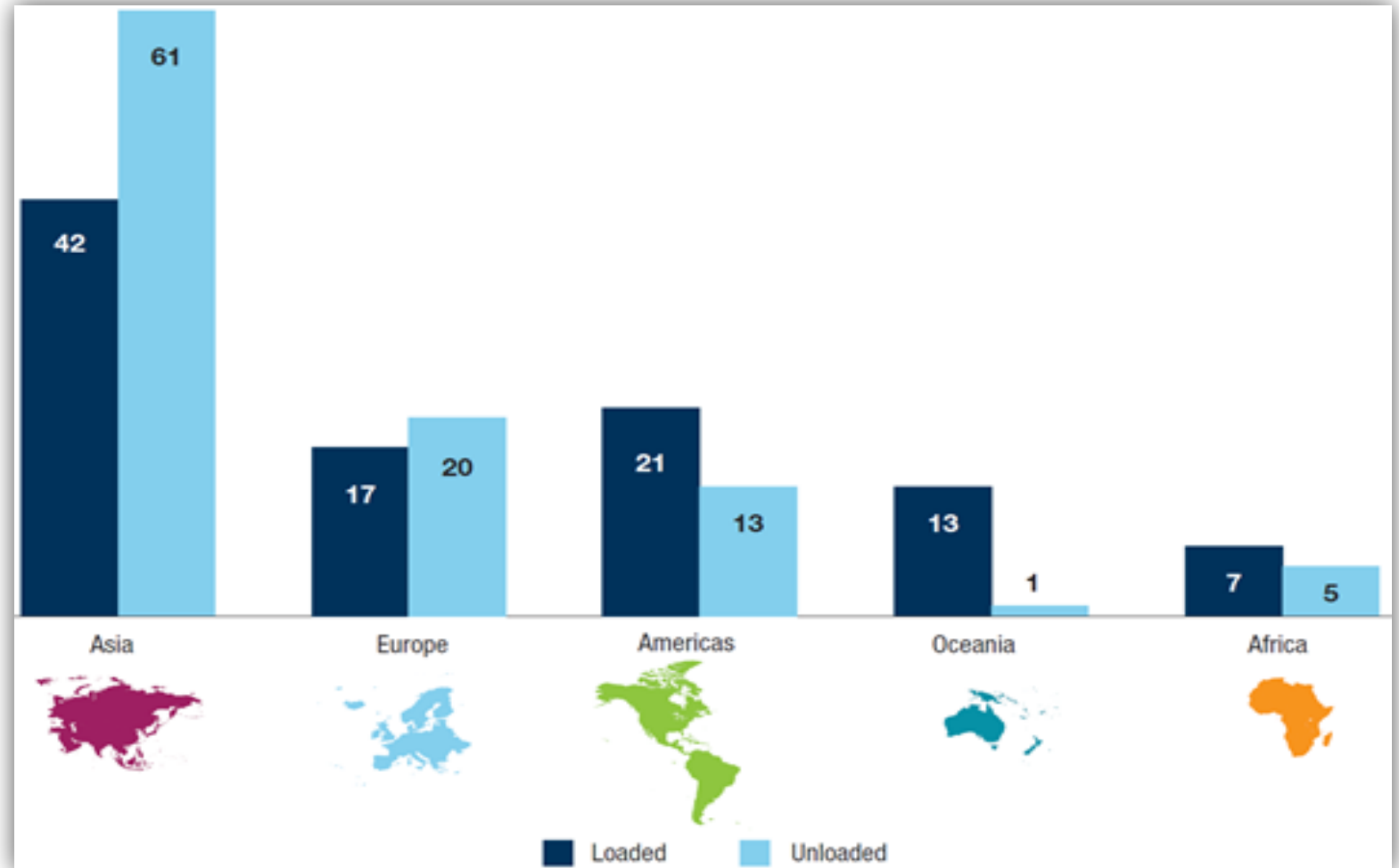
World Seaborn Trade 2017



Shipping and Ports

World Seaborn Trade by Region 2017

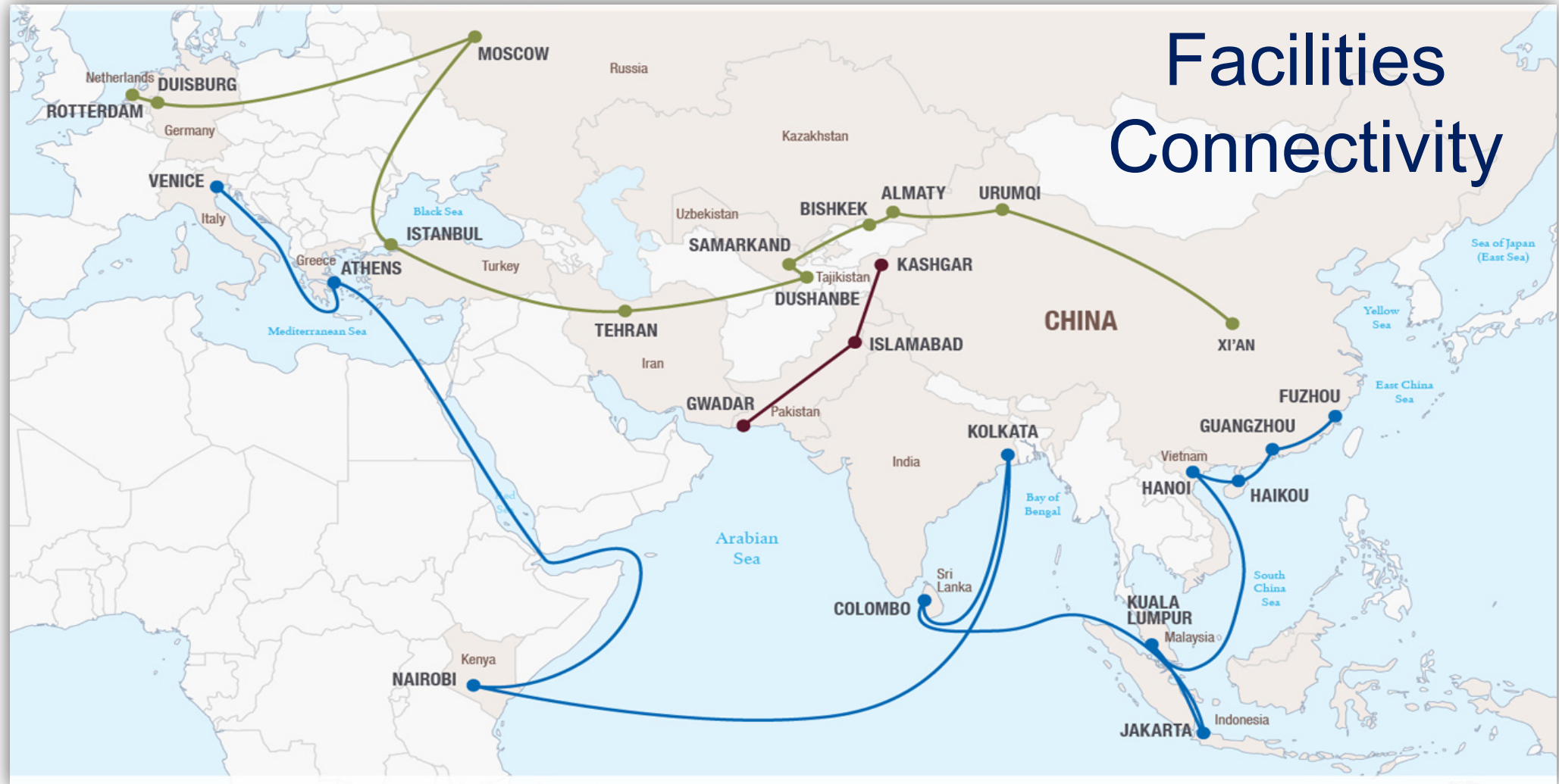
Percentage share in world tonnage



Shipping and Connectivity

- Shipping and Ports
- Connectivity under BRI
- China and Southeast Asia

Connectivity under BRI



Connectivity under BRI

- **Transport connectivity**

- BRI agreements on transport cooperation are signed with 15 countries and 2 international organizations, at BRI Summit 2017.



Consensus

Platform

Foundation

Connectivity under BRI

- Maritime connectivity under BRI ?



Connectivity under BRI



Connectivity under BRI

Global Top 10 Ports

Asia

Top 10	10
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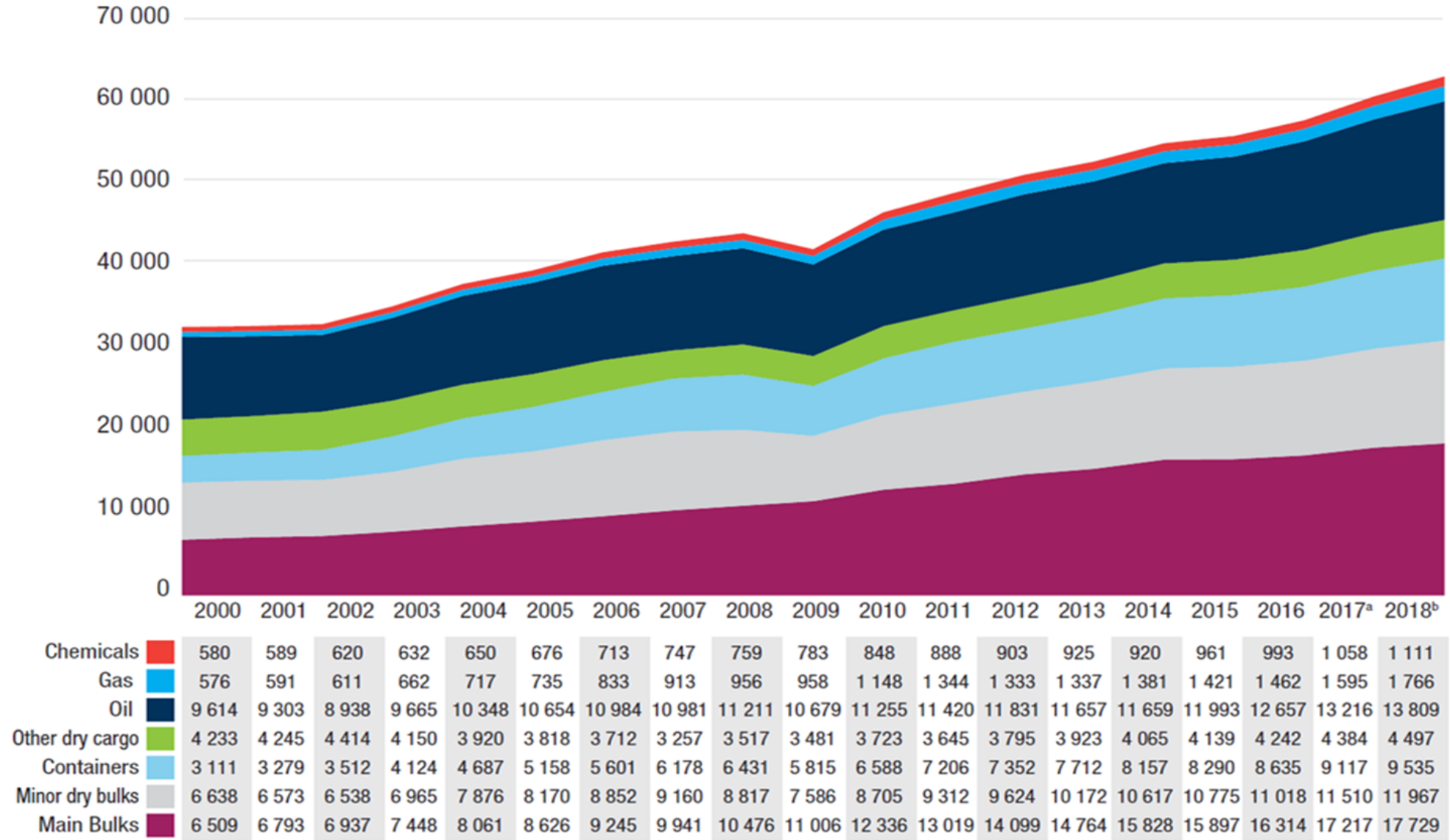
(Source: Lloyd's List)

Asia	
China	7
Republic of Korea	1
Singapore	1
UAE	1

Connectivity under BRI

World Seaborn Trade

in cargo ton-miles,
(B tons miles)
2000-2018



Connectivity under BRI

Vision for Maritime Cooperation under BRI

Principles

- Consensus
- Open and inclusive
- Market-based and multi-stakeholder
- Joint and benefit sharing

Connectivity under BRI

Vision for Maritime Cooperation under BRI

Cooperation Priorities

1 Green development

- marine ecosystem and biodiversity
- regional marine environment
- addressing climate change
- international blue carbon cooperation

Connectivity under BRI

Vision for Maritime Cooperation under BRI

Cooperation Priorities

2 Ocean-based prosperity

- Marine resource utilization
- Marine industry cooperation
- Maritime connectivity
- Maritime transport
- Connectivity of information infrastructure & networks

Connectivity under BRI

Vision for Maritime Cooperation under BRI

Cooperation Priorities

3 Maritime security

- Maritime public service
- Maritime navigation security
- Joint maritime SAR
- Prevent marine disasters
- Maritime law enforcement

Connectivity under BRI

Vision for Maritime Cooperation under BRI

Cooperation Priorities

4 Innovative growth

- Marine scientific R & D
- Marine technology cooperation
- Smart ocean application
- Marine education and exchange
- Ocean culture

Connectivity under BRI

Vision for Maritime Cooperation under BRI

Cooperation Priorities

5 Collaborative governance

- Hi-level dialogue mechanisms
- Mechanisms for blue economy
- Marine spatial planning & application
- Multilateral mechanisms
- Think tanks

Connectivity under BRI



中国远洋海运集团有限公司
CHINA COSCO SHIPPING CORPORATION LIMITED

Excellent global service

Brings network advantage and brand advantage

[More>](#)

The variable deck load of the platform is

15,000 tons

Designed draft is

12,500 feet

Drilling depth is 40,000 feet



Connectivity under BRI



中国远洋海运集团有限公司
CHINA COSCO SHIPPING CORPORATION LIMITED

Total fleet size is more than
100.71 million DWT,
ranking the first in the world
More>

Container fleet capacity is

2.98 million TEU

Ranking the third in the world.

Self-owned dry bulk fleet capacity is 38.55 million DWT, ranking NO.1 in the world.



Connectivity under BRI

COSCO Shipping

- Shipping routes over 160 countries
- Connecting 1500 ports
- 1050 offices in 70 countries
- Employing 20000 overseas staff approx.

Connectivity under BRI

COSCO Shipping owns top container fleet totaling **361** container ships, connecting **85** countries, covering **267** ports, with **355** global routes.



85

国家/地区



267

港口



355

航线



361

船舶



Connectivity under BRI

COSCO Shipping

For BRI connectivity, COSCO Shipping :

- 260 container ships are deployed along BRI countries
- Covering 194 shipping routes
- Operates 21 overseas ports.

Connectivity under BRI

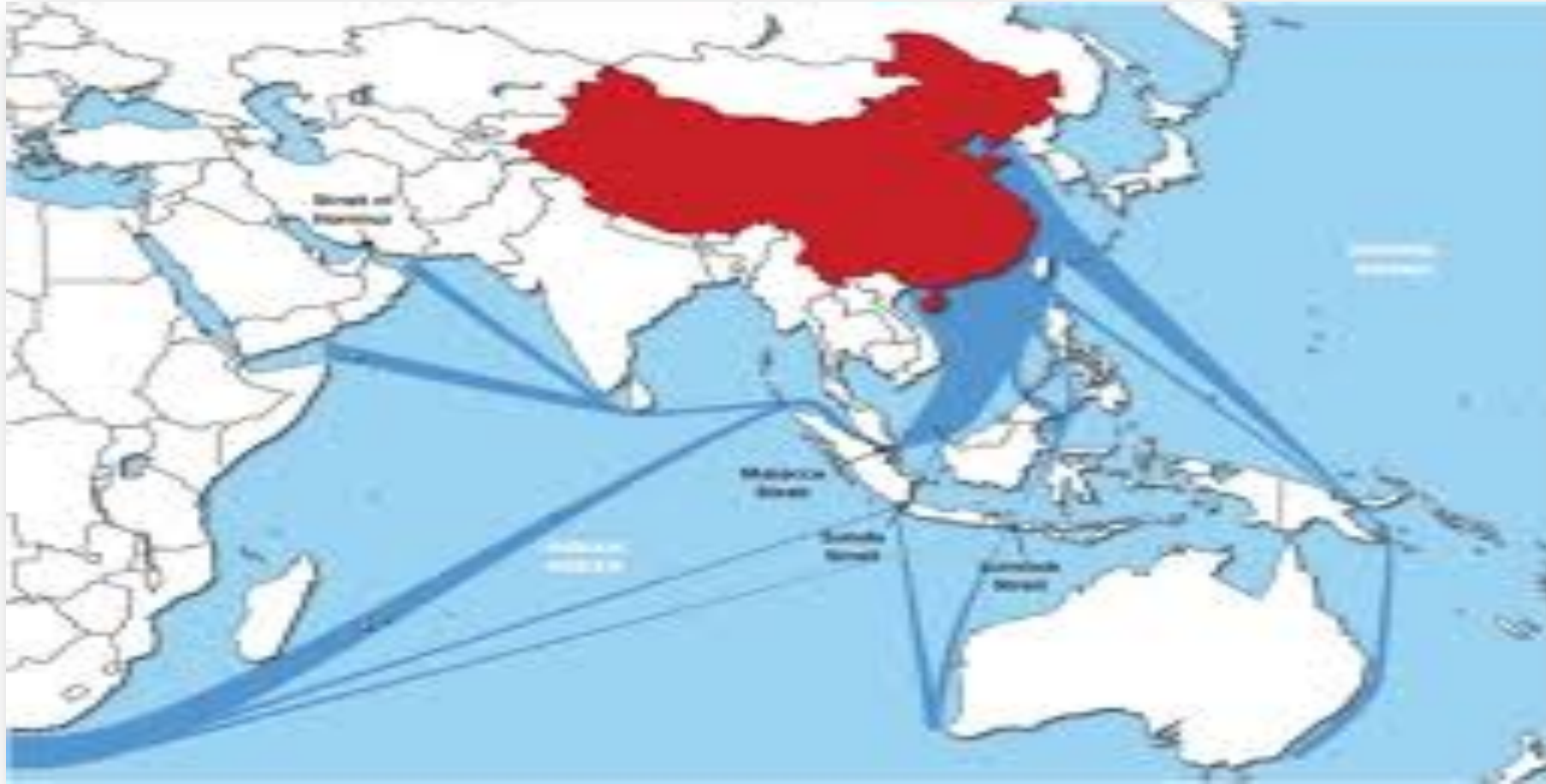


NE Asia to Australia



SE Asia to Australia

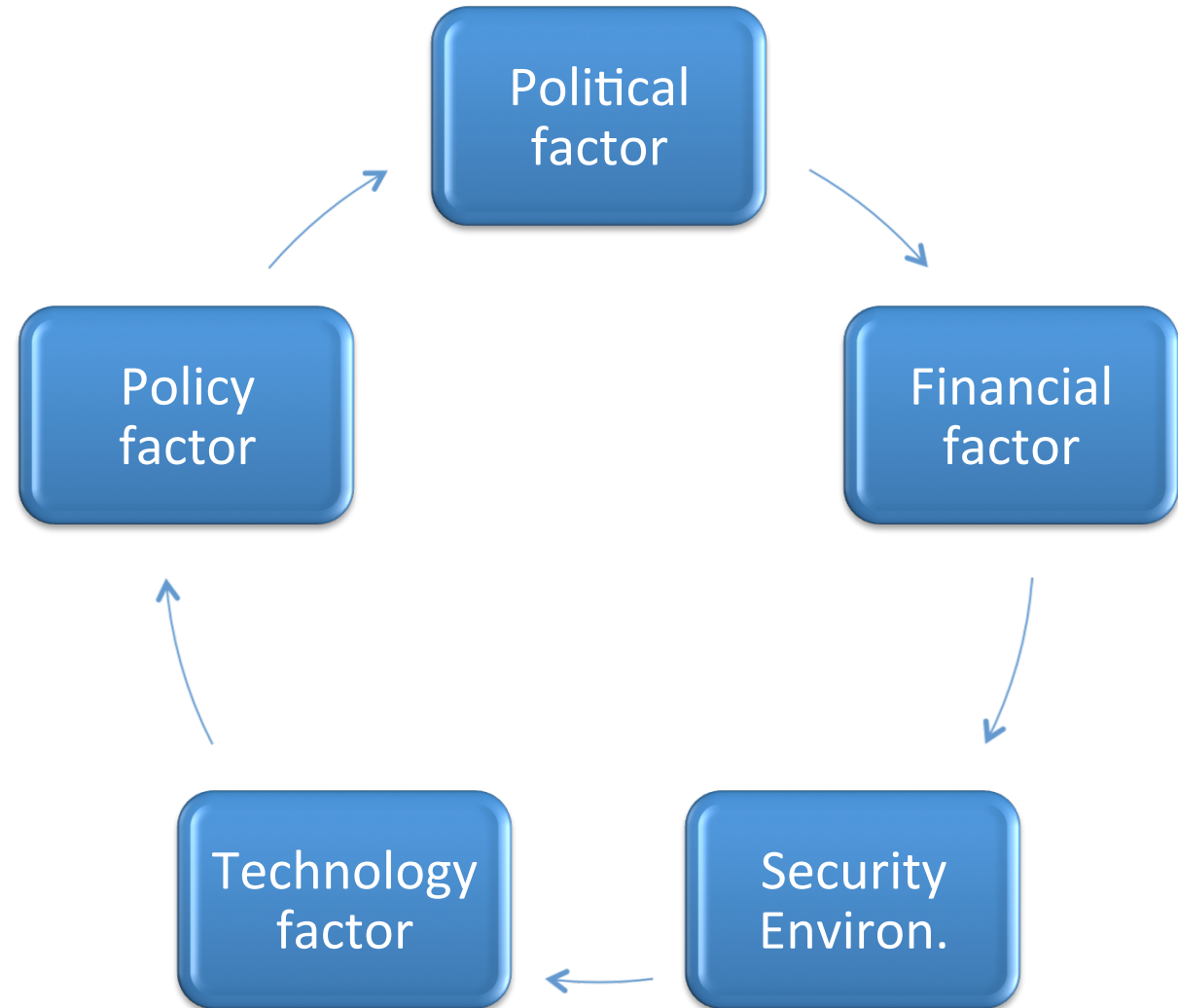
Connectivity under BRI



Maritime Silk Road builds smooth, secure and efficient transport routes connecting major sea ports under BRI.

Connectivity under BRI

What are the main factors that may affect the connectivity ?



Connectivity under BRI

Economic Factors:

- Overall GDP level
- Reliance in foreign trade
- Fund gap in Asian infrastructure construction
- Investment



Connectivity under BRI



Technological Factors:

- Shipping industry
- Challenges from terminal automation
- Main obstacles

Connectivity under BRI

Information sharing

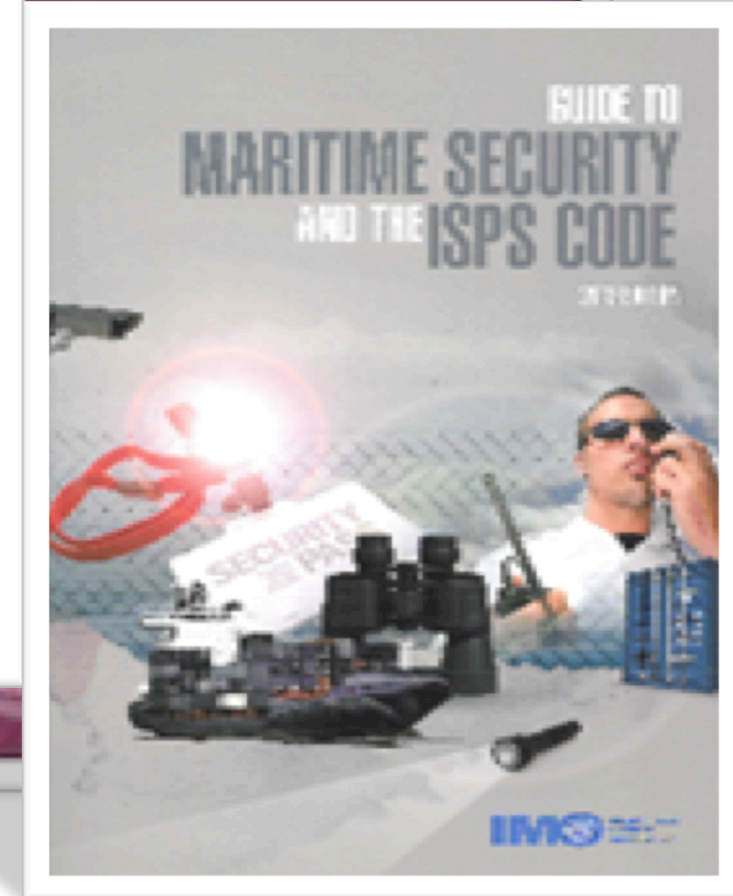
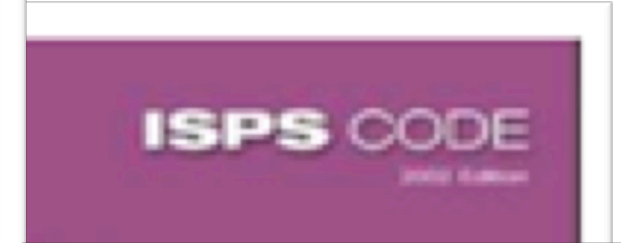
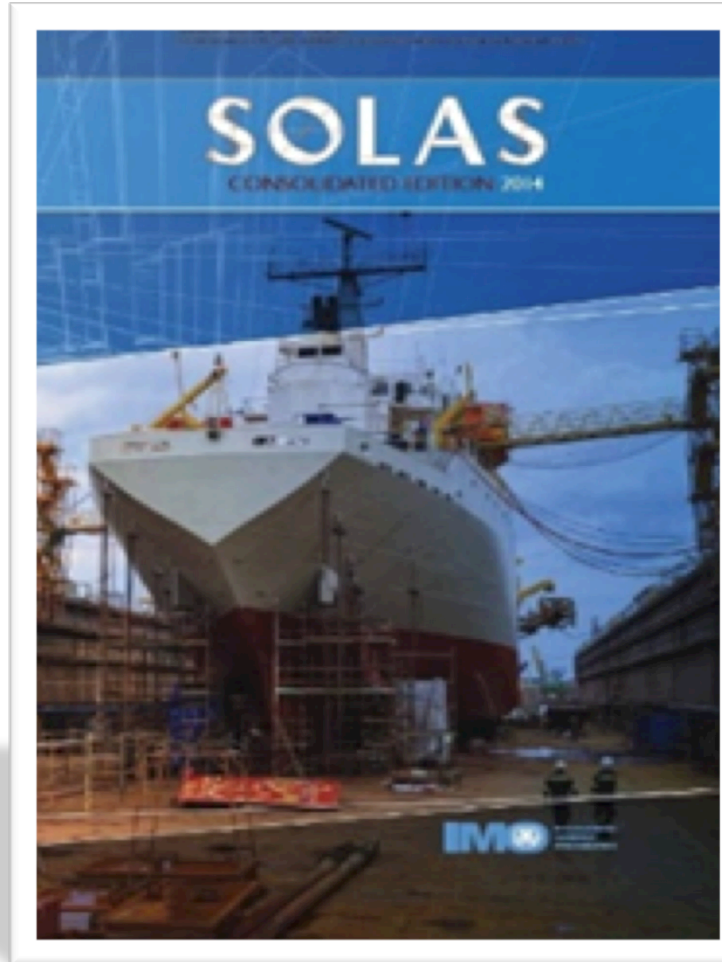
- Information fence
- Traditional trade barrier



Connectivity under BRI

Maritime & Port Security

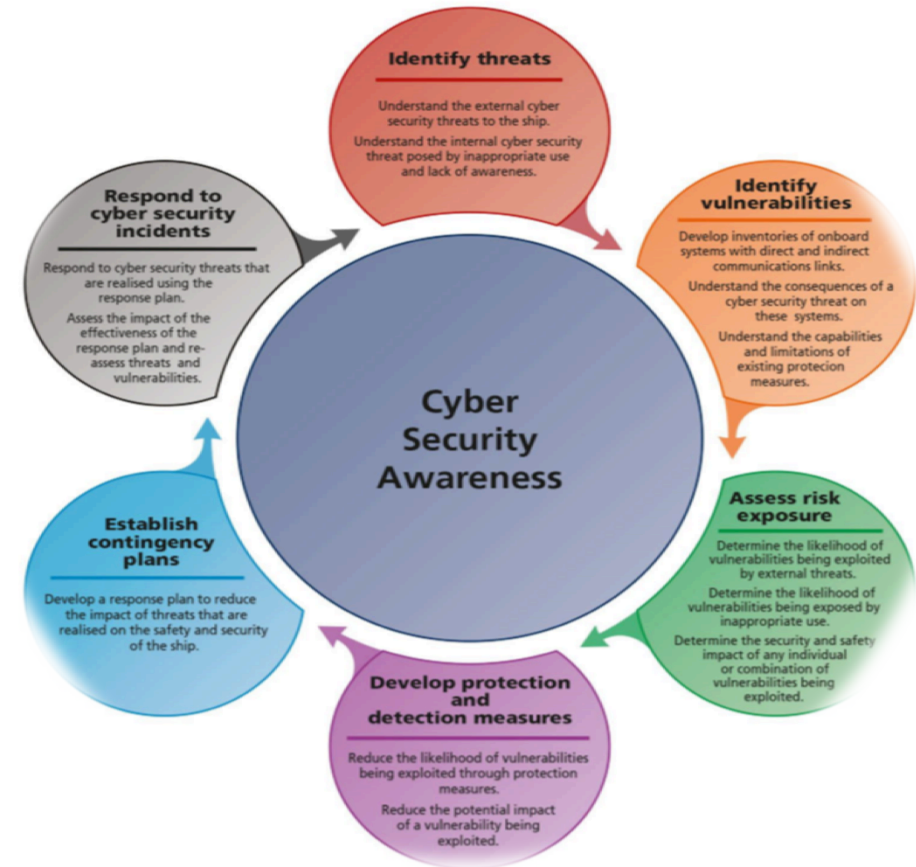
- SOLAS
- ISPS Code
- Training



Connectivity under BRI

Maritime Cyber Security

- Shipping and ports are highly automated, operations rely on computerised information and communication technologies, which may be vulnerable to maritime cyber hacker attacks.
- Maritime cyber risk management.



Connectivity under BRI

Marine Pollution Prevention

Air pollution

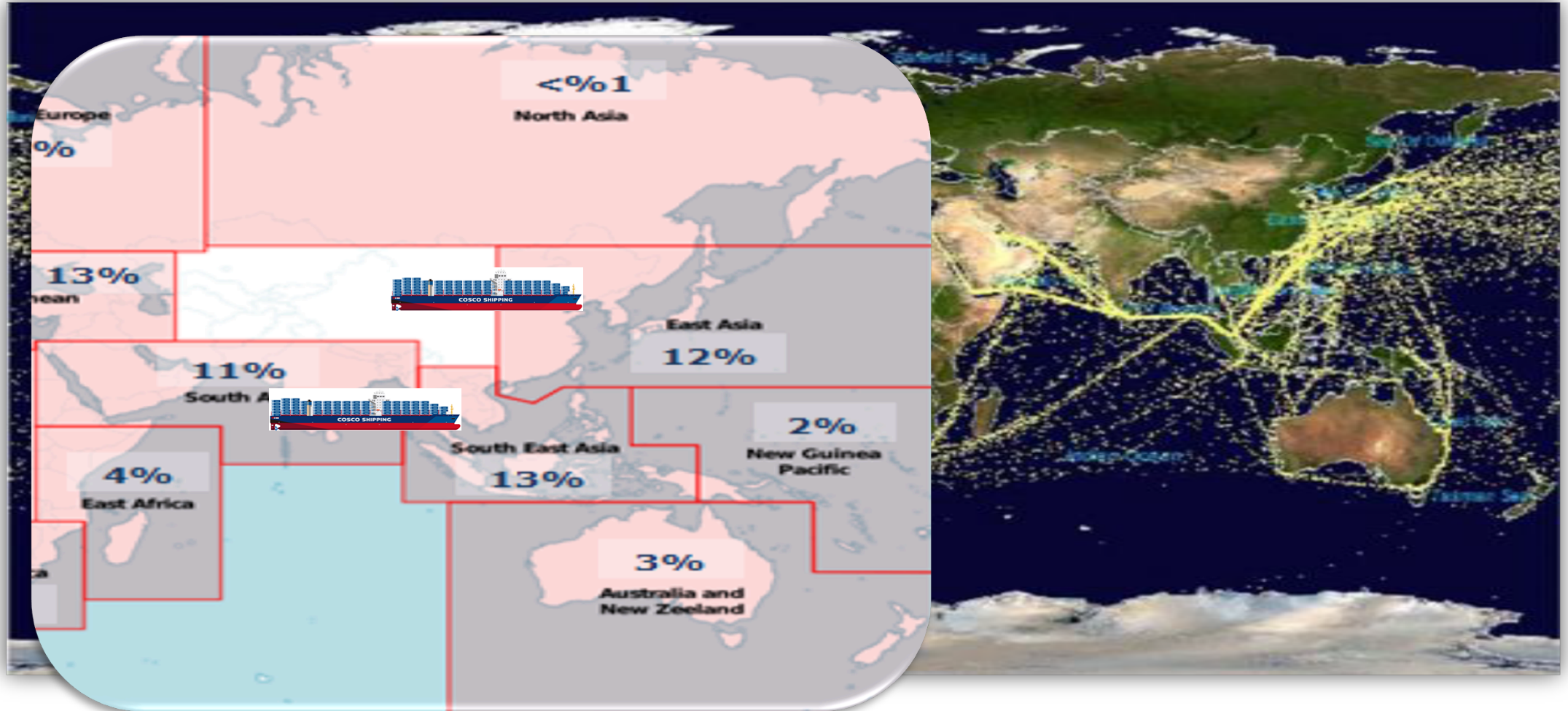
- Multi-lateral Vs Unilateral in GHG
- Air pollution
- SO_x and NO_x



Shipping and Connectivity

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China and Southeast Asia



(Source: IMO home, Equasis 2016)

China and Southeast Asia

China – SE Asia Shipping Connectivity

- Qinhuangdao – the Philippines
- Rizhao – Ho Chi Minh – Bangkok
- China-Singapore (Chongqing-Guangxi-Singapore)

China and Southeast Asia

China – Asean Port Cities Co-op Network

- 24 port cities, port & shipping enterprises join the network,
- China – Singapore,
- China – Malaysia,
- China – Thailand,
- China – Brunei,

China and Southeast Asia

China and Singapore Conclude Negotiations on Upgrading Free Trade Agreement



5 Nov. 2018, Vice Minister and Deputy China International Trade Representative **Fu Ziying** met with Singaporean Minister of Trade and Industry **Chan Chun Sing** and jointly announced the conclusion of negotiations on upgrading the China-Singapore Free Trade Agreement.

China and Southeast Asia

Shanghai 2018 (Jan. to Sept.)

- container throughput : 31.35 m TEUs



China and Southeast Asia

Ningbo-Zhoushan

2018 (Jan. to Sept.)

- Container throughput
20.14 m TEUs



China and Southeast Asia

Xiamen (Amoy)
fully automated
terminal operation.



China and Southeast Asia

Qingdao fully automated container terminal



30% more efficient, 70% less labour,

(Source: picchina.people.com.cn, 2017)

China and Southeast Asia



For shipping and connectivity

- Confidence building
- Capacity building
- Cooperation

China and Southeast Asia

Capacity building

- workshop for maritime administrators;
- training for port state control officers;
- training for SAR coordinators;
- master and doctor degree programme;
- joint SAR exercises;
- ...

Shipping and Connectivity

*China and Southeast Asian countries
need to work together for regional
connectivity and sustainability*

Q & A

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