APEC Training Course on Common Principles to Shipping Policy

Transportation Working Group (TPTWG)

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APEC Project: TPT 02 2015T – APEC Training Course on Common Principles to Shipping Policy

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1. Background

Trends of globalization involves in emergence of new pattern of governance, which is including maritime transportation sector. Port has been realized as a significant mechanism for growth and development of economies. Privatization of ports around the world has been considered more seriously. Port privatization is known broadly as a new concept in port operations and service development that has emerged along with liberalization, commercialization and the introduction of competition to the sector. The challenges of ports arise from various levels of privatization which provide the economy to reformulate all functions and commercial activities to meet the cost minimization and maximum of service quality, also integration of logistics and supply chain system.

The governments have been implementing privatization policies toward the effective and productive operation of ports to deal with maritime transportation needs, as well as to mobilize the private resources to invest in modernization and high capacity which has led interest of the private sector involvement in maritime sector (Public-Private Partnerships: PPP).Consequently, selecting the PPP option that fits best to their objectives and goals accordingly are concerned. However, each economy has PPP opportunities for port development, but PPP structure and funding mechanism are unique, by the time some are lack of knowledge or experience. The purpose of this project is to provide better understanding, share experiences and raise awareness of port commercialization, port privatization, and port investment funding as well as put into action the Leaders' commitment to realize the Bogor Goals through maritime connectivity and regulatory coherence. Additionally, it has been mentioned in the central element of APEC's agenda and the 2010 Leaders' Declaration says that capacity building needs to be evolved as priorities shift to meet new challenges on Strengthening Economic and Technical Cooperation and all Leaders welcomed the ongoing efforts to develop a more strategic, goal-oriented and multi-year approach toward capacity building.

2. Objective

This project will build APEC economies' capacity in the area of policy development and contribute to the implementation of "APEC Common Principles to Shipping Policy" in order to enhance the liberalization in maritime sector that was presented by TPT-WG. Moreover, the project ensures the workshop participants to be able to enhance understanding of port commercialization, privatization and port investment funding in the Asia Pacific region by providing an opportunity for exchange of experiences and learning among stakeholders. The key objectives of this project are as follows:

1) Awareness rising on, exchange of experiences to support the port commercialization, privatization and port investment funding including Public-Private Partnerships;
2) Exchange of information on key elements of policies, strategies and regulations;
3) Exchange of information on port investment funding to enhance capacity building under port development in the Asia Pacific region; and
4) Establishment of and shipping industry partnership in order to increase accessibility of data and enhance regional cooperation.

3. Work plan

The main stages of the project implementation are:

1) A Project Steering Committee was formed for the project implementation in July 2015.

2) The Coordination of the training program was preceded during August-September 2015.

The Project Overseers (PO), in cooperation with the Co-sponsors have conducted a needs assessment to design the training course that matches the needs of participants. There are two levels of the training needs assessment as follows**:**

- Organizational assessment was performed to survey the organization management on the pattern of privatization in port, port investment policies, existing projects and development plans including expectations of the port.

- Individual assessment was performed to survey responsibilities, skills and work experiences of the participants, which provides the attitude surveys.

The participants were requested to complete a needs assessment. Afterward, the PO designed the training activities, content, materials and program to be in line with the needs of participants. Moreover, the PO also designed the Application Form that reflects the minimum qualification of the participants.

3) Training document was submitted to MEG in October 2015.

The PO circulated the result of the needs assessment, designed program, training materials and documents to ME G to get an approval. All progresses were reported to the MEG for suggestions and further improvement.

4) A three-day training course on "Port Management highlighting challenges related to port commercialization and privatization, encouraging competition and development of ports and most appropriate source(s) of port investment funding" has held in December 2015 in Bangkok, sponsored by Thailand.

The training course was created under, the Policy item 8 (Port Management) which allowed the participants to share the information and discussion on international frameworks and practices on port commercialization and privatization and port investment funding through learning. The key topic presented was the trends of globalization involves the new pattern of governance in maritime transportation sector, model of port commercialization and privatization encouraging private sector involvement in ports based on non-discrimination in the allocation of development rights, or in the awarding of contracts for the provision of port services, including the best practices on port investment funding among APEC economies. The detailed programme schedule is attached at ANNEX 1 and list of participants is attached at ANNEX 2.

5) The 6-month monitoring report was created by the PO during January-March 2016.

The PO created the 6-month monitoring report to follow up the privatization situation of each economy and to monitor the result of the training course.

6) The 6-month monitoring report was submitted to MEG and speakers during April-May 2016.

The PO submitted the 6-month monitoring report to the MEG and speakers for an approval and suggestions and further improvement.

7) The final 6-month monitoring report was circulated to the participants in June 2016.

The PO circulated the 6-month monitoring report to participants.

8) Data collection from participants was done in July 2016.

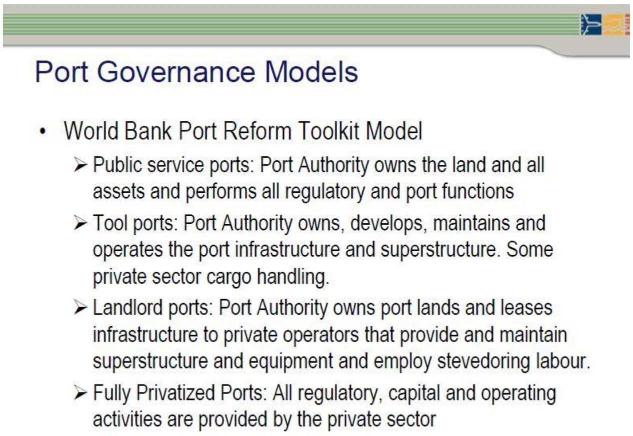
9) Analyzation and making the Completion Report during August-December 2016.

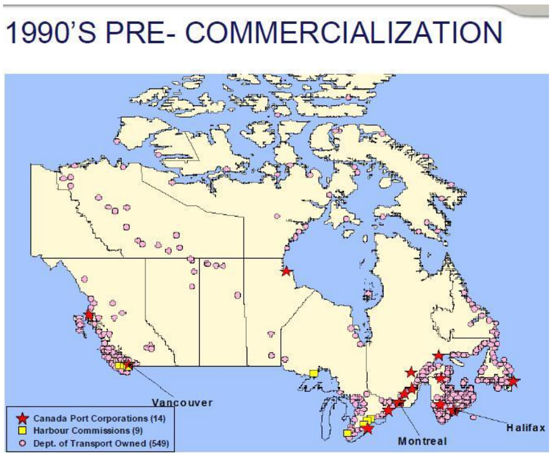
The PO collected the information on port commercialization, privatization and port investment funding from 11 economies: Brunei Darussalam; Canada; People's Republic of China; Hong Kong, China; Indonesia; Japan; Malaysia; the Philippines; Chinese Taipei; Thailand and Viet Nam to be analyzed and summarized in the completion report.

4. Port Commercialization and Privatization in APEC region

4.1 A Member Economy Port Policy Perspective presented by Mr Doug O'Keefe (Canada)

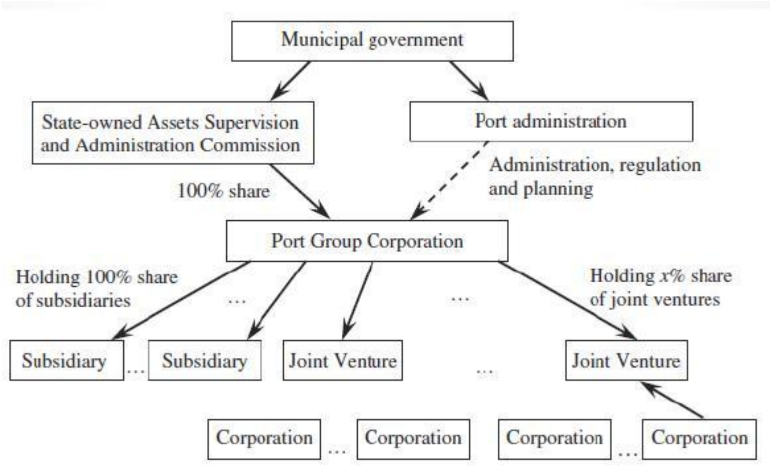
Mr O'Keefe presented the challenging environment in port sector and the pressure on a government to rethink about the port governance to enhance more efficiency in private sector. He went through the two models of port ownership – the first one was proposed by the World Bank in Module 3 of the Port Reform Toolkit, Alternate Port Management Structures and Ownership Models Readers of this module should be able to reach a decision about the most effective, efficient, and feasible structure of their ports based on the identification of their ports' strengths and weaknesses and given each economy's unique economic, political, and social environment. The second model was initiated by Drs Mary Brooks and Ramon Baltazar that better reflect decentralization management and control as well as privatization of ownership.





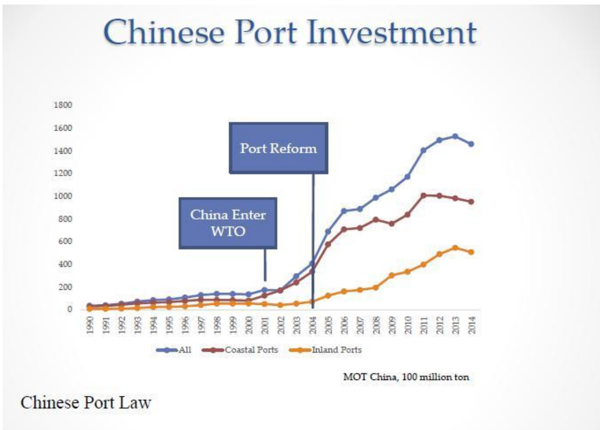
He explained the activities within the functions of port as regulator, landlord, and operator and how governments can privatize some or all of these activities to customize the level of government involvement in each port, depending on their strategic objectives. He then reviewed the World Bank's strategies for port reform highlighting the differences between commercialization, corporatization, and privatization. Mr O'Keefe then referred to the commercialization of Canada Port Corporations under the Canada Marine Act of 1998. He said that these 18 ports are federal, not-for-profit corporations, each with a Board of Directors nominated by port users, and governments at the local, regional and federal levels. He further described the obligations of the ports to demonstrate public accountability and transparency in the commercial operations and further plans. He outlined the roles and responsibilities of Transport Canada, the Port Authorities, and private terminal operators. He concluded the session by relating the refinements of the port policy since 1998 and the challenges and benefits of port commercialization.

4.2 Port Governance and Commercialization in China presented by Dr Yang Dong (China)



10. A generic model of port governance in China.

Dr Yang Dong started the session with the Development of Chinese Ports. The biggest container ports in the world are all located in China, making it the world's largest trading economy. He pointed that China has the biggest maritime demand, from particularly iron ore and coal import and containerized cargoes, and it will soon become the No.1 oil importing economy. Dr Dong showed the top container ports in China namely Shanghai Port, Shenzhen Port, Ningbo Port, Qingdao Port, Guangzhou Port, Tianjin Port and Dalian Port. In accordance with China's Port Law, China encourages domestic and foreign economic organizations to invest in port construction and



operations. The Port Law is divided into a number of chapters: General Provisions, Port Planning and Construction, Port Operations, Port Security and Supervisory Management, Legal Responsibilities, and Supplementary Provisions. The Law is applied for port planning, construction, maintenance, operation, management and other related port activities. The law empowers authorized local authorities to establish a department for administering local ports. While the local authorities may engage in port planning, any plan must be consistent with the member economy strategy and approved by the central government. Importantly, the law encourages foreign investment in ports.

The port governance in China experienced three main stages;

1) Centralization (Before 1984)

Before 1984, the Ministry of Communications directly controlled the 38 major ports in China, consisting of 13 coastal ports and 25 ports along the Yangtze River. The Ministry determined all aspects of business in the ports and local governments did not have much input into the port industry in their regions.

2) Semi-decentralization (1987-2004)

After 1987, 37 of the 38 major ports were transferred to a semi-decentralization or dual-administration system, jointly controlled by the MOT and the local governments. The only exception was Qinhuangdao Port that has been of its member economy significance as the largest coal transport port and was still under direct control of the Ministry.

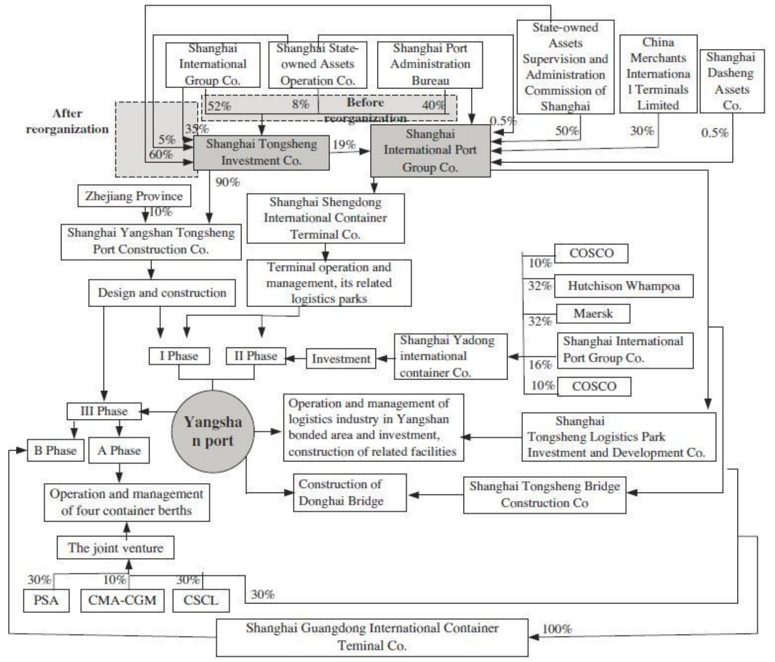


Fig. 6. Governance structure of Yangshan port. *Source:* Own realization based on Yearbook of China Transportation and Communication.

3) Decentralization

A large scale of decentralization was symbolized by the fact that all 37 ports under the dual-administration were transferred to the corresponding local governments by March 2002, following a decree from the State Council of the People's Republic of China.
Dr Dong demonstrated the governance structure of Shanghai Port (Yangshan port) showing that the Shanghai Port is the charge of the Shanghai Municipal Transport and the Shanghai Port Administration Bureau (the Shanghai Port Authority), which responsible for port planning, administration and regulations, and the Shanghai International Port Group (SIPG)., The SIPG was established in 2003 and wholly floated on the Shanghai Stock Exchange. Its major shareholders are the State-owned Assets Supervision and Administration Commission of Shanghai (50%), China Merchants International Terminals (Shanghai) Co.Ltd (30%), Shanghai Tongsheng Investment (Group) Corp.(19%), followed by Shanghai Dasheng Assets Co. (5%) and Shanghai-owned Assets Operation Co. (5%).

4.3 Port Commercialization and Privatization presented by Mr Sandhy Wijaya (Indonesia)
Mr Wijaya presented the port commercialization and privatization activities in Southeast Asia and the case of Indonesia. The details are as follows:

1) Strategic issues which lead to the port commercialization and privatization activities in South East Asia:

- Shifting global outsourcing

Formerly, the center of production in Asia was China; however, due to the increase of main costs such as wages and logistics costs, the global outsourcing location has started moving from China to South Asia Economies such as India and Bangladesh, and to Southeast Asian Economies such as Indonesia; Malaysia; the Philippines and Viet Nam. This phenomenon resulted in the increase of cargo throughput in these regions.

Therefore, the raising of port capacity is significantly needed. Port authorities were urged find the solution to increase port capacity whether to use government funds or to commercialize or privatize the ports.

- ASEAN Economic Community (AEC)

Due to the official commencement of the AEC in 2016, which pave the way for free flow of goods and the investment in ASEAN region, the volume of port throughput in ASEAN region tends to increase. Consequently, the Port Authorities also have to find the solution to increase port capacity whether to use government funds or to commercialize or privatize the ports

- Fierce Competition

In this era, the vertical and horizontal integration in port industries are being tools for the Port Authorities to increase the port capacity by conducting synergies with shipping companies or global terminal operators to develop the ports without using government fund. The competition level in ASEAN Region is fierce owing to this phenomenon.

Based on the calculation, the HHI in ASEAN region is 1.880, which indicated the market as highly concentrated (monopolistic market). The market is controlled by a few mega players. Therefore, the regulation in the ASEAN region is required to control the competition.

2) Commercialization and privatization of port business

According to World Bank (2013), commercialization is a process to form the port management based on privatizes basic like transforming the port organization into a truly autonomous port authority which is financially independent. While, Corporatization is a process in which a public sector is transformed into a company.

Currently, most of the world’s Container Ports are operated by private sectors, the performance of those ports are better than the ports controlled by government.

3) Indonesia: Fact, Figure and Government Plan

Indonesia has 17,504 islands and inhabited by 250 million people. In terms of port, Indonesia has 2,459 ports scattered on the islands, out of which are 111 commercial ports run by IPCs. In terms of a commodity, Indonesia has abundant natural resources (oil and mining products) and renewable energy (Crude palm oil) which scattered in the archipelago. Hence, the flow of cargo from ports of origin to other islands or to exported destination economies is very important.

Due to the cargo imbalance between western part of Indonesia and eastern part of Indonesia, the government of Indonesia developed a strategy to create a regular shipping route to connect among the main islands (sea toll road concept); therefore, in order to support the strategy, 24 strategic ports of IPCs had to be upgraded, modernized and developed.

In this sense, a lot of capital expenditures are required. Hence, most of the financial strategy implemented was creating Special Purpose Vehicle (SPV) Company with strategic partners who have core competencies in the said related business and getting support from the financial institution.

4) Legal framework and implication

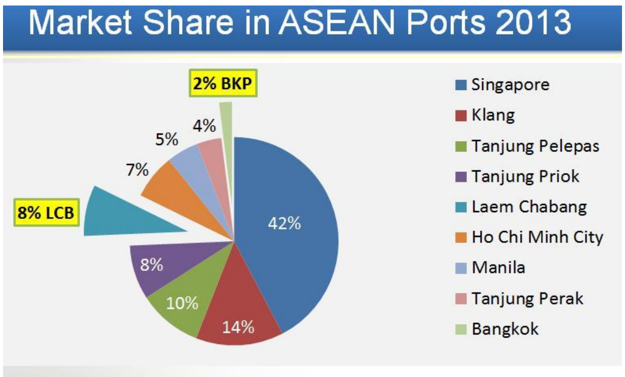
The milestone of Port Ownership Model and Management in Indonesia has evolved from previously run by a government to control by a state-owned company; from the unified functions of port authority and port operator to separate; from a monopolistic market, to an open market.

IPCs business has also evolved from a port operator to have various subsidiaries related to maritime business such as container terminal operators, stevedoring companies, tug operators, port developers, port universities, hospital, equipment maintenance companies and etc.

Since 2008, the Indonesian Government has launched a new Law so-called law on Shipping as a port reform program to open the port market for private participation through a concession agreement, either by tender or direct appointment.

Mr Wijaya concluded that, most of the commercial ports in Indonesia are still running by state-owned companies, and the private companies are reluctant to develop ports since it requires a lot of capital expenditures with long payback period. The private companies are more interested in operating terminals in existing ports rather than build up new ports. The new law is not sufficient to encourage the private companies to participate in developing ports. Therefore, the government needs to give incentives to attract the private companies such as low-interest rate, long concession period and low concession fee.

4.4 Port Commercialization and Privatization presented by Miss Panhathai Nithilatthi (Thailand)



Miss Panhathai showed the market share in ASEAN Ports 2013, which found that Since 2009 Laem Chabang Port (LCB) has strongly grown at 7% a year on average. From the year 2012 to 2013, the market share of its increased by 2% from, 6% to 8% whereas, Bangkok Port (BKP) shared 2% of the market.

Realizing that infrastructure investment gap in APEC region is huge, she pointed that governments alone cannot meet the investment requirements for their infrastructure. In 2014, APEC endorsed Multi-Year Plan on Infrastructure Development and Investment (*PPP framework*). The Multi-Year Plan identifies four workstreams that will help guide future APEC work in infrastructure development and investment. In the process, the Multi-Year Plan would create common regional understanding and help stakeholders in making decisions when carrying forward the infrastructure development projects. The workstreams of the Multi-Year Plan are as follows:

Workstream 1: Fostering a business friendly environment for infrastructure development and investment, through a solid regulatory framework, that minimizes uncertainty and maximizes transparency and predictability;

Workstream 2: Development and refinement of the integrated planning system mechanisms;

Workstream 3: Development of government capacity to identify and generate a pipeline of bankable infrastructure projects; and

Workstream 4: Development or further improvement on financing and funding environment to encourage long - term investors.

Miss Panhathai referred to the study of APEC on “Connectivity creating new platforms for growth”, surveys have been conducted amongst 635 business leaders in the region and the result shows that China; US; and Indonesia have become the most popular economies for foreign investments. Private capital spending in APEC is expected to reach $56 billion in the next 3-5 years. There were 49 transportation projects (9 Seaports) seeking for PPP infrastructure in 2014.

She related the concept of Privatization and the reasons to implement the PPP approach with various benefits, such as access to private finance, better allocation of risks, efficiency gains and on time-on budget delivery. Moreover, the port governance models; public service port, tool port, landlord port and private service port were also presented. Up to 90% of ports worldwide adopt the landlord port authority model, although this only accounts for approximately 65% of throughput.

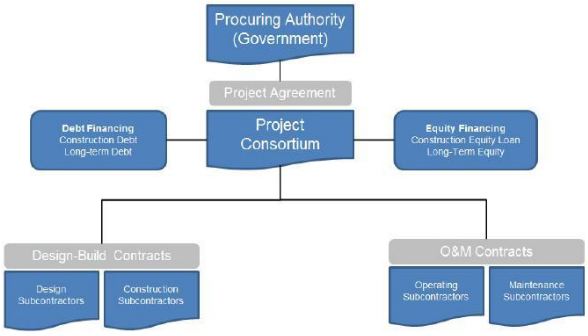
Type	Port Infrastructure	Port Suprastructure		Port Labour Force
Explanation / Examples	*Examples for infrastructure assets:* -port area, -quays, -roads, -railway tracks, -water, -electricity, -sewage systems, -pavement	*Examples for suprastructure assets:* *Buildings* -office buildings, -storage facilities (open/covered), -silos, -etc.	*Examples for suprastructure assets* *Equipment:* -cranes, -reach stackers, -fork lifts, -shovel loaders, -trucks, -etc.	*Examples for labour forces (required for all offered port activities including storage, workshop, repair and processing of goods):* -office worker, -port worker -fork lift driver, -reach stacker driver, -etc.
Illustration				
Public Port	Public	Public		Public
Tool Port	Public	Public		Private
Landlord Port	Public	Private		Private
Private Port	Private	Private		Private

Laem Chabang Port: At the beginning, the Leasehold agreement was made during 1993-1995, indicated that the Port Authority of Thailand (PAT) invests in port infrastructure and lessees or private port operations provide tools and equipment. Their own proprieties will be transferred to the PAT at the end of the contract. 2) BOT (Built Operate Transfer) Contract: resulted from public policy to encourage the private sector to be more participated in port business. During the concession period, PAT owns only public properties provided which are port land and outside areas. Whereas, the privates take hold of infrastructure, equipment and facilities that they provided during the concession. At end of the contract, ownership of immovable properties including port infrastructure will be transferred to the PAT, and partial or entire of moveable properties own by companies can be bought by PAT.

5. Presentation on Port Investment Funding

5.1 Port Investment Funding presented by Mr Doug O'Keefe (Canada)

Mr O'Keefe explained that there are several sources of port investments, mainly are public funds, port authority funding and private sector terminal investors. It noted that the emergence of non-traditional investors, such as pension funds, sovereign wealth funds and non-pension investment funds, took an equity stake in terminal operators and provided more financial disciplines in the development of terminals operations. The PPP investments in case of Canada are as following:



Source: PPP Canada

1) Debt and equity are both needed for long-term PPP transactions

- Project Company (PC) finances construction costs with both debt and equity.
- Risk of PC's capital is incentive for proper management of project and risks.
- Debt to equity based on cash flow risks with lenders requiring more equity (higher financial costs) for more variable cash flows (e.g. 90:10 D/E common).

2) Expected return on investment

- Equity : typically targets an internal rate of return of 11-13% before taxes.
- Debt : "A" rated PPP project bonds currently pay 180-220 basis points over Government of Canada debt of comparable maturities.

3) Short - term and long - term investors in the Canadian marketplace

- Short-term debt is typically financed through bank loans.
- Long-term debt is typically a bond that is either private (e.g. funded by Insurance Companies) or widely distributed depending on the transaction amount.
- Project developer's equity investments are paid back over the long-term operations period along with long-term debt repayment.

4) Attracting private financing

- A minimum $50 million capital cost is needed to attract private financiers

Moreover, the public funding of infrastructure in Canada including the leveraging of public investment by engaging port authorities, various levels of government and the private sectors:

1) Government develops a 10-year plan to deliver significant new infrastructure funds, and makes changes to the New Building Canada Fund so that it is more focused on strategic and trade enabling infrastructure priorities.

2) PPP in Canada: Federal Crown Corporation whose mandate is to improve the delivery of public infrastructure by achieving better value, timeliness and accountability to taxpayers, through PPP.

3) Set of investment and policy measures focused on establishing Canada's Asia-Pacific Gateway and Corridor Initiative as the best transportation network facilitating global supply chains between North America and Asia.

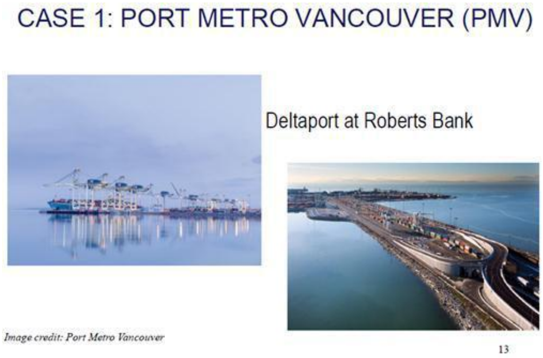
4) Provincial and Municipal Governments

The Canadian Port Authorities invest in facilities by using operating revenues for direct investment or covering debt service from commercial lenders. He then provided examples of investment projects namely the landside projects and a new Roberts Bank terminal 2 in Port Metro Vancouver; the Fairview Container Terminal in Prince Rupert; and a new multi-user bulk terminal in Sept-Iles, Quebec. The details are as follows:

CASE 1: PORT METRO VANCOUVER

5 major capital projects in 2014 – all landside projects to improve port access and flow of cargo movement. The total cost of these projects was $247.9 million. The port invested $113.6 million while the balance was financed by APGCI and provincial funding.

Project	Total Cost	Share
Low Level Road Project	$91.5M PMV	$29.1 M
South Shore Corridor Project	$73.2M PMV	$34.9 M.
Powell Street Overpass Project	$20.0M PMV	$20.0 M
232nd Street Overpass Project	$23.2M PMV	$5.4 M
Delta port Terminal Road and Rail Improvement Project	$40.0M PMV	$24.2 M.



CASE 2: Roberts Bank Terminal 2 (T2) Project, Port Metro Vancouver (PMV)

•New 3-berth container terminal with 2.4 million TEUs capacity;

• 40-year Terminal Development and Operating Concession – the concessionaire is responsible for terminal facilities, equipment and ongoing container handling operations.

• PMV also contracted for a Land Base Contractor to design, finance constructs and maintains the land base.

• PMV issued "Request for Qualifications" in June 2015.

Received 10+ responses by September 8, before closing and 5 bidders were selected for the “Request for Proposal” stage.

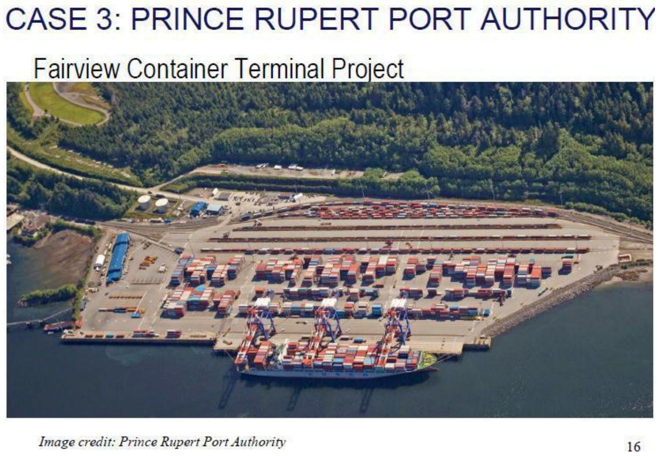
CASE 3: Fairview Container Terminal Project Prince Rupert Port Authority

• Phase 1 (completed in 2007)

– Widened the breakbulk wharf to 360 metres long and reconfigured 24 hectare terminal

– $170 million cost: 5 Partners - Maher Terminals ($60 million); Federal & Provincial Governments ($30 million each); CN Rail & Prince Rupert Port Authority ($25M ea).

– Maher Terminals got awarded concession contract to the year 2034 on 500,000 TEUs terminals.



• Phase 2:

– Project was initiated by Maher Terminals with $650 million expected cost.

– Terminal will be extended up to 800 metres and capacity increased to 1.2 million TEUs.

– DP World brought Mahers’ stake in April 2015.

– Option to renew concession to the year 2054 following the completion of extension

– Concession details are confidential.

CASE 4: Multi-User Wharf, Sept-Iles

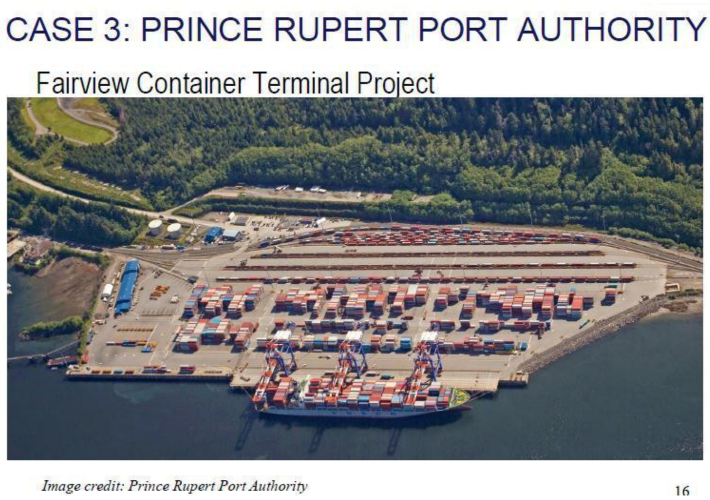
Sept-**Iles** is Canada’s main port for iron ore, aluminums ships, petroleum coke and limestone exports. Most bulk shipping was through two privately owned terminals.

• New $220 Million Multi-User Facility completed in 2015:

– 400-metre wharf face and 560-metre approach ramp, along with conveyors and ship loaders;

–Deepwater terminal capable of handling two Chinamax ore ships;

– State of the art conveyors capable of loading 8,000 tonnes of ore an hour.

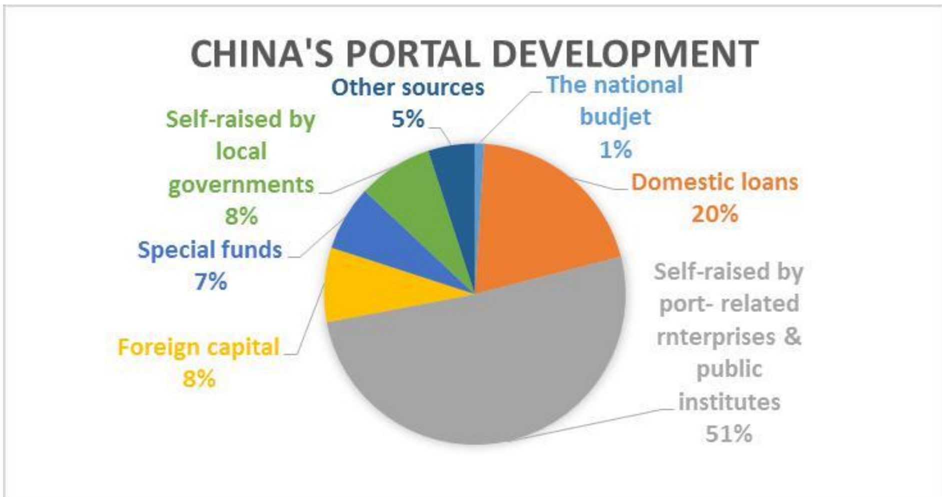


• Funding:

– Federal Government and Port Authority funded $55 million each.

– $110 M from 5 iron ore mining companies – Alderon Iron Ore, Champion Iron Mines, Labrador Iron Mines, New Millennium Iron, and Tata Steel Minerals Canada

5.2 Port Investment presented by Dr Yang Dong (China)



Since the introduction of Port Law, private capital has been active, breathing new life to ports. Dr Dong mentioned that the major investment models are privatization; for example, BOT, acquisition, joint venture, etc. Meanwhile, financing by listing on stock markets is also one of choices for ports. The case of port investment in China's ports as follows;

Port	Terminal	Designcapacity (million/terminal)	Investor	Share
Dalian	DL Container Terminal	1.8/5	MPA/MSK	49%
Tianjin	TJ Orient Container	1.4/4	DB world	49%
Qingdao	Container T phase 2\3	1	P&O Nedlloyd	--
	YG container Terminal		MSK /Cosco	50%
Shanghai	SCT container Waigaoqiao phase 4 container Pudong international container Waigaoqiao phase 1 container	1.7/10 1.8/4 1.6/3	Hutchison MSK Hutchison Cosco	50% 49% 30% 20%
Ningbo	Beilun phase2	0.8/3	Hutchison	49%
Fuzhou	Jiangyin International cont	1.5/5	PSA	---
Xiamen	XM international container XM Xiangya free-trade zone	2	Hutchison HK NWS	49% 50%
Shantou	ST International Container	Hutchison	70%	Shantou
Shenzhen	Yantian international container Shekou container Chiwan container	400/5 50/2 85/3	Hutchison/China Merchant Cosco/P&O Nedlloyd/Swire China Merchant Kerry(SG)	73%/32.5% 17.5%/25% /25%/20% 25%
Guangzhou	GZ container terminal	6	PSA	49%
Others	Nanjing,Nanhai,Jiangmen,Zhuhai	More than 10	Hutchison, Cosco and so on	More than 50%

A foreign investment in China apparently resulted in the increased port capacity (throughput) during 2000-2014.

In addition, The Maritime Silk Road aims to reach Europe, originating from cities on China's southeastern coast and using a system of linked ports and infrastructure projects. The sea route begins in Fuzhou, China and goes via Bangladesh; Indonesia; India; Sri Lanka; Viet Nam; the Maldives and East Africa. Along the African coast, China plans to develop ports in Kenya; Djibouti; Tanzania and Mozambique. The Maritime Silk Road would then continue from the African coast into the Red Sea and through the Suez canal to the Mediterranean. After passing Athens, the road terminates in Venice, where it joins the land-based 'belt' route. (The land-based route will start from the Chinese city of Xi'an, traveling through Central Asia, West Asia, and the Middle East, before reaching Europe and ending in Venice.)

In 2014, China announced the creation of a $40 billion Silk Road Fund, with investment from the State Administration of Foreign Exchange, China Investment Corporation, Export-Import Bank of China and China Development Bank. Additionally, the Asian Infrastructure Investment Bank (AIIB) is being established with equity of $100 billion to finance the creation of the new trade routes. Many of the economies involved in the new Silk Road routes are also members of the Chinese-led AIIB. Dr Dong added that China plans to offer low-cost financing to participating economies to help enable the infrastructure development required. This is a great opportunity for economies to seeking the development plan fund. At this time, there are no international organizations or ports supported by Maritime Silk Road Fund.

5.3 Port Investment presented by Mr Tienchai Makthiengtrong (Thailand)

Mr Tienchai described about the sources of fund available in Thailand, Member Economy Budgetary, Financial Loan, State Enterprise Bond, Infrastructure Bond and Securitization. The details are as follows:

- **Member Economy Budgetary**

Member Economy Budgetary is strictly controlled in Thailand, so that the government can maintain the economy's financial discipline. Generally, Government debt as a percent of
GDP is used by investors to measure a economy ability to make future payments on its debt, thus affecting the economy borrowing costs and government bond yields.

- **Domestic Loan**

In order to finance the project, the Port Authority of Thailand may get loans from domestic banks. It would be a long-term, secured (backed by a collateral) or unsecured, and are often advanced for financing equipment, machinery, etc. Banks usually require the commercial borrowers to submit monthly and annual financial statements, and maintain insurance coverage on the financed items.

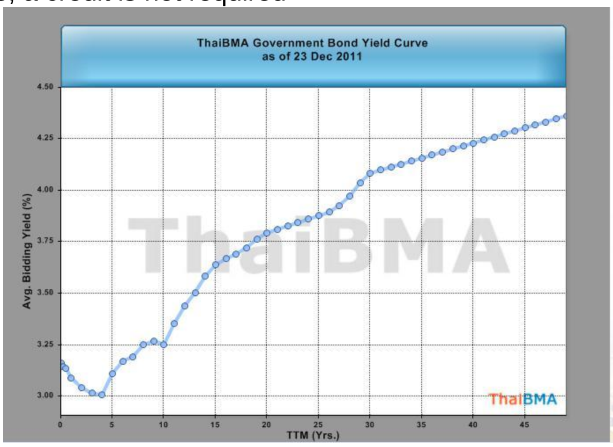
- **International Loan**

Acquiring a financial support from the international finance such as Asian Development Bank (ADB), Japan International Cooperation Agency (JICA), and the World Bank for infrastructure projects including the PPP's project which contain of long term loan with low interest rate (Grace Period).The funding methods are when the cabinet approved in principle, the Treasury Department Loan under the Ministry of Finance shall contact the source of fund for the project risk assessment. After such source of fund approved project funding, the project owner shall submit the project to the House of Representatives for consideration. The project has to be approved by the House of

Representatives in two times principle according to Section 190, and the government is required to provide the debt guarantee.

- **State-Own Enterprise Bond**

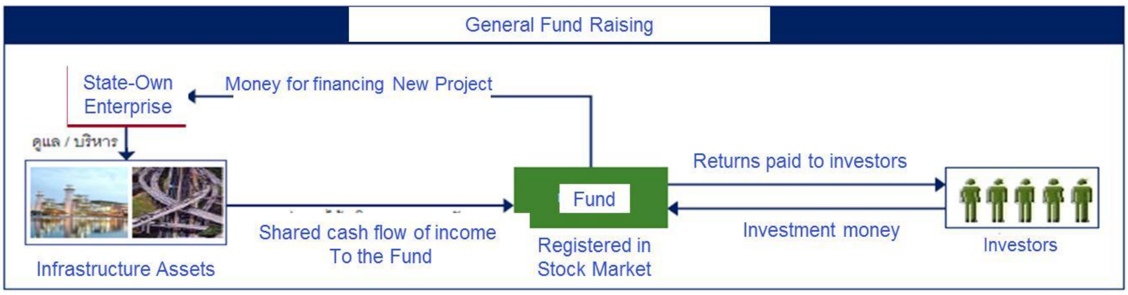
Minimum lot is 1,000 million Baht with compounded semi-annually interest payment. Principal repayment shall be in the last year of loan contract. The full amount of principle remains the same until the payment at the end of contract, resulting in a higher interest rate comparing to directly getting loans from the financial institution where the principal is repaid as installments. The bondholders will receive the agreed upon interest. Interest rate will depend upon the financial performance of bond issuer. Also, the term period of bond would also determine the level of coupon rate. In general, the interest rate for State-Own Enterprise Bond shall be referred to the Government Bond Yield Curve plus 60 to 70 bps. In this method of funding, State-Own Enterprise Bond issuance, a credit is not required



TTM (Yrs.)	Yield (%)
0.08	3.17%
0.25	3.15%
0.50	3.14%
1	3.09%
2	3.04%
3	3.02%
4	3.01%
5	3.11%
6	3.17%
7	3.20%
8	3.25%
9	3.27%
10	3.26%
20	3.80%
25	3.88%
30	4.08%
35	4.16%
40	4.23%
45	4.30%
49	4.36%

- **Infrastructure Fund**

Infrastructure Fund is a new alternative for raising fund to finance mega projects. The infrastructure fund manager will be set up as a juristic person in order to directly distribute Unit Trusts to institutional investors as well as retail investors. State-Own Enterprise shall transfer future cash flow to be received from operational performance to the fund raiser. Examples of infrastructure works which may this raise fund by adopting this method are Power Plant, Water Supply Works, Communication Business and Express way.



The State-Own Enterprise is eligible to utilize the money received from the Infrastructure Bond for financing its projects. Meanwhile, the state-own enterprise still holds the ownership of all assets and fully has management rights over its own infrastructure. After the fund raiser sells the Unit Trust, all Unit Trusts shall be registered in the stock market in order to strengthen the liquidity of investors for their trading in over the counter market.

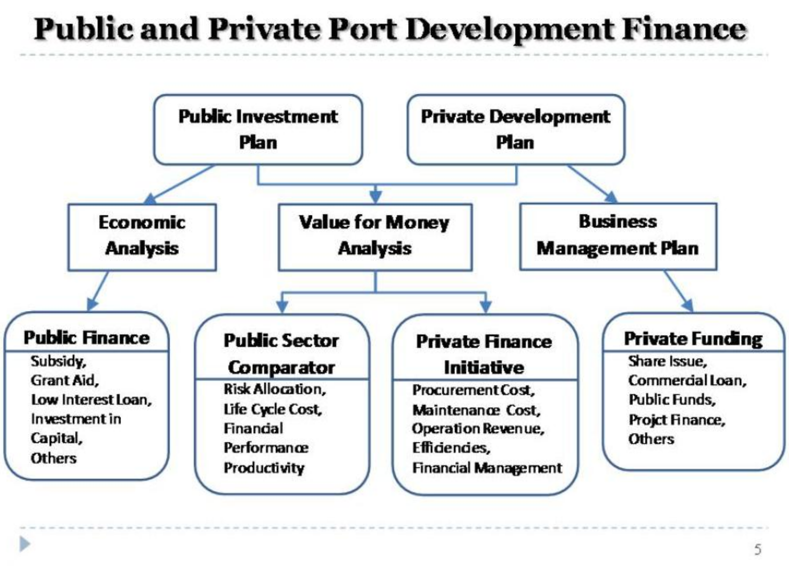
- **Securitization / Assets backed Securities**

Securitization is the process of taking an illiquid asset, or group of assets, and through financial engineering, transforming them into a security. A typical example of securitization is a mortgage-backed security (MBS), which is a type of asset-backed security that is secured by a collection of mortgages. The Interest Rate shall be depended upon the assets value or the received cash flow.
Moreover, he showed the factors of project funding as following:

Factor	Loan	Infrastructure Fund
1.Cost	Interest	Discount rate
2.Receiving Money and Financial Cost	Depending upon credit rating and the loaner's collateral.	Depending upon the amount and the future project cash flow.
3.Level of Public Debt	Included	Not included
4.Responsibility to the Stakeholder	Pay back the loaned amount with the interest. Repayment shall be paid by loaner in accordance with the contract.	Profit sharing money shall be paid to the Unit Trust holders by Fund raiser in accordance with the project cash flow.
5.Risk due to Project Delay	Pay back the loaned amount with the interest. Repayment shall be paid by loaner in accordance with the contract.	Unit Trust holders shall bear the cost of all risk.

In conclusion, he pointed that, in case of Thailand, the member economy budgetary is limited and not suitable for Mega Projects. Whereas, a new alternative for Mega Project funding is Infrastructure Bond. Financial loan and State Enterprise Bond which Public debt shall be increased within a certain level and Member Economy credit rating shall be lessen. While Securitization is free from public debt.

6. Training on Port Investment Funding presented by Mr Sumio Suzuki (Japan)



Mr Suzuki presented on the basic knowledge of the investment funding including Funding Strategy, Feasibility Study of Port Development Project and Engineering Economics. He also explained about the evolution of Private Investment in Ports starting with the ADB's guidebook on "Developing Best Practices for Promoting Private Sector Investment in Infrastructure, Ports" in 2000, presenting that the full scale privatization is not recommended. While Private cargo-handling terminals and competition for third party cargo are recommended.

The cases of valuation of privatized ports in Australia were shown as follows;

1) Port Botany was privatized for USD 3.17 billion in 2013, under a 99-year lease, for 25 times the value of EBITDA.

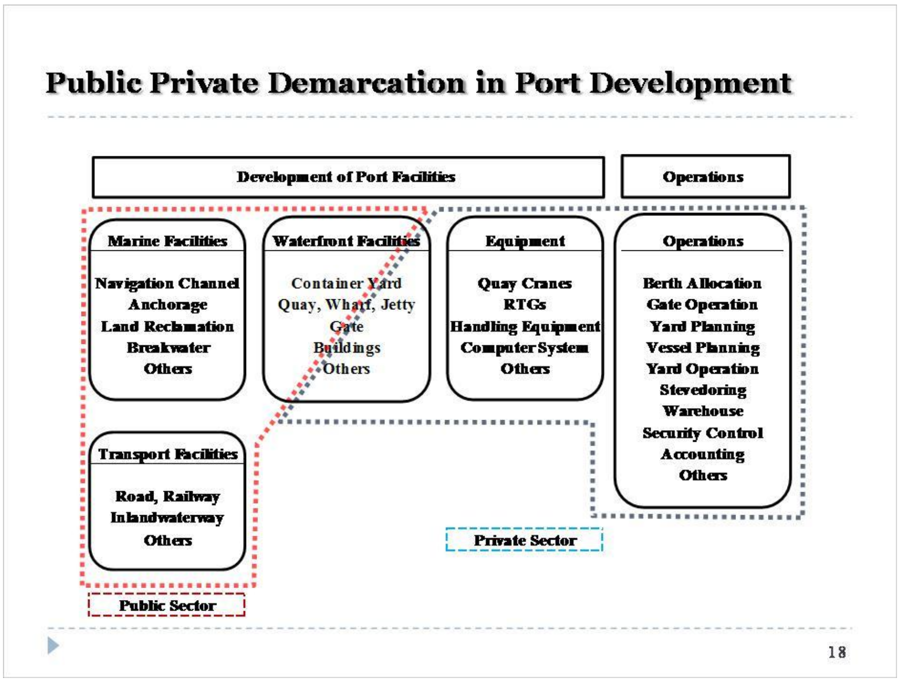
2) Port Kembla for USD 0.56 billion in Australia in 2013, under a 99-year leases, for 25 times the value of EBITDA.

3) Port of Brisbane, Canadian pension fund CDPQ acquired a 26.67% stake in the port for about USD 1.03 billion in 2013, implying an enterprise value (including debt) of USD 4.55 billion, which was roughly 27 times the value of EBITDA.

4) Port of Newcastle in New South Wales was sold for USD 1.29 billion under a 98 year lease in 2014, which was 27 times the value of EBITDA.

5) Port of Melbourne, valuation of at least USD 3.67 billion for a 99-year lease, with 25 times the value of EBITDA. (2.5 million TEUs in 2013/14)

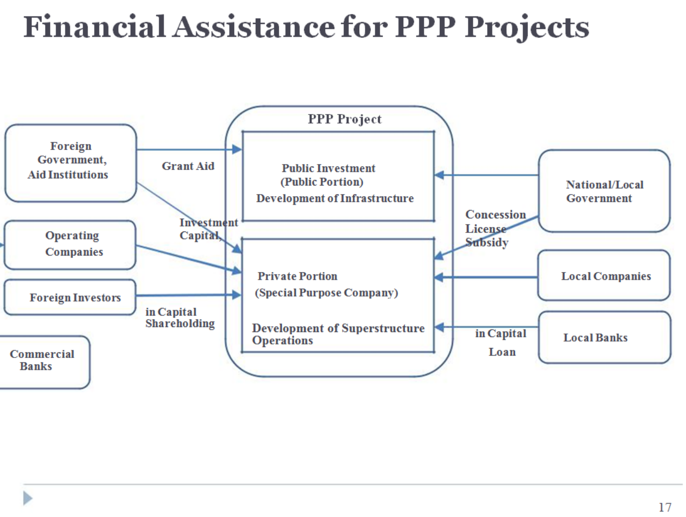
He reviewed the PPP Laws and Regulations in Asian economies. It is apparent that more than 60 economies have established laws and/or regulations related to private participation in infrastructure projects, in terms of “Concession, BOT, PFI, PPP” or other form of private investment. Such laws and/or regulations in Asian economies are mainly established or revised after 2000. For example, the Philippines started BOT Law in 2012, Thailand had the Private Investment in State Undertaking Act (PPP Act) in 2013 and Viet Nam had a Decree on investment in the PPP form (PPP Decree) in 2015.



Moreover, the historical changes in port management systems in UK; USA and Europe were discussed. He showed the financial assistance for PPP projects and Public Private Demarcation in Port Development. Private sectors are funded in part of operations, equipment and some waterfront facilities and public sector invested in marine facilities, transport facilities and some waterfront facilities. For example, maritime access channels outside the ports are generally the responsibility of the Central Government. Exterior breakwaters are also the responsibility of port authorities in many cases; Japan; France and some other economies give financial assistance, whereas, Belgium; USA and some others develop breakwaters by own capacity. Lights, buoys and navigational aids outside the ports are usually the responsibility of the organization in charge of maritime safety. Quays and berths are usually the responsibility of the port authority. Central Government sometimes renders financial assistance to port authorities. Superstructure of terminals is usually built by port authorities or private operators.

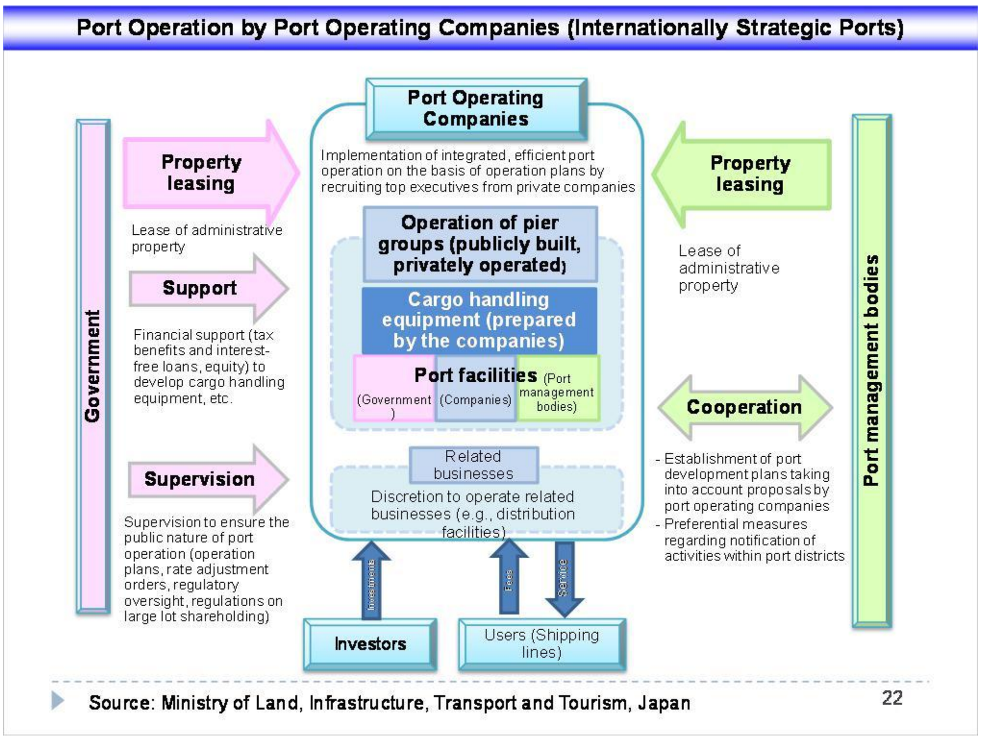
The tax levy for port development and maintenance was one of the discussions. Some US ports can levy tax on property of residents within a certain port district behind the port. In case of the State of Washington, the port is permitted to levy up to $0.45 per $1,000 of assessed valuation.

The 2015 levy will be used for General Obligation (G.O.) Bonds Debt Service, Regional Transportation & Freight Mobility projects (FAST Corridor and Argo Road), Seaport and Real Estate Environmental Remediation Liability, a portion of operating expenses and Real Estate Capital Improvements, Highline Schools NOISE Insulation, Workforce Development/Port Jobs and Addition to the Transportation Infrastructure Fund (TIF)



The PPP for port development in caes of Japanese ports

In Japan, main ports were developed by Member Economy Government or Major Cities (1875-1945). Ports and Harbours Law established in 1950, local governments shall be port management. The PPP container terminal started in 2002. PSA joined Habiki Container Terminal (34% of shares, 2004-2007). After that, Port Operating Company System was introduced and amended to the Ports and Harbors Law in 2011. Ports of Kobe and Osaka jointly established a port operating company in 2014.



The port development shall be made in accordance with the plan of port management body, and the plan shall be endorsed by the member economy government in case of major ports. Member economy government can hold shares of a port operating company, if necessary.

7. Lesson learned on Port Privatization and Port Investment from APEC economies

PORT PRIVATIZATION AND COMMERCIALIZATION AND PORT INVESTMENT ACTIVITIES IN APEC PORTS

This part shows the summary of a discussion during the workshop and the information from economies surveys. During the meeting, participants shared the status of privatized and commercial activities, port privatization policy/law/regulation, key factors influencing the privatization, port investment and the challenge in their economies.

7.1 BRUNEI DARUSSALAM

The government-run port of Brunei Darussalam, the Muara Port, is administered, managed, and operated by the Ports Department under the Ministry of Communication. The Ports Department is responsible for management of infrastructures of commercial port facilities and operational management of the covered and storage areas, berth allocation, and cargo into and out of port.

Muara Port plans to privatize the new container terminals. Privatization will involve only operations and management of leased container terminal. Other port activities such as an operation of general cargo will be run by the Ports Department. The details of privatization and commercialization activities are as follows:

1) INLAND CONTAINER DEPOT (ICD MUARA)

Date of Officiated: 10 June 2009 by His Honourable Minister of Communications, Brunei Darussalam

Area: 18,000 sq. ft.
Units: 5 Units @ 3,600 sq. ft. per unit

Ports Department, Ministry of Communications has awarded Proposal for the Lease and Operation of The Inland Container Depot at Muara for Logistics / Transshipment / Transit Re-Export and Distribution' to ASAFF Sdn Bhd. The company will commence its operation by the end of the year.

Among activities to be carried out in this area but not limited to the following:

(i) Logistics Centre
(ii) Distribution Centre
(iii) Cargo Consolidation / Deconsolidation
(iv) Storage Area
(v) Cargo/ Container Transit / Transshipment
(vi) Trading House

2) INLAND CONTAINER DEPOT (ICD KUALA LURAH)

Ports Department, Ministry of Communications will seek an operator of the new ICD Kuala Lurah. The location of this ICD is at the border between Brunei Darussalam and Malaysia to facilitate movement of cargoes between Brunei Darussalam and Malaysia. This is line with ASEAN Agreement on the Facilitation of Goods in Transit.

3) FERRY SERVICES FOR VEHICLES AND PASSENGERS BETWEEN SERASA, BRUNEI TO LABUAN, MALAYSIA

M.V. Goodwill Star made her maiden voyage from FT. Labuan, Malaysia to Serasa, Brunei Darussalam on 7th May 2015. Owned by Labuan Mainland Link Sdn. Bhd., M.V. Goodwill Star serves as a second ferry operating at Serasa Ferry Terminal other than M.V. Shuttle Hope which is operated by PKL Jaya. These vessels have the capacity to carry both passengers and vehicles.

M.V. Goodwill Star calls for Serasa Ferry Terminal on a daily basis with a capacity of carrying 100 vehicles and 500 passengers for every voyage.

7.2 HONG KONG, CHINA

Regulatory role of government regarding administration, management, and operation at the Port of Hong Kong, China is exercised by the Marine Department. Government's role is limiting to monitoring the market situation, providing a discussion forum for the industry and the compliance to international standards with regards to safety and environmental protection, ship registration, manning, pollution, and maritime search and rescue operation. The government encourages private investment and supports with positive non-intervention policy. Hong Kong, China is Fully Privatized Ports Model which, all regulatory, capital and operational activities are provided by the private sector. Most major marine facilities in Hong Kong, China are run by private firms.

A free port philosophy of management is the guiding principles. The philosophy of free port, free enterprise, and the free market are to provide a minimum scale of regulatory and bureaucracy framework while complying with all internationally accepted practices and standards. Port activities are left to private enterprises and market forces. Cargo handling facilities at the port have been developed and are operated by the private sector in order to take advantage of their commercial skill and reduce port bureaucracy to a minimum. Port privatization legal framework of Hong Kong, China showed long term tenancy for container terminal and short term tenancy for temporary cargo handling seafront

7.3 INDONESIA

Indonesia started to reform ports base on the Shipping Law in No.17/2008. which separate the commercial port (Port Authority: PA) and the non-commercial port (Port Management Unit: PMU). Based on Indonesian Negative List (Presidential Decree No. 39 Year 2014 about List of Closed and Open Businesses with the requirements in the field of Investment), foreign companies can invest maximum 95% of total in PPP project (under Concession Scheme).

The Government of Indonesia (GOI) supports in basic infrastructures such as General Cost, Breakwater, Outer Seawalls/Revetment, Dredging, Reclamation/Quay wall and Revetment, Road & Bridge, Navigational Aids, Engineering Cost, Contingency, Administration Cost which was approximate USD 1.14 billion, while Private Sector supports in General Cost, Container Yard, Pavement, Revetment for Phase II, Backup Area (on land), Container Handling Equipment, Engineering cost, Contingency, Administration Cost, Construction cost which was around USD 2.03 billion. In 2015, the ratio of the development of the ports in Indonesia can be shown that 36% supported by the GOI and 64% supported by privates.

PROJECT FINANCING

USD $

Description	PATIMBAN	SOURCE of FUNDING
1. General Cost	132,568,710	GOI & Private Sector
2. Direct Construction Cost		
(1) Breakwater	60,007,949.5	Govt. of Indonesia
(2) Outer Seawalls / Revetment	58,861,296.0	Govt. of Indonesia
(3) Dredging *)	374,998,383.9	Govt. of Indonesia
(4) Quay Wall/ Reclamation & Soil Improvement *) **)	543,940,939.3	Govt. of Indonesia
(5) Yard Pavement & Buildings	289,595,250.0	Private Sector
(6) Revetment for Phase II	38,777,229.0	Private Sector
(7) Backup Area (On land)	31,749,296.0	Private Sector
(8) Road & Bridge	138,452,840.0	Govt. of Indonesia
(9) Container Handling Equipment	854,766,720.0	Private Sector
(10) Navigational Aids	16,520,000.0	Govt. of Indonesia
Sub Total Construction Cost	2,407,669,903.6	
3. Project Related Expenses		
(1) Engineering Cost	66,284,355.0	GOI & Private Sector
(2) Contingency	265,137,419.8	GOI & Private Sector
(3) Adminis tration Cost	26,513,742.0	GOI & Private Sector
Sub Total Project Related Expenses	357,935,516.8	
4. Total Construction Cost	2,898,174,130.3	
VAT 10%	289,817,413.0	
Total Project Cost	3,187,991,543.4	

Note: *) Excluding Change of Draft Design for Access Channel and Basin to -14m from -17 m LWS on first stage
**) Not consider change of parts of wharves structure from reclamation method to deck on pile

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INDONESIA PORT CORPORATION I (IPC I)

In order to create the optimal performance for providing maximum contribution to improving performance, IPC 1 formed several subsidiary companies with specific business-focused as such PT Terminal Petikemas Indonesia is designated to provide port services and operate specific terminal; PT Prima Terminal Petikemas is formed to provide international container services and responsible for business growth.; PT Prima Indonesia Logistik is responsible for providing all services that related to logistic business; PT Prima Multi Terminal has a core business that links with general cargo services and other services; PT Prima Pengembangan Kawasan is responsible for providing, developing, and managing an integrated industrial area and property services.

IPC 1 has planned to improve port performance which particularly by extending the container terminal at Port of Belawan, which is currently being pursued deepening of the channel. To support it, IPC 1 will do channel deepening. In addition to the safety shipping, this project is also intended to accommodate a change in the size of ships that enter to the Port of Belawan of the previous size of 2,000 TEUs to 3,500 TEUs.

Port of Kuala Tanjung with its strategic location is one of two ports that declared by the President of Republic Indonesia to become the Hub Port of Indonesia. The preliminary project itself is designed to accommodate the liquid cargo and container that coming from the hinterland and special economic zone, SEI Mangke in North Sumatera. The development project was already started in January 2015 and expected to be implemented in early of 2017.

INDONESIA PORT CORPORATION II (IPC II)

The Company has realized a number of strategic programs. Among those are obtaining funding commitment from domestic and foreign banks. It demonstrated great confidence from stakeholders, particularly in this case from creditors to the Company. According to the agreement, IPC obtained offshore credit facilities in the amount of USD 2 billion, with existing drawdown in the sum of USD 550 million. The fund was used to develop several Company's strategic policies in 2015.

The company has prepared a number of medium and long range plans whose realization was started in 2015. The plan was to support the improvement on Company's performance as well as a part of a process to secure Company's position as port industry and global logistic player. Several strategies have been prepared; among others is the construction and development of facilities at some ports. The fund came from Company's cash and loans from syndicated Indonesian and foreign banks.

Funding commitment from domestic and foreign banks showed stakeholders'—in this case, creditors'— firm confidence level to the Company. Therefore, the Management is optimistic that programs and targets that have been determined for 2015 will be solidly realized. The firm believers are 7-bank syndicated consisting of Deutsche Bank AG, Singapore Branch; Australia and New Zealand Banking Group Limited; the Bank of Tokyo- Mitsubishi UFJ; Mizuho Bank; Societe Generale, Hong Kong, China Branch; Sumitomo Mitsui Banking Corporation and United Overseas Bank. According to the agreement, IPC obtains credit facility in the amount of USD1 billion with existing drawdown of USD 550 million. The capital will be used to build a number of new ports, i.e.: in Sorong Papua, West Kalimantan, and South Sumatera and for the development of Cirebon port, West Java.

On sea transport mode, IPC plans to utilize existing waterway which extends 40 km from TanjungPriok to Cikarang Industrial zone, West Java (Cikarang-Bekasi-Sea) with estimated cost of less than Rp 1 trillion. This canal will turn into transportation channel that can be used by barges with maximum 150 containers load capacity. IPC will also build a large terminal in Cikarang area (Cikarang inland waterway). This initiative is part of the efforts to reduce the use of trucking from seaport to industrial zone as heavy congested traffic in the city costs a lot.

INDONESIA PORT CORPORATION III (IPC III)

PT Pelabuhan Indonesia III (Persero) has implemented the following programs involving undertakings on innovation and investment that will facilitate logistics enhancements especially in East Indonesia in accordance with its corporate vision: To be an excellent port service provider, committed to stimulate member economy logistics integration, the following initiatives are being undertaken:

1. Teluk Lamong Multi-purpose Terminal is a part of Tanjung Perak Port that caters to serve large vessels with -14 m LWS draft. Tanjung Perak Port capacity is currently limited, both in construction capabilities and land availability.

The construction of Teluk Lamong Multi-purpose Terminal was completed and operated in 2014. In 2011, the development of the wharf and access bridge has commenced.

2. The development of Surabaya West Access Channel (SWAC) will cover the widening of SWAC from 100 m to 150 m and its deepening from -8.5 m LWS to -14 m LWS. Therefore, the access channel capacity will increase from 27.000 units of ship per year and can cater to vessels with above 60.000 DWT (Post-Panamax). This development is expected to increase cost efficiency on member economy logistics, particularly those concerning the East Java economic growth.

In 2011, Pelindo III accomplished technical and financial feasibility studies (assisted by Netherlands' consultant), environmental study (assisted by ITS consultant) and has obtained environmental feasibility approval. It was also proposed to the Ministry of Transportation that Pelindo III became an initiator to obtain management concessions of SWAC. Implementation of the dredging was started in 2012, therefore operation is expected to commence by the end of 2013.

3. Modernization of Tanjung Emas Port in Semarang to overcome the obstacles in rendering its service at both Tanjung Emas Branch and Container Terminal Unit, which are land subsidence and tidal limitations. Hence, the revitalization program was applied to build a polder system that is integrated to the polder system of the City of Semarang. In 2011, the development phase covered construction of the Inner Port wharf, Nusantara wharf elevation, yard and polder systems development and procurement of luffing crane.

4. Development of Container Terminal in Banjarmasin Port, which has the highest growth in container traffic. To cope with the growth, Pelindo III added some facilities at the Banjarmasin Container Terminal by constructing Container Wharf of 265 meters in length and Container Yard of 2.7 hectares in area. Completion of the project was in

2012. Provision of additional cargo handling equipment, consisting of five of units head trucks and chassis, and one unit RTG, also complimented the facility development.

5. Development of Benoa Port into Cruise Port Terminal that will expand the utilization of the port into a turnaround cruise port and tourism center. In 2011, Pelindo III developed a small cruise terminal to support cruise activities. Deepening of the port basin from -9 m LWS to -12 m LWS will also be undertaken. Pelindo III, which acts as one of the shareholders, is also into construction of the Nusa Dua Toll Road that links Benoa Port - Ngurah Rai airport - Nusa Dua.

6. Procurement of container handling equipment at Tenau Kupang Port in 2011 that included one unit of CC and two units of RTG to improve container handling productivity. This reflects Pelindo III’s commitment to accelerate economic development in the eastern part of Indonesia.

7. Procurement of loading and unloading equipment at Tanjung Perak Port, consisting of a Harbour Mobile Crane (HMC) for the Jamrud Terminal. This will increase the production capacity in Tanjung Perak Port. Currently, there are four available units of 7 HMCs, which are planned for deployment.

INDONESIA PORT CORPORATION IV (IPC IV)

Indonesia Port Corporation IV has not conducted any port privatization. At several ports, however, commercialization has been implemented in stages, including operational partnership and investment partnership covering port facility development or procurement.

In terms of the port operational partnership, there has been a synergy between the port operator and private parties through container or break-bulk handling activities as well as port area utilization to support industrial activities. Port facility and equipment development are being undertaken through private sector participation and the cooperation scheme being adopted is generally through revenue-sharing.

Makassar New Port project is now in progress and will be operated in the early year of 2018. The project is a partnership program between the Government of South Sulawesi, Regency of Makassar, and Pelindo IV. It will be operated by Pelindo IV and some prospective investor.

The challenges for private participation in the port development or operation is the existing institutional arrangements limit the choice of funding because PA and PMU are centralized that fully dependent on funding from the State Budget. Based on the current institutional structure, PA and PMU are not permitted to reinvest revenues directly for port operation. Therefore to grant a more flexible approach in managing and utilizing the funds originating from sources other than the State Budget (e.g., revenue from the Project), it might be considered allowing PA and PMU to function as a public service body. The majority of PA does not own basic port infrastructure, it belongs to the port operators instead. It prevents from establishing fair playing field/competition within in the port. A trend for PBEs to submit an unsolicited proposal. However, MOT has not set up thorough criteria to evaluate the unsolicited project. If excessively unsolicited projects are approved, it might lead to an inefficiency of port operations due to over investment.

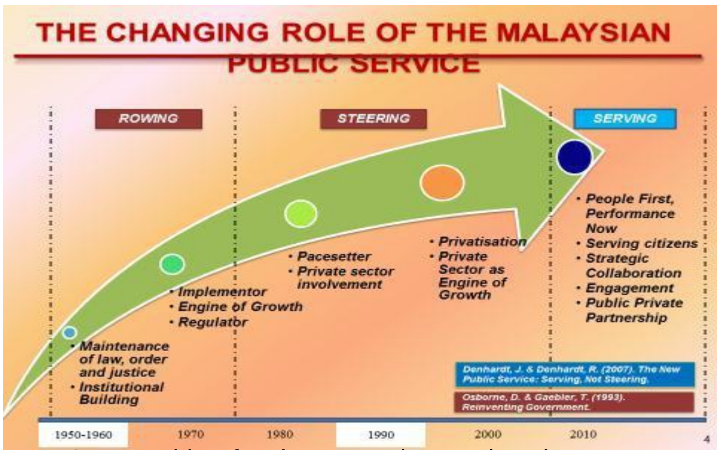
7.4 JAPAN

Most ports in Japan are landlord ports. The recent privatization was the establishment of “Port Corporation” which manages and leases port terminals to shipping companies or stevedoring companies. The system is described in Port Law. According to the Ports and Harbour Law (law No.218,1950), the "Port Administrator" is assigned to develop, administer, manage, and operate ports and harbors in Japan to unify the port administration. The "Port Administrator" is a port and harbor board, established by a corporation statute and set up individually or commonly by general local public entities. Jurisdiction of the administrator is limited to subjects concerning member economy benefit and, at the same time, the port administrator is not able to obstruct fair competition by the private sector and will not operate any business in competition with the private sector. Port administrator or local public entities control harbor limits (water areas) and waterfront area (land area) which are designated by the member economy government and are in charge of port plan, port improvement and share of cost, management of public properties and regulation of use, and commercialized administration. However, port facilities are being operated by commercial firms. member economy government directs, adjusts, and assists the autonomous administrative body only for the benefits of port and harbor municipalities; especially in the main areas of formulating member economy policy, supervising, and supporting port administrator. The corporation is expected to conduct port marketing or giving incentives to port users.

Sources of fund in case of container terminal are available from the public (government/local government) and loan. It is case by case. In Japan, there are both public terminals and dedicated terminals. The challenge of the port privatization in Japan is marketing which should be enhanced. Undoubtedly, the capacity of corporations is one of the significant challenges.

7.5 MALAYSIA

The Malaysian government encouraged PPPs in 1950 and it has been in active since 1991. The PPP scheme was officially unveiled under the 9th Malaysia Plan in 2006 whereby the government decided to streamline privatization by adopting new approaches such as PPP/PFI model and mechanisms. The 10th Malaysian Plan (2011-2015) further enhances the objective of PPPs. Malaysia does not have a specific PPP law.



However, the Financial Procedure Act 1957 provides for the general control and management of the public finances in Malaysia. The Act was amended in 1972 to empower the Minister of Finance to manage, control, supervise and direct all financial matters involving the federal government. Although the Act does not provide specifically for PPPs, the Act is still relevant as it regulates public purchase and acquisition. To maintain check and balance in the procuring process, projects proposals are assessed and evaluated by the Project Steering Committee i.e through the PPP Committee and the Highest PPP Committee. It is then tabled to the Cabinet for a collective decision. In addition to the above, PPPs in Malaysia are also governed by the member economy policies on PPPs, including the privatization master plan. These member economy policies set out guidelines for the regulation of PPPs. In view of the fact that these member economy policies are not the act of parliament, it is not binding. Nevertheless, these policies guide PPPs and to be followed when procuring PPPs. Apart from the above, Public Private Partnership Unit (UKAS) as the central agency in coordinating PPP in the economy has also developed several Guidelines pertaining to PPP and privatization. These Guidelines further detail out the objective of the policy, methods of PPP and privatization, as well as the implementation mechanism

Malaysia extraction of some of the issues and recommendations

- Public financial support should be considered when properly justified in order to make projects financially viable. Instruments such as Viability Gap Funding, Tax Incentives and Guarantee Mechanisms should be developed.

- Efforts should be pursued to further develop domestic banking sectors as PPP programmes need to be supported by strong local institutions

- PPP contracts and related regulations should ensure that projects are bankable (issuance of step-in rights, termination payments and security interest)

- Financial products should be developed for channeling institutional investors' funds to infrastructure projects. Initiatives should be supported to deepen domestic capital markets and particular local currency bond markets.

- Private investors might not be ready to support certain risks. Access should be facilitated to mitigate risks such as political risks, commercial and currency risks which include insurances and guarantees."

The financial sector is part of Malaysia's success. The economy's banks are well capitalized and governance is applied equally to all financial institutions. Macroeconomic management has been strong and the business environment is robust. One area that stands out as a major contributor to Malaysia's success is its innovative and inclusive financial sector. Malaysia has developed a full range of financial services from microfinance to special loans for farmers tied to growing seasons and financing for small- and medium-scale enterprises. Fundamental to the stability of Malaysia's financial system is its adoption of compliance with global standards for supervision and regulation of banking and insurance. At the same time, Malaysia's banks are well capitalized; governance and regulations are applied equally to all financial institutions across the economy. In addition, the court system and alternative mechanisms including arbitration facilitate resolution of disputes.

Malaysia has also become a global leader in Islamic finance or participant banking. During the last decade, the economy has boosted financial inclusion partly by developing an Islamic finance agenda to promote stability and stronger ties between finance and the real sector. The quality of service and sound practices adopted by Malaysian financial institutions has proven its viability.

Malaysia: Financial Sector Stability Assessment 2013
International Monetary Fund

Malaysia's financial system has weathered the recent global financial crisis well, helped by limited reliance of financial intermediaries on cross-border funding, a well developed supervisory and regulatory regime, and a well capitalized banking system.

Banks are resilient to a range of economic and market shocks; though the high level of reliance on demand deposits is a potential vulnerability. Other risks faced by the financial system include those related to rapid loan growth, rising house prices, and high household leverage, which call for enhanced monitoring of household leverage and a review of the effectiveness of the macro prudential measures

The regulatory and supervisory regime for banks, insurance firms, securities markets, and market infrastructure exhibits a high degree of compliance with international standards. Areas for improvement include enhancing the framework of consolidated supervision and addressing legal provisions that could potentially compromise supervisory independence.

Local Fund

The appetite of local financial institution for PPP projects is generally good with sufficient liquidity. The current funds rate ranges from 5.5% - 7.5% p.a. subject to instrument and project profile

Enabling Environment

- Accurate and unbiased estimations of future payments, highly necessary to ascertain that all of the parties involved will attain the optimal benefits from the construction and operation of the PPP project.

- An adequate legal and regulatory framework to give assurance to the investor/lender

- A consistent policy orientation, the creation of an overall member economy strategy might be significantly helpful in making sure that projects would remain attainable and sustainable despite changes in government administration

After the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) is in collaboration with UKAS of the Government of Malaysia, viability gap funding, tax incentives and guarantee mechanisms should be developed. Dana Jamin established in May 2009, to be a financial guarantor and a catalyst to stimulate and further develop the Malaysian bond/ Sukuk market. Providing the financial guarantee insurance for bonds and Sukuk issuances to viable Malaysian companies will enable an access to the Private Debt Securities (PDS) market. Jointly owned by Minister of Finance Incorporated (50%) and Credit Guarantee Corporation Malaysia Berhad (50%), Danajamin is rated AAA by both Rating Services Bhd (RAM) and Malaysia Rating Corporation (MARC). Credit Guarantee Corporation is a financial institution majority owned by Bank Negara Malaysia. Danajamin has total assets of RM1.9 billion and total shareholders' equity of RM1.3 billion as at 31 December 2014.Danajamin is regulated and supervised by Bank Negara Malaysia under the Financial Services Act 2013.

Danajamin's key objectives are:

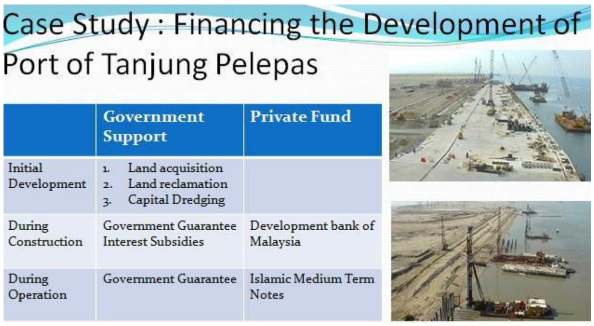
- To provide a financial guarantee to enable financially viable companies access to the PDS market;

- To obtain financing, with emphasis on long-term financing;

- To catalyse the further development of the domestic PDS market as an alternative source of financing to complement the banking industry; and

- To accelerate economic growth by improving access to capital for Malaysian companies

Case Study of financial Development of Ports in Malaysia



1) Port of Tanjung Pelepas

The government supported in initial development; land acquisition, land reclamation, and capital dredging. While during construction and operation were supported by both government and private fund (Development bank of Malaysia and Islamic Medium Term Notes)

2) Kuantan Port

The privatization for the New Deep Water Terminal (NDWT) was completed on 16th June 2015. NDWT is a project involving two parties, namely: the Federal Government, which will be responsible for the construction of a breakwater measuring 4.7 km.; and the private sector, which will be responsible for the reclamation, construction of berths and navigation channel as well as provision of equipment.

3) Bintulu Port, Northport, Westport used Sukuk Issuance on Ports which distinguish Suhuk from Conventional Bonds. The details are as follows;

	Conventional Bonds	**Sukuk**
Asset ownership	Bonds do not provide the investor a share of ownership in the asset, project, business, or joint venture they support. They're a debt obligation from the issuer to the bondholder.	Sukuk provided the investor partial ownership in the asset on which the Sukuk are based.
Investment criteria	Generally, bonds can be used to finance any asset, project, business, or joint venture that complies with local legislation	The asset on which Sukuk are based must be sharia-compliant.
Issue unit	Each bond represents a share of debt.	Each Sukuk represents a share of the underlying asset.
Issue price	The face value of a bond price is based on the issuer's credit worthiness (including its rating).	The face value of Sukuk is based on the market value of the underlying asset.
Investment rewards and risks	Bondholders receive regularly scheduled (and often fixed rate) interest payments for the life of the bond, and their principal is guaranteed to be returned at the bond's maturity date.	Sukuk holders receive a share of profits from the underlying asset (and accept a share of any loss incurred).
Effects of costs	Bondholders generally are not affected by costs related to the asset, project, business, or joint venture they support. The performance of the underlying asset does not affect investor rewards.	Sukuk holders are affected by costs related to the underlying asset. Higher costs may translate to lower investor profits and vice versa.

7.6 PAPUA NEW GUINEA

PNG Ports Corporation Ltd is a State-owned Entity whose ownership is vested in trust with the Kumul Consolidated Holdings (formerly IPBC) on behalf of the Government of PNG. PNGCL operates 16 ports in PNG including Lae Port and Port Moresby Port.

The concession based on PPP operating model for Lae (Tidal Basin) and Pom Port (Motukea). PPP Modality is preferred given international experience in driving higher efficiencies and productivity – Lowers cost to all stakeholders. High productivity levels through faster turnaround at berth and increased volumes will attract larger cellular container vessels which will result in reduced logistics costs and corresponding economic benefit of reductions in the supply chain costs for movement of goods into and out of PNG.

7.7 THE PHILIPPINES

Philippines Ports Authority (PPA) was established under Presidential Decree (PD) No.505 and amended by PD No.857 in December 1975. PPA is mandated to implement an integration of planning, development, financing, and operations of ports that applied for the entire port in the Philippines. PPA has been implementing a Terminal Management Operations and Service Policy which classified ports according to the level of investment that is needed by the port to operate optimally and respond to market needs perfectly. The cited Development and/or management and operations of any ports could be provided by the government and/or the private sector, depending on the tier classification, through management contracts, built-operate-transfer schemes, joint venture arrangements or leasing of port real estate. In addition, PPA retains its regulator role of ensuring port operators to comply with existing government rules and regulations.

As a government corporation, PPA is vested with finance autonomy, therefore, does not rely on member economy governments for its budget. However, the policy of accelerating privatization of major ports has been reviewed and contained in the Medium Term Port Development Plan (MTPIP).

The manners of privatization of ports in the Philippines vary from port to port. In the smaller ports, only the cargo handling and ancillary services are contracted out to the private sector with the contracts ranging from 3 to 15 years. The PPA continues to maintain, adjust and manage the ports. In the bigger ports, like the Manila International Container Terminal (MICT), their operations, management, maintenance and development functions have been transferred to the port operator for 25 years. The contract for the MICT was awarded through international competitive bidding to a percentage share of the gross revenues of the private operator.

Port of Davao-Sasa.-The development of Davao-Sasa Port through PPP under the initiative of the Department of Transportation (formerly Department of Transportation and Communications) has been suspended. The Directors of the new PPA Board has directed PPA to restudy the development requirements of the port and prepare its own proposal.

Privatization of Existing Passenger Terminal Buildings (PTBs). As approved by the PPA Board Commissioners, the guidelines which govern the procurement of PTB operators for existing PTBs were finally implemented on 12 November 2012. The followings are the recent updates on PTB privatization across the different PPA ports nationwide:

1. Awarded with 5-Year Contract in 2016

a. Baseport Legazpi (PMO Bicol)
b. Baseport Dumaguete (PMONegros Oriental/Siquijor)
c. TMO Larena (PMONegros Oriental/Siquijor)
d. Iloilo Fast Craft Terminal (PMO Panay/Guimaras)
e. TMO Tubigon (PMO Bohol)

2. For Public Bidding

a. TMO Balanacan (PMO Marinduque/Quezon)
b. Baseport Lucena (PMO Marinduque/Quezon)
c. TMO Sta. Cruz (PMO Marinduque/Quezon)
d. Baseport Masbate (PMO Masbate)
e. TMOPio Duran (PMO Bicol)
f. TMO Coron (PMO Palawan)
g. Baseport Fort San Pedro (PMO Panay/Guimaras)
h. TMOManguino-o, Calbayog City (PMO Eastern Leyte/Samar)
i. Baseport Tagbilaran (PMO Bohol)
j. Baseport Nasipit (PMO Agusan)
k. TMO Danao (PMO Negros Occidental/Bacolod/Banago/Bredco)

3. For Re-bidding due to Failure of Bidding

a. TMO Cuyo (PMO Palawan)
b. El Nido (PMO Palawan)
c. TMO Culasi (PMO Panay/Guimaras)
d. Baseport Iligan (PMO Lanao del Note/Iligan)
e. Baseport Surigao (PMO Surigao)

Sources of port investment available in the Philippines are corporate funds and loans, concessions development commitments, service contracts, facility requirements, and terminal operators development commitment.

The benefit of port privatization is enabling the port to generate sufficient funds to sustain port development program, maximize the use of underutilized and idle port facilities, ensure efficient and complete delivery of port services, facilities, and amenities, as well as upgrade existing port facilities at no expense to PPA.

7.8 CHINESE TAIPEI

The port reform process in Chinese Taipei, divided into two stages;

Year	Important	Effect
1989	• Chinese Taipei central government (Executive Yuan) Announced the launch of "State-Owned Enterprises Privatization" policy to increase operational efficiency and flexibility of state-run enterprises	• On maritime transport sector, as of 2010, companies were privatized: Yang Ming Line (on 20 June 1998), and

1) Between 1989 and 1999, the reform concentrated on privatization and liberalization.

Year	Important	Effect
1990	• Chinese Taipei's government filed application with GATT (WTO at present) to rejoin the Organization, which launched the liberalization policy to all its industries.	• On 1 January. 2002, Chinese Taipei became the 144th WTO member (Chinese Taipei).
January 1998	• Stevedoring services in Keelung Port was privatized. • Dock works problem was solved in Keelung Port.	• Port labor was no longer Employed by the Harbor Bureau. • Dock workers were employed by the private stevedore companies. • The number of stevedoring companies was no longer restricted; those that met the conditions could be set up freely to provide cargo-handling services. • Terminal operators and Consignees had more choices of stevedoring services.
January 1999	• Stevedoring services in Kaohsiung Port was privatized.	• Experienced the same effect as happened in Keelung Port.

2) Beginning from 2000, the process was more focused on organizational restructure.(i.e. port authority re-organization)

Year	Important	Effect
August 2000	• New ruling DPP party took • Office decided to change Port Bureau as a business entity. • Considering to invite local government to organize "Port Council" in order to administer port planning and operations.	• No action was done due to no consensus between central and local governments. • Central government was also under re-organization to be completed in January, 2010.
2001	• MOTC proposed the so-called "Four Acts for Maritime and Port Reform" to Executive Yuan (Parliament) for promoting reform of maritime administration and port operation. • Parliament did not approve those Acts in 2002.	• No action
February 2005	• MOTC again submitted the "Proposed Act of Harbor Bureau Establishment and Supervision" to Parliament. • Parliament did not approve the proposed Act.	• No action.
2010	• MOTC submitted the Port Reform Acts (including Organization Act of Maritime and Port Administration and Act of the Establishment of Taiwan Port Corporation Limited) to Parliament. • If the Proposed Acts were to be approved by the Parliament, Maritime and Port Administration could be set up in 2012; port business could be operated by the state-run Taiwan Port Corporation.	• To be decided. • There is no strong opposition on the reform from the Port Labor Union.

Most ports in Chinese Taipei are landlord ports which the Port Authority owns port lands and leases infrastructure to state-owned operators that provide and maintain superstructure and equipment, as well as employ stevedoring labour.

In accordance with the Taiwan International Ports Corporation (TIPC) Established Act, the TIPC is a kind of public enterprise responsible for managing and operating the International commercial ports. The development plans of Port of Kaohsiung were supported by the government such as Kaohsiung Container Terminal Phase II, Wharves 115,116 and 117 reconstructions.

7.9 THAILAND

The Port Authority of Thailand (PAT), was established under the Port Authority of Thailand Act B.E.2494 (1951). PAT is a economy enterprise under the general supervision of the Ministry of Transport with an objective to conduct the business pertaining to the port for the interest of the economy and public. Five major ports in Thailand are controlled by PAT. Laem Chabang Port (LCP) is the biggest international port of Thailand whereas Bangkok port (BKP) serves as the main river port in the central of Thailand, located on the Chao Phraya River. 95% of international transport in Thailand shared by these two main ports with 76% and 19% shared by LCP and BKP respectively. The other three regional ports namely; Chiang Saen Commercial Port and Chiang Khong are operated to serve as a transport hub for Mekong Sub-Region (Southern China, Myanmar and Laos PDR) and Ranong Port is promoted to serve as the gateway to the Andaman Sea. PAT has been continuously developing the ports under control to ensure that they meet the world class standard and the utmost benefit to port users.

Laem Chabang Port (LCP)

LCP is a landlord port. Terminals are operated by private companies. PAT is in charge of the port plan, port improvement, and mega investments. Currently, there are two phases being operated at LCP, while the third phase is in the process of planning. There are 13 contracts made between private companies and PAT.

Order	Deck Number	Private Firm	Date of contract	Duration (year)	End of contract	Type of contract
1	A4	Aow Thai Klung Sin Kar Co., Ltd	1-Mar-93	25	1-Feb-18	Lease Agreement
2	B2	Evergreen Container Terminal (Thailand)Co., Ltd	30-Mar-93	27	23-Mar-20	
3	B4	TIPS Co., Ltd	1-Jan-94	27	25-Dec-20	
4	B3	Eastern Sea Laemchabang Terminal Co., Ltd	1-Jan-95	27	25-Dec-21	
5	B1	LCB Container Terminal Co., Ltd	1-Nov-95	27	25-Oct-22	
6	A5	Namyong Terminal Co., Ltd	1-May-96	25	25-Apr-21	BOT Agreement
7	B5	Leamchabang International Terminal Co., Ltd	1-May-96	30	24-Apr-26	
8	A2	Thai Laemchabang Terminal Co., Ltd	1-Oct-96	30	22-Sep-26	
9	A1	Laemchabang Cruise Center Co., Ltd	1-Mar-00	30	23-Feb-30	
10	C3	Laemchabang International Terminal Co., Ltd	1-May-03	30	25- Apr-33	
11	A0	LCMT Co., Ltd	1-Nov-04	30	25-Oct-34	
12	A3	Hatchison Laemchabang Terminal Co., Ltd	1-Nov-04	30	25-Oct-34	
	C1	Hatchison Laemchabang Terminal Co., Ltd	1-Nov-04	30	25-Oct-34	
	C2	Hatchison Laemchabang Terminal Co., Ltd	1-Nov-04	30	25-Oct-34	
	D1	Hatchison Laemchabang Terminal Co., Ltd*	1-Nov-04	30	25-Oct-34	
	D2	Hatchison Laemchabang Terminal Co., Ltd*	1-Nov-04	30	25-Oct-34	
	D3	Hatchison Laemchabang Terminal Co., Ltd*	1-Nov-04	30	25-Oct-34	
13	C0	Hatchison RO-RO- Terminal (Thailand) Co., Ltd	1-Sep-04	30	25-Aug-34	

Terminal D1, D2 and D3 will be operated when containers land on A3 + C1 + C2 more than 75 percent of its capacity. A3, C1, C2, D1, D2 and D3 terminal use the same contract, created by Hatchison Co., Ltd with the port authority of Thailand.

According to the container throughput forecast at LCP, the throughput is expected to exceed the port capacity within 2020, therefore PAT plans to increase the port capacity by expanding port area through the LCP Phase 3 Project. The feasibility study was done to analyze the most appropriate port structure. The first priority concerned is the long-term benefit of the economy which the result of the study suggested that a landlord structure would be the most suitable for the Phase 3 Project.

According to the leasehold agreement, the port authority shall need to invest in the constructions of infrastructure, public utilities and some operational equipment, whereas lessees or private firms shall provide other tools and equipment such as cranes and other handling equipment. Thus, the privates do not have a significant role in port investment, they will involve in the maintenance of tools during the contract period.

In terms of the construction, the main objective of attracting private to be involved in the port investment and operations is to cut off public purchase. besides, operating by private is more flexible and faster than governments. Therefore, the future trend of a port structure is partially or entirely transforming from public to private.

Bangkok Port (BKP)

The master plan called PAT's Asset Utilization Plan B.E. 2535 (1992) was proposed in order to develop 48% of the area outside BKP customs' fence under the concept of "Modern Port City". The developed area was divided into four zones which serve different purposes. The allocation of the area in zone 1-4 aims to be developed as a Maritime Business Center, Logistics and Distribution Center, a modern Business Complex and Exhibition Center to add value to the asset. Within the four zones, the first priority zone chosen by PAT is now being developed as "the Quick Win Project".

8. Conclusion

The participants were convinced that privatization will be more important in various industries including maritime industry. The current port situation has urged port to adjust its role and response to the new concept of port administration, management, and operations. Higher port productivity and efficiency are sought to improve port performance. While government financing resources to develop port infrastructure are limited, the alternative is to encourage private involvement in port administration, management, and operations.

Privatization has many forms and levels; ranging from the soft end (commercialization) to medium scale (corporatization) to the strong tail (Built-Operate-Transfer). Each level shows the degree of control by the government with proportion to the degree of private involvement in port administration, management, and operation it allows. However, the best form of port development and management of each economy may differ in economies, stages of development, and location in the maritime transportation network. Obviously, The APEC economies strongly agreed that political and financial approaches are the main factors that push each government to adopt privatization in its port system at a certain degree. There are more than 60 economies have established laws and/or regulations related to private participation in infrastructure projects, in terms of “Concession, BOT, PFI, PPP” or other forms of private investment.

Privatization has both positive and negative points of view. However, the ports that need the operational and commercial flexibility by port management have thus dictated a progressive reduction of regulation and an increasing participation of the private sector and port user.

ANNEX 1

PROGRAM OF
THE 3RD APEC TRAINING COURSE ON COMMON PRINCIPLES TO SHIPPING POLICY
16-18 DECEMBER 2015
BANGKOK, THAILAND

Time	Activity
Wednesday 16 December 2015	
0830 - 0900	Registration
0900 - 0930	Opening Session • Welcome address by the Director General of Port Authority of Thailand • Photo Session
0930 - 0945	Introduction of APEC Training Course on Common Principles to Shipping Policy by the Project Overseer (PO)
0945 - 1000	Coffee Break
	Presentation on Port Commercialization and Privatization
1000 - 1040	• Mr Doug O'Keefe (Canada)
1040 - 1120	• Mr Sandhy Wijaya (Indonesia)
1120 - 1200	• Miss Panhathai Nithilatthi (Thailand)
1200 - 1300	Lunch (Hosted by the Port Authority of Thailand)
1300 - 1400	Economy Report "Best Practices on Port Commercialization and Privatization" • Malaysia • Indonesia • Viet Nam *15 mins per economies
1400 - 1445	Workshop on Port Commercialization and Privatization
1445 - 1500	Coffee Break
1500 - 1600	Workshop on Port Commercialization and Privatization (Cont.)
1700 - 2000	Welcome Dinner (Hosted by the Port Authority of Thailand)
Thursday 17 December 2015	
	Presentation on Port Investment Funding
0930 - 1010	Mr Doug O'Keefe (Canada)
1010 – 1050	• Dr Yang Dong (China)
1050 - 1110	Coffee Break
	Presentation on Port Investment Funding (Cont.)
1110 – 1200	• Mr Tienchai Makthiengtrong (Thailand)
1200 - 1330	Lunch (Hosted by the Port Authority of Thailand)
1330 - 1430	Economy Report "Best Practices on Port Investment Funding" • Malaysia • Indonesia • Viet Nam *15 mins per economies
1430 - 1530	Training on Port Investment Funding Presented by Mr Sumio Suzuki (Japan)
1530 - 1545	Coffee Break
1545 - 1615	Closing Session • Distribution of the Certificate of Attendance
Friday 18 December 2015	
0800 - 1600	Technical Visit

ANNEX 2

List of Participants

No.	Full Name	Organization/ Position	Gender	email
Speakers				
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