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Burmese to English
Bilingual Conference
Translation

15th ASEAN PORTS & SHIPPING 2017

SULE SHANGRI-LA, YANGON, MYANMAR
THURSDAY 6 AND FRIDAY 7 JULY 2017

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CHALLENGES & OPPORTUNITIES IN DEVELOPING REGIONAL MARITIME HUB

THE JOHOR PORT EXPERIENCE

MUHAMMAD RAZIF AHMAD, JOHOR PORT AUTHORITY

MARITIME ACTIVITIES

Port & Port Services

Ship Repair

Legal Services

Shipping & Shipping Services

Finance & Banking

Education & Training

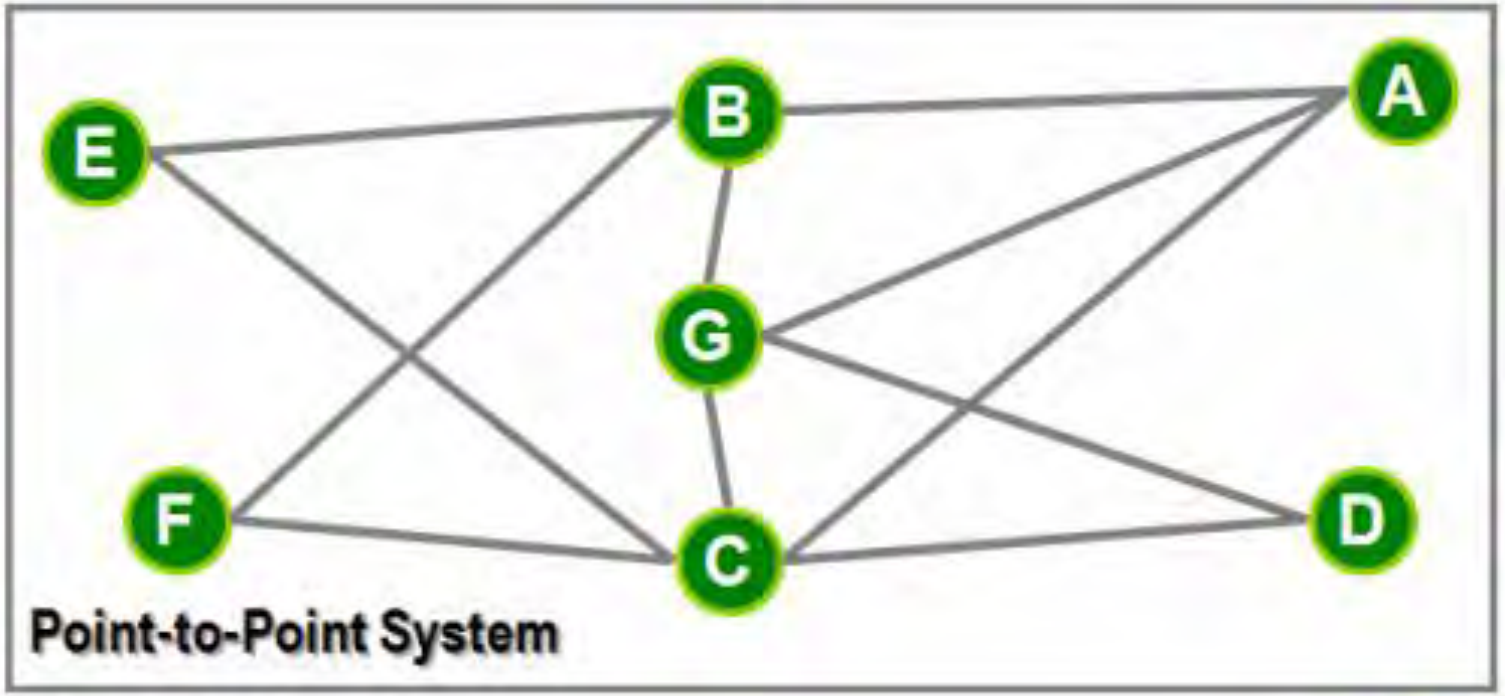
Maritime Tourism

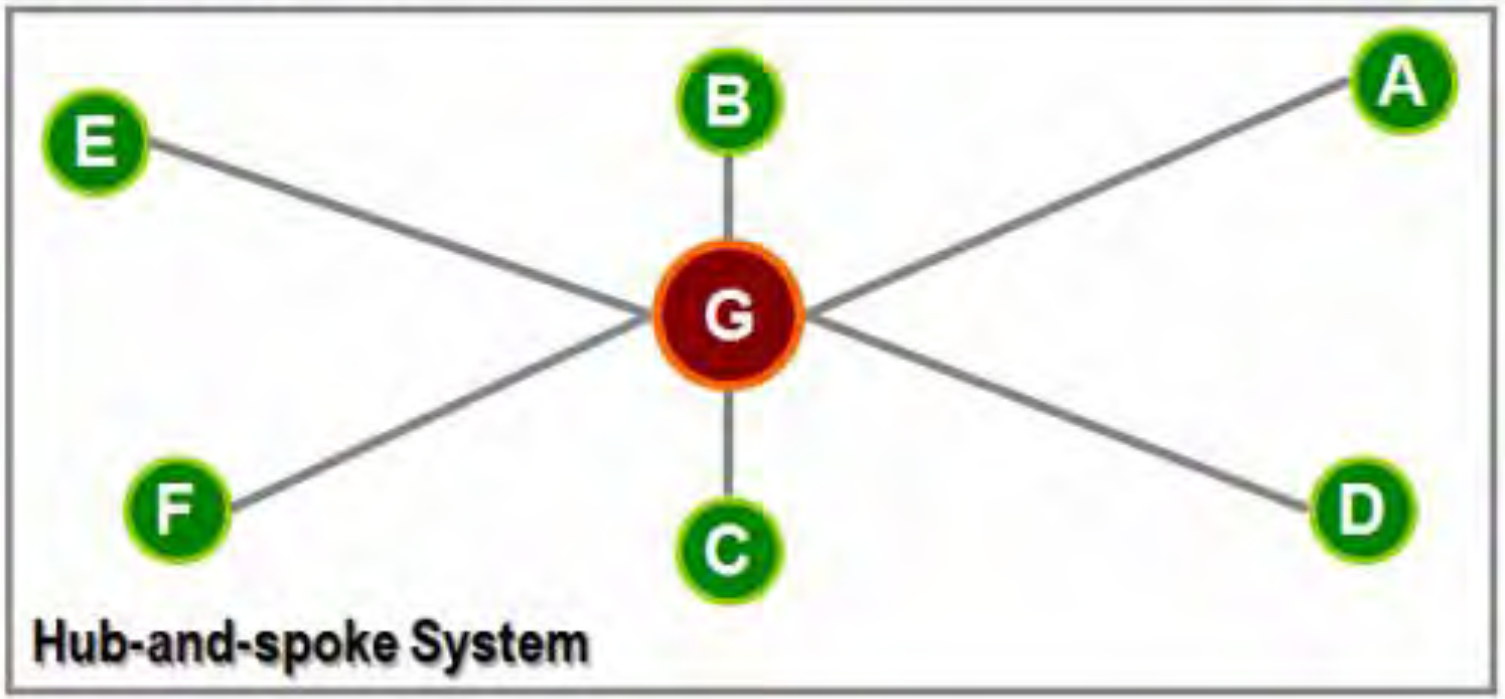
Bunkering

HUB AND SPOKE SYSTEM

Fundamental of a maritime hub system

- Post deregulation of the US airline industry, Deregulation Act 1978
- Widely used logistics strategy
- Adopted by Main Line shipping operators
- Cost effective
- Greater efficiency





FACTORS THAT DETERMINE SHIP CALLS AT HUB PORTS

Lalith Edirisinghe & T. Laluthasiri Gunaruwan, University of Colombo, Sri Lanka, "Sri Lanka's Maritime Hub Vision: An Analysis of Potentially Supportive Factors

No	Factor	Nature
1	*Transhipment volume potential of the Port	Transhipment network
2	Availability of on-arrival berth (window)	Port efficiency/capacity
3	Domestic volume potential of the port	Domestic trade
4	Operational productivity (Gantry crane moves per hour)	Port efficiency/capacity
5	Feeder network availability to cover all destinations/origins	Transhipment network
6	Deviation time from main sea route	Geographic location
7	Time taken to berth/unberth ships	Port efficiency/capacity
8	Frequency of feeders	Transhipment network
9	Port handling/stevedoring costs	Port charges/costs
10	Port navigational costs	Port charges/costs

* 82% respondents put this as priority 1

THE FUNCTIONAL ROLES OF PORTS

Still as important today as in the past as ships seek a place of refuge, protection from the elements. As well as getting fresh supplies; fuel & water apart from the functional operation of discharging and loading goods.

PORTS

TRADE GATEWAYS

Facilitate the import/export activities of a country, thus have a direct role in the economy of the country.

SAFE HAVENS

CARGO HUBS

Modern role of ports especially as transshipment hubs for the movement of containers. Thus, have a direct role in global economic activities.

PART OF SUPPLY CHAIN

Modern role of ports seen as part of the total global/national supply chain. Thus, port efficiency affects the productivity & efficiency of the total supply chain.

WHY PORTS ARE IMPORTANT?

90% of global trade is transported by water

- gateways for trade (Import & Export)
- sea transportation most economic

Provide employment

- direct & indirect
- multiplier factor of up to 20.23 (Singapore Management University 1995)

Generate business activities

- agency services, support services, bunkering & supplies, ship repair, warehouses, depots & haulage, finance & banking, education & training, legal
- Contributes to GDP

THE CASE FOR JOHOR, MALAYSIA

Port of Tanjung Pelepas a Regional Transhipment Hub

Started operation in 2000

PTP AS A REGIONAL TRANSHIPMENT HUB

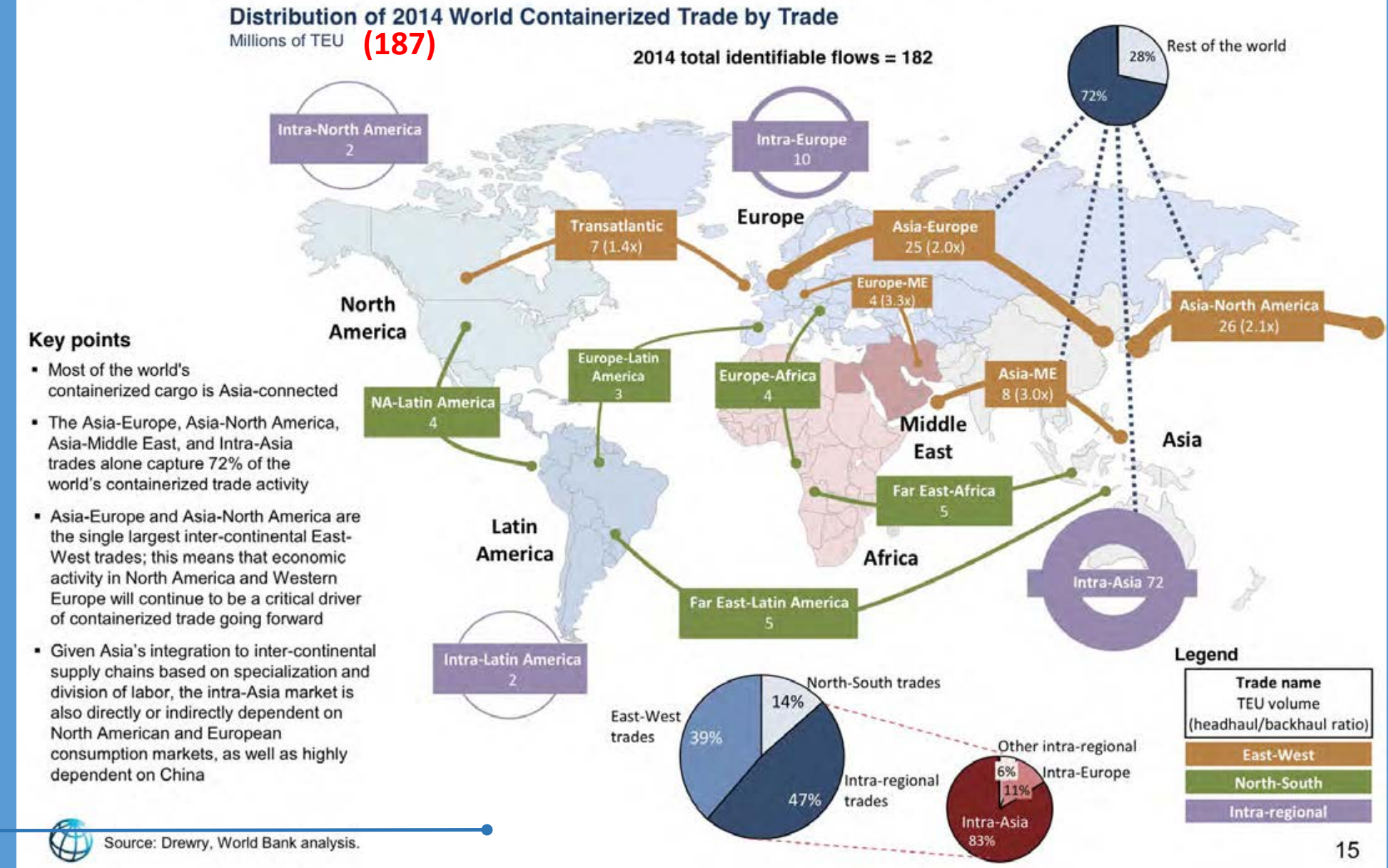
...what have we done so far?

PTP started operation in 2000
Dedicated container terminal
Located in the middle of East-West trade route
Good shipping network and service frequency
Excellent inland road & rail connectivity ... especially to industrial zones
In-house free zone areas

LOCATION, LOCATION, LOCATION!

Straits of Malacca & Singapore

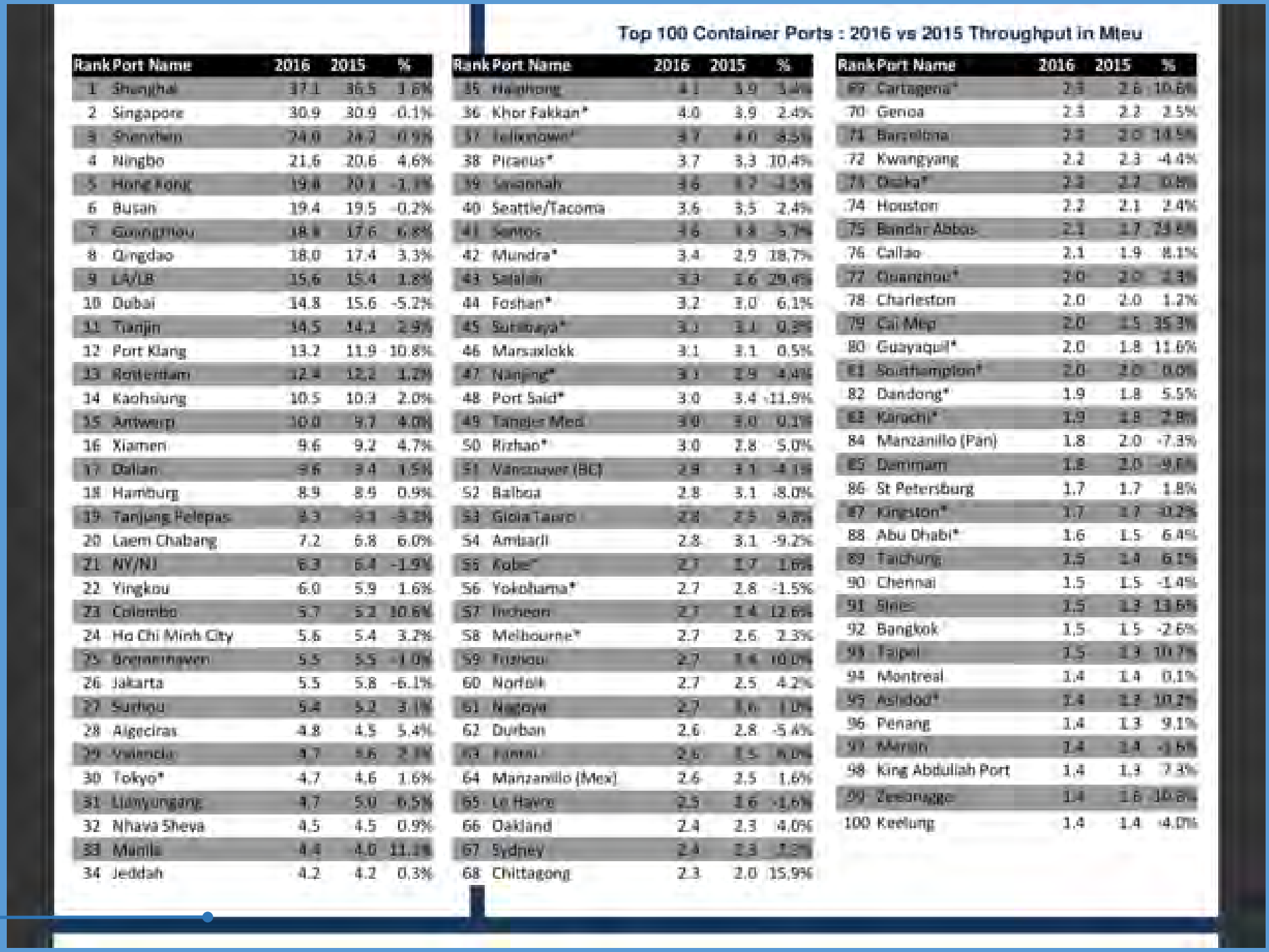
Global containerized sea freight is highly concentrated in the Asia-connected East-West and intra-regional trades: the Asia-Europe, Asia-North America, Asia-Middle East, and intra-Asia trades alone capture 72% of the world's containerized trade



Source: Drewry, World Bank analysis.

ASEAN Ports in Top 100 Container Port List

1. Singapore (2)
2. Port Klang, Malaysia (12)
3. Tanjung Pelepas, Malaysia (19)
4. Laem Chabang, Thailand (20)
5. Ho Chi Minh City, Vietnam (24)
6. Jakarta, Indonesia (26)
7. Manila, Philippines (33)
8. Haiphong, Vietnam (35)
9. Surabaya, Indonesia (45)
10. Bangkok, Thailand (92)
11. Penang, Malaysia (96)



Top 100 Container Ports : 2016 vs 2015 Throughput in Mteu

Rank	Port Name	2016	2015	%
1	Shanghai	37.1	36.5	1.6%
2	Singapore	30.9	30.9	-0.1%
3	Shenzhen	24.0	24.2	-0.9%
4	Ningbo	21.6	20.6	4.6%
5	Hong Kong	19.8	20.1	-1.3%
6	Busan	19.4	19.5	-0.2%
7	Guangzhou	18.8	17.6	6.8%
8	Qingdao	18.0	17.4	3.3%
9	LA/LB	15.6	15.4	1.8%
10	Dubai	14.8	15.6	-5.2%
11	Tianjin	14.5	14.1	2.9%
12	Port Klang	13.2	11.9	10.8%
13	Rotterdam	12.4	12.2	1.2%
14	Kaohsiung	10.5	10.3	2.0%
15	Antwerp	10.0	9.7	4.0%
16	Xiamen	9.6	9.2	4.7%
17	Dalian	9.6	9.4	1.5%
18	Hamburg	8.9	8.9	0.9%
19	Tanjung Pelepas	8.3	9.1	-9.2%
20	Laem Chabang	7.2	6.8	6.0%
21	NY/NJ	6.3	6.4	-1.9%
22	Yingkou	6.0	5.9	1.6%
23	Colombo	5.7	5.2	10.6%
24	Ho Chi Minh City	5.6	5.4	3.2%
25	Bremerhaven	5.5	5.5	-1.0%
26	Jakarta	5.5	5.8	-6.1%
27	Suzhou	5.4	5.2	3.1%
28	Algeciras	4.8	4.5	5.4%
29	Valencia	4.7	4.6	2.1%
30	Tokyo*	4.7	4.6	1.6%
31	Lianyungang	4.7	5.0	-6.5%
32	Nhava Sheva	4.5	4.5	0.9%
33	Manila	4.4	4.0	11.1%
34	Jeddah	4.2	4.2	0.3%
35	Haiphong	4.1	3.9	5.4%
36	Khor Fakkan*	4.0	3.9	2.4%
37	Telixnowo*	3.7	4.0	-8.5%
38	Piraeus*	3.7	3.3	10.4%
39	Savannah	3.6	3.7	-3.5%
40	Seattle/Tacoma	3.6	3.5	2.4%
41	Santos	3.6	3.4	5.7%
42	Mundra*	3.4	2.9	18.7%
43	Salalah	3.3	2.6	29.4%
44	Foshan*	3.2	3.0	6.1%
45	Surabaya*	3.1	3.1	0.3%
46	Marsaxlokk	3.1	3.1	0.5%
47	Nanjing*	3.1	2.9	4.4%
48	Port Said*	3.0	3.4	-11.9%
49	Tanger Med	3.0	3.0	0.1%
50	Rizhao*	3.0	2.8	5.0%
51	Vancouver (BC)	2.9	3.1	-4.1%
52	Balboa	2.8	3.1	-8.0%
53	Gioia Tauro	2.8	2.5	9.8%
54	Amsarli	2.8	3.1	-9.2%
55	Kobe*	2.7	2.7	1.6%
56	Yokohama*	2.7	2.8	-1.5%
57	Incheon	2.7	2.4	12.6%
58	Melbourne*	2.7	2.6	2.3%
59	Fuzhou	2.7	2.4	10.0%
60	Norfolk	2.7	2.5	4.2%
61	Nagoya	2.7	2.6	1.0%
62	Durban	2.6	2.8	-5.4%
63	Fanmi	2.6	2.5	6.0%
64	Manzanillo (Mex)	2.6	2.5	1.6%
65	Le Havre	2.5	2.6	-1.6%
66	Oakland	2.4	2.3	4.0%
67	Sydney	2.4	2.3	2.2%
68	Chittagong	2.3	2.0	15.9%
69	Cartagena*	2.3	2.6	-10.6%
70	Genoa	2.3	2.2	2.5%
71	Barcelona	2.3	2.0	14.5%
72	Kwangyang	2.2	2.3	-4.4%
73	Osaka*	2.2	2.2	0.6%
74	Houston	2.2	2.1	2.4%
75	Bandar Abbas	2.1	1.7	23.6%
76	Callao	2.1	1.9	8.1%
77	Quanzhou*	2.0	2.0	2.3%
78	Charleston	2.0	2.0	1.2%
79	Cai Mep	2.0	1.5	35.3%
80	Guayaquil*	2.0	1.8	11.6%
81	Southampton*	2.0	2.0	0.0%
82	Dandong*	1.9	1.8	5.5%
83	Karachi*	1.9	1.8	2.8%
84	Manzanillo (Pan)	1.8	2.0	-7.3%
85	Dammam	1.8	2.0	-9.6%
86	St Petersburg	1.7	1.7	1.8%
87	Kingston*	1.7	1.7	-0.2%
88	Abu Dhabi*	1.6	1.5	6.4%
89	Taichung	1.5	1.4	6.1%
90	Chennai	1.5	1.5	-1.4%
91	Sines	1.5	1.3	13.6%
92	Bangkok	1.5	1.5	-2.6%
93	Taipei	1.5	1.3	10.7%
94	Montreal	1.4	1.4	0.1%
95	Asidod*	1.4	1.3	10.2%
96	Penang	1.4	1.3	9.1%
97	Mersin	1.4	1.4	-1.6%
98	King Abdullah Port	1.4	1.3	7.3%
99	Zeebrugge	1.4	1.6	-10.6%
100	Keelung	1.4	1.4	-4.0%

CONTAINER SERVICES AT PTP

Sailing frequency

Route	Frequency (per week)
Intra-Asia	>45
Europe/Mediterranean	11
India Sub Continents	5
Middle East/Red Sea	2
Africa	13
US	5
South America	2
Oceania	4

30 shipping lines calling PTP

Connected to over 300 port of calls globally with >100 weekly services

M Line Transhipment Hub (2000); Evergreen (2002)

PTP Terminal Infrastructure & Facilities

Facilities

- 10.5 million TEUs capacity
- 14 Berths – 5.04km linear quay
- Navigation Channel Draft – 16 meters
- Container yard with 239,400 TEUs capacity
- 5,080 Reefer Points
- 12 lanes gate complex
- 45 Pilots & 8 Tug Boats

Equipment

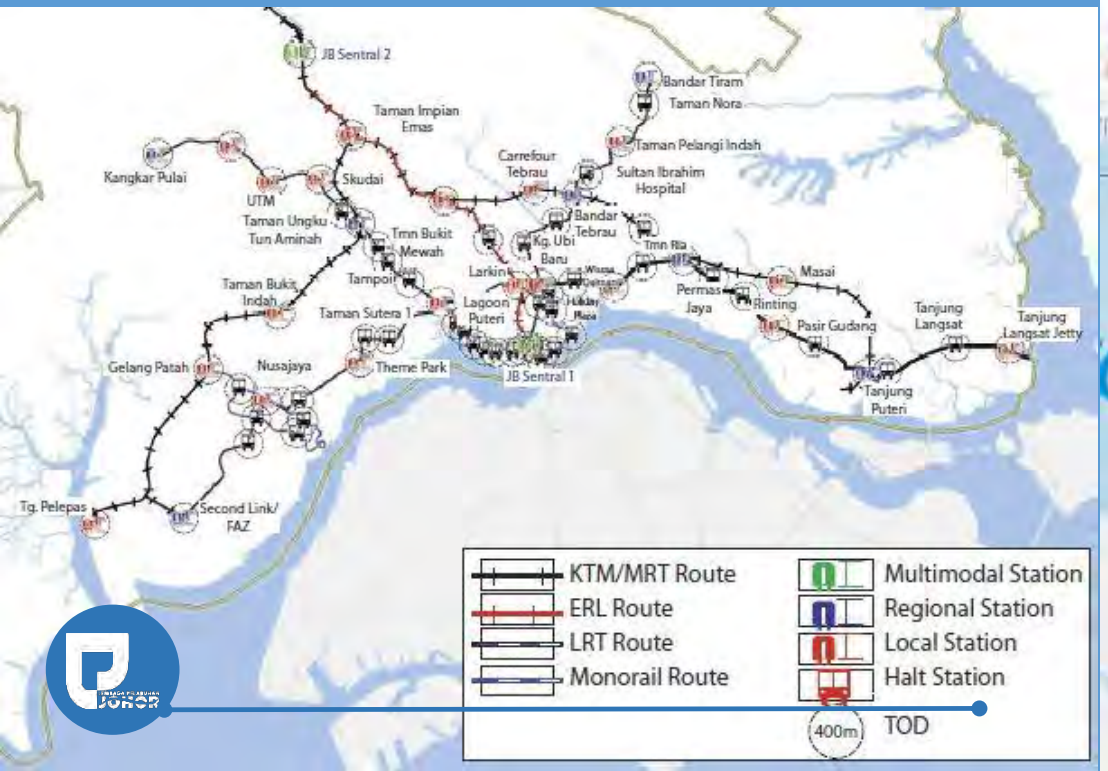
- 58 super-post Panamax cranes
- 174 Electrified Rubber-Tyred Gantry cranes
- 422 Prime Movers
- 20 Empty Handlers
- 2 Reach Stackers
- Integrated IT Systems – Navis Sparcs

BASIC INFRASTRUCTURE

Road, Rail & Air Connectivity

Rail connection to the National Railway Lines

Rail link to Johor Port



Excellent road connectivity to PTP

30 minutes to Senai International Airport

THE ROLE OF PORT IN A TYPICAL SUPPLY CHAIN

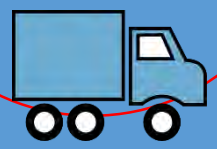
Ship waiting time
Berth availability
Time spend at berth
Crane operation
Yard storage
Port gate

PORT

Government Agencies
Shipping Agents

Haulage

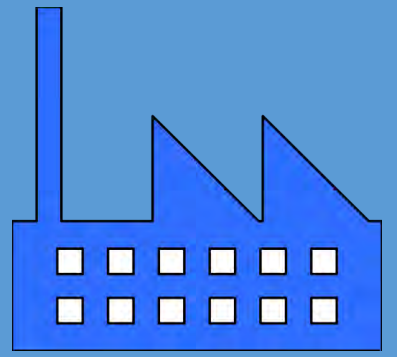
DEPOT



Haulage

SHIPPER/
CONSIGNEE

Forwarder



Consumers

PORT PERFORMANCE - MEASURE IT!

VESSEL

1. Rate of Berth Utilization
2. Waiting Time for Pilot
3. Berth Turnaround Time
4. Moves per Crane per Hour
5. Box per Vessel per Hour

TERMINAL

1. Rate of Berth Utilization
2. Yard Utilization
3. Dwell Time of Container at Yard
4. Clearance Time
5. Haulage Turnaround Time

“Measure what can be measured, and make measurable what cannot be measured.”
— Galileo Galilei

PORT SUPPORT SERVICES

INTERNET CONNECTIVITY

PORT SYSTEM

Johor Port Community System

Johor Ports Net

Port Traffic Management System

"By synergizing all of the port's operations and communication centers, the I.T. network system facilitates a free-flow of real-time information and provides near paperless transactions between shipping lines, forwarders, shipping agents and the port ensuring high productivity."

- Port of Tanjung Pelepas

OTHER SERVICES

Banking & Finance, Ship Agency, Cargo Agency, Ship Chandelling, Bunkering, Legal

Customs, Immigration, Marine Department, Port Health, Malaysia Quarantine Authority

PORT GOVERNMENT SERVICES

Container Depots & Repair Services

PTP FREE ZONE

Provides warehousing & distribution business within PTP port area: 40 companies with RM2.6 billion invested

Attractive rental rates

Very close to the Port

Enjoys tax incentives

More than 15,000 workers

100,000 TEUs annually

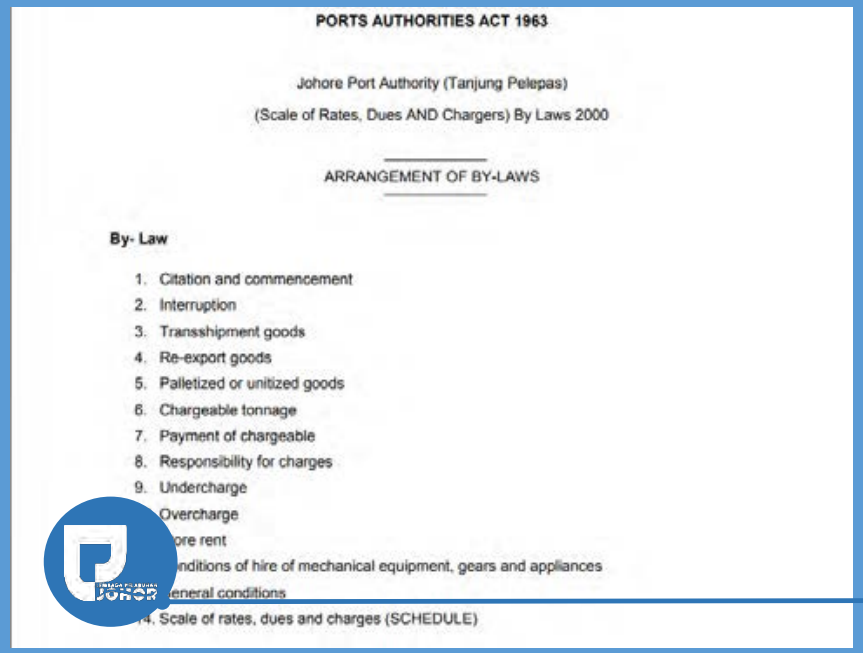
DAMCO, DHL, DB SCHENKER, NAIGAI NITTO, NIPPON EXPRESS, KONTENA NASIONAL, PANALPINA on 6 continents, Century, NIPPON MINING & METALS CO.,LTD., BMW, BOUSTEAD Since 1828, PAN ASIA LOGISTICS, Kimberly-Clark, mapletree, FLEXTRONICS, SMC, SMC FOOD 21 PTE LTD, GUANCHONG COCOA MANUFACTURER SDN. BHD., JBCOCOA, AXIS REAL ESTATE INVESTMENT TRUST, TASCO NYK GROUP COMPANY, TIONG NAM, PAR INTERNATIONAL, Nfsb, JIBRI LOGISTICS SDN BHD, OLAM, icbp, rii, CIBAVISION Shared Passion for Healthy Vision and Better Life, JST, ISC, STR SPECIALIZED TECHNOLOGY RESOURCES, INC., OneSubsea A Cameron & Schlumberger Company, AIE, Goodman

PTP

PTP PORT TARIFF

Johor Port Authority (Tanjung Pelepas) (Scale of Rates, Dues and Charges) By-Laws 2000

- Port charges are regulated by PTP Tariff By-Laws
- Ensure rates are stable & competitive
- Rates structure is simple & transparent
- Consolidated Marine Charges (pilotage, tugs & mooring)



PORTS AUTHORITIES ACT 1963

Johore Port Authority (Tanjung Pelepas)

(Scale of Rates, Dues AND Chargers) By Laws 2000

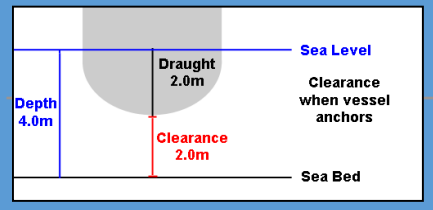
ARRANGEMENT OF BY-LAWS

By- Law

1. Citation and commencement
2. Interruption
3. Transshipment goods
4. Re-export goods
5. Palletized or unitized goods
6. Chargeable tonnage
7. Payment of chargeable
8. Responsibility for charges
9. Undercharge
10. Overcharge
11. ore rent
12. nditions of hire of mechanical equipment, gears and appliances
13. eneral conditions
14. Scale of rates, dues and charges (SCHEDULE)

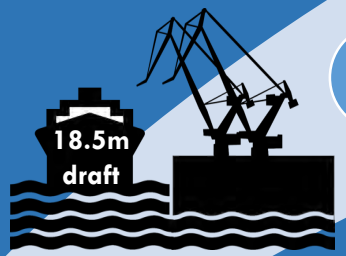
SAFE & SECURE PORT

	Services	Remarks
1	**Maintenance Dredging**	• Maintaining service draft in access channel and at berths
2	**Marine Resource Management System**	• Vessel Traffic Management Information System (VTMIS), Pilot Booking System, Oil Spill Detection Radar, Radar Scanner and CCTVs
3	**Harbour Tugs & Pilot Boat**	• Adequate number of tugs and pilot boat • Higher bollard pull (BP) tug capacity (65T)
4	**Pilot Manning / Competency**	• Continuous competency related training – refresher program • New competency requirement for Triple EEE compliance • Sustain and increase the number of pilot's headcount. Attractive remuneration ✓Total of 45 pilots
5	**Port Security**	✓24 hours year round ✓ISPS compliance

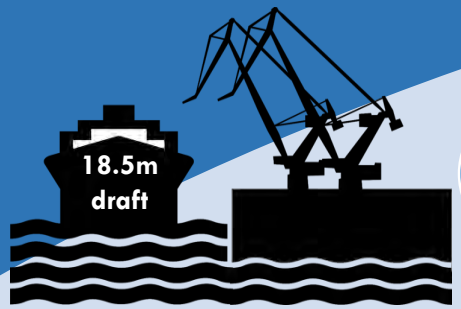


PTP - LONG TERM MASTER PLAN

Year 2015
No . of Berth 14
Length 5.04 km
Capacity : 10.5 mil TEUs



Year 2018
No. of Berth 14
Length 5.04 km
Capacity : 13.5 mil TEUs



Year 2025 (Projected)
No. of Berth 18
Length 6.54 km
Capacity : 16.9 mil TEUs

Year 2070 (Projected)
No. of Berth 55
Length 19.94 km
Capacity : 53 mil TEUs

FZ Phase 1 & 2
Year 2015 to 2018
495.2 acres
Warehouse space: 8.45 mil sqft

FZ Phase 3
Year 2020
178 acres net leasable area
+ 5.5 mil sqft warehouse space

FZ Phase 4 & 5
Year 2025
395 acres net leasable area
+ 12.2 mil sqft warehouse space

THE CHALLENGES

1. Attracting the MLO (in a very competitive market)
2. Ever bigger vessels
3. Land for growth (competing use of foreshore land)
4. Fiscal incentives not forever
5. Government bureaucracies & red tapes
6. Cost of development
7. Port workers

SUMMARY – Developing Regional Maritime Hub

1. Port is ready: infrastructure; service efficiency; future expansion
2. Hinterland industry: support distribution business
3. Right incentives: tax relief, Free Zones
4. Shipping connectivity
5. Support services: finance, banking, legal …
6. Ease of doing business – port systems
7. Economic sense - cost of doing business
8. Port Authority needs to drive the initiative

FACTORS THAT DETERMINE SHIP CALLS AT HUB PORTS

Lalith Ediris[illegible] T. [illegible]uthaki Gu[illegible] University of C[illegible]m[illegible] Sri [illegible]ka[illegible] Sri Lank[illegible] Maritim[illegible] Vision[illegible]n An[illegible] of Potent[illegible]y Sup[illegible]rt[illegible] Fac[illegible]

HOW DOES PTP FARE?

No	Factor	Nature	
1	*Transhipment volume potential of the Port	Transhipment network	✓
2	Availability of on-arrival berth (window)	Port efficiency/capacity	✓
3	Domestic volume potential of the port	Domestic trade	✓
4	Operational productivity (Gantry crane moves per hour)	Port efficiency/capacity	✓
5	Feeder network availability to cover all destinations/origins	Transhipment network	✓
6	Deviation time from main sea route	Geographic location	✓
7	Time taken to berth/unberth ships	Port efficiency/capacity	✓
8	Frequency of feeders	Transhipment network	✓
9	Port handling/stevedoring costs	Port charges/costs	✓
10	Port navigational costs	Port charges/costs	✓

* 82% respondents put this as priority 1


THANK YOU FOR YOUR KIND ATTENTION!