







CY TUNG International Centre for Maritime Studies 董浩雲國際海事研究中心



MARITIME INSIGHT

C.Y. Tung International Centre for Maritime Studies

Maritime Education | Research | Consultancy

Volume 2, Issue 3, Autumn 2014

Logistics and **Maritime Management** on the

PolyU Postgraduate Programmes

Shipping, Logistics and Supply Chain Management

- O MSc / PgD in Global Supply Chain Management
- O MSc / PgD in International Shipping and Transport Logistics

Operations and Quality Management

- O MSc in Management (Operations Management)
- O MSc in Quality Management

Enquiries

🖌 lms.enquiry@polyu.edu.hk

🐼 (852) 2766 7409 / 2766 7918 🛛 🚹 www.facebook.com/PolyU.B.School Online application www.polyu.edu.hk/study



www.lms.polyu.edu.hk

We are among a small group of business schools worldwide with Triple Accreditation:









Faculty of **Business** 工商管理學院

Deliver .

Maritime Insight

Volume 2, Issue 3, Autumn 2014

Table of Contents

1. Container Throughput and Economic Development

Container Throughput of Ports in the Philippines, Singapore, Thailand and Vietnam from 2002 to 2013......2

2. News Highlight

Global Container Terminal Operators Annual Review and Forecast......9

The World Economic Forum Released the Global Competitiveness Report 2014-2015......9

The Chinese Government Attached National Strategic Importance to Ocean Shipping Industry.....10

Strategic Alliance in Container Liner Shipping After P3 Failure.....11

3. Insights from Experts

4. Special Issues

Special Issue I: Enhancing the Competitiveness of Hong Kong's Maritime Cluster

Overview of the Report on Enhancing Hong Kong's Position as an International Maritime Centre	16
Container Terminal 10 in Hong Kong: Over Capacity or Sustainable Strategy	22

Special Issue II:

Maritime Security, Piracy and Container Security	31
Advertising Opportunities Call for Papers	

Container Throughput and Economic Development

South East Asia has experienced rapid economic growth in recent decades with exports contributed a lot to the region's economic development. According to UNCTAD Maritime Transport, the total fleet in South East Asia has increased from 58,280 in 2002 to 150,337 in 2014. Among them, the number of container ships was increased from 5,630 in 2002 to 22,069 in 2014. Located next to the two world's biggest growth engines China and India, countries of South East Asia have not lost out in the battle during this round either. In the previous issue of the Maritime Insight, container throughput of ports in Cambodia, Indonesia and Malaysia were presented and discussed in association with the economic development of those countries. Figures 2 to Figure 5 illustrate the main economic indicators of the Philippines, Singapore, Thailand and Vietnam, from which readers could better understand the relationship of port development and economic growth.



Figure 1. Container Throughput of Ports in South East Asia During 2002 to 2012

Sources: UNCTAD Review of Maritime Transport 2005-2013 World Bank Container Port Traffic

Container Throughput and Economic Development

Container Throughput of Ports in the Philippines, Singapore, Thailand and Vietnam

1. The Philippines



Figure 2. Main economic indicators of Philippines, 2002-2012

A number of trends are reshaping the international maritime transport and trade in South East Asia, including the Philippines. The Philippines is one of the emerging markets in the world. According to the World Bank, agriculture accounts for 12% of the Philippines GDP as of 2013. Specifically, the Philippines is one of the world's largest producers of coconuts, pineapples, rice and sugar. Agriculture plays an important role not only in the global food supply but also in the country and its economy.

Agricultural products and trade still grow at a higher rate than average. Apart from the agri-food supply, the Philippines also plays a major role in the international shipping industry. Due to its unique geographic advantage, the Philippines depends on water greatly, and thus it develops services such as shipbuilding and repair, supplying seafarers, and tourism in particular. With regards to the international trade, the ports in the Philippines handle most of the imported and exported materials and products, and bring economic growth. The ports have also created

Sources: UNCTAD STAT, <u>http://unctadstat.unctad.org</u>

Container Throughput of Ports in the Philippines, Singapore, Thailand and Vietnam

employment opportunities and the aforementioned businesses, cargo handling, and other services related to the shipping industry. Figure 2 showed an obvious GDP growth of the Philippines during period from 2002 to 2012. According to the World Economic Outlook released by the IMF this year, growth in the Philippines is expected to remain robust though its GDP growth rate decreased from 7.2 percent in 2013 to 6.5 percent in 2014. However, port congestion and Metro Manila's traffic congestion are currently making the economic growth slow down a little bit. Due to its insufficient infrastructure and facilities, transporting goods to factories and consumers faces bottlenecks, and thus making it difficult for the Philippines to hit its economic growth target of 2014.

In order to enhance ports' competitiveness at a global level, the Philippine Ports Authority included the development of the nation's port into the master plan as being crucial to economic development. The Port of Manila is the heart of the Philippine port system, and it serves as the country's gateway to major cities of the world and the junction of domestic and international trade. Furthermore, the government has undertaken measures to upgrade old ports or construct of new ports. Improvement of the road system is necessary to keep up with the demands for trade efficiency and the development of international trade.

2. Singapore

Singapore has a thriving shipping and maritime industry. It has always been endeavoring to increase its port profile internationally by actively establishing links with shipping related industries and nurturing a sound macroeconomic environment. The Port of Singapore is a world-class port, and is also the important transshipment hub and Asia-Pacific gateway.





According to the recently released Global Competitiveness Report 2014-15, Singapore ranks second overall for the fourth consecutive year, owing to an outstanding and stable performance across all facets of the Global Competitiveness Index (Index). In terms of infrastructure, for which it ranks second according to the Index, Singapore has also achieved the world-class level with excellent roads, ports, and air transport facilities. The government of Singapore contributes

Data sources: http://www.mpa.gov.sg

Container Throughput and Economic Development

Container Throughput of Ports in the Philippines, Singapore, Thailand and Vietnam

immensely to the formation of the global maritime cluster and its status as an international maritime centre. Such a mature maritime community offers a lot characteristics and advantageous policies for other port cities and practitioners to emulate.



Figure 4. Main economic indicators of Singapore, 2002-2012

Sources: UNCTAD STAT, http://unctadstat.unctad.org

Its economy relies immensely on the sound macroeconomic environment and the development of ports in Singapore. Having said that, Singapore's competitiveness could not have performed so well without the active engagement and strategic investment of the Singapore government. Active engagement from the government includes such activities, but not limited to, the strong focus on education, nurturing industrial clusters, and offering various kinds of incentives and favorable policies that attract and retain professionals. As evidence of the return on those endeavors, as is shown in Figure 4, the amount of foreign direct investment has tripled and GDP has doubled since 2002. Hence it is clear that the container throughput during these years has increased 90% since 2002 when looking at Figure 1.

Container Throughput and Economic Development

Container Throughput of Ports in the Philippines, Singapore, Thailand and Vietnam

3. Thailand



Figure 5. Main economic indicators of Thailand, 2002-2012

Thailand, one of the member countries of the to-be-established ASEAN Economic Community, plays an important role in the regional economic integration. Figure 1 shows that from 2002 to 2012, Thai seaborne trade has increased and the container throughput has risen steadily. The tremendous growth in international trade volume which is indicated in Figure 5 relies heavily on maritime transport. Nine major international ports in Thailand handle over 90% of the Thai seaborne trade in terms of throughput. These nine ports are situated in all parts of the country. Four of them are administrated by the state, and the other five are privately owned. The state-owned ports are Bangkok Port, Songkhla Port, Leam Chabang Port and Maptaput Port. The first three ports are for break bulk especially containerized cargoes. The privately owned ports are BMT Pacific, Thai Prosperity Terminal, Unithai Port, Sriracha Harbor, and Kerry Siam Port.

As can be seen in Figure 5, GDP almost tripled from 2002 to 2012. Another important indicator of Thai's growth potential was that foreign direct investment that Thailand has attracted into the region in 2012 was four times as much as in 2002. Growing integration with the ASEAN

Sources: UNCTAD STAT, http://unctadstat.unctad.org

Economic Community as mentioned earlier would continue to support the economic growth and international trade in Thailand.

Nevertheless, in order to make the most of the integration, Thailand needs to make extra efforts and have strategic plans in terms of infrastructure, policies and regulations. International ports, as a result, face both new opportunities and challenges too. The problems are almost the same as the one in the Philippines. Congestion between the ports and their hinterlands are crucially hampering the efficient movement of cargo. The development of inland transportation seems unable to match the increase in cargo volumes. Trade facilitations including customs procedures are major concern by importers, exporters and freight forwarders in Thailand. Clear and explicit government policies are necessary to be in accordance with the ASEAN Economic Community and to be held in high regard by the shipping lines and agents.

4. Vietnam

Vietnam remains one of South East Asia's fastest growing economies with 5.4% GDP growth in 2013. GDP growth has increased four times since 2002. However, Vietnam might be one of the poorest countries in the region. As is shown in Figure 6, foreign direct investment into this region is rather less compared with other nearby countries. Furthermore, according to Figure 1, growth of container throughput in Vietnam was quite slow. There are several factors behind this.

Firstly, Vietnam's logistics system is out of date. Roads are underdeveloped or even say, in a bad condition both in terms of quantity and in quality. This results in traffic congestion and inefficient logistics activities. In addition, due to disadvantageous geographical location, the development of international ports in Vietnam faces great challenges as well. The three largest ports of Vietnam are Saigon Port, Hai Phong Port and Da Nang Port. Hai Phong Port and Da Nang Port are the only two ports in Vietnam with full connection to their hinterlands by road, rail and inland waterway, while all the other ports are limited with obsolete facilities and poor supporting services, especially compared with some major seaports of Thailand. Most large ports in Vietnam are located on rivers. Ho Chi Minh City, for example, has rather limited access to the ocean. Connected to this, shipping costs increase as goods need to be transshipped from other major ports such as Hong Kong and Singapore.

Due to its low cost in labor and lands, Vietnam becomes an attractive destination for other Asian countries to shift manufactories there. Obviously, it could never be very attractive only for low cost reasons. There is room to change and to improve in terms of logistics operation and management. Once solutions are identified towards connectivity and efficiency in doing business, Vietnam has the potential to catch up and continue to enjoy economic growth in the future. Figure 6. Main economic indicators of Vietnam, 2002-2012

Container Throughput and Economic Development

Container Throughput of Ports in the Philippines, Singapore, Thailand and Vietnam



Sources: UNCTAD STAT, http://unctadstat.unctad.org

The last three issues of the Maritime Insight have reviewed the economic indicators and container throughput of this region. Home to 600 million people and located next to the growth engines of China and India, except for Singapore, countries of Southeast Asian region face the challenges of infrastructure capacity building so as to continue to boost productivity and maritime transport. Will the future belong to these countries? It probably would be and is indeed worth waiting for.

Global Container Terminal Operators Annual Review and Forecast 2014

According to Drewry's recently released report on Global Container Terminal Operators Annual Review and Forecast 2014, the annual global container throughput is projected to be 840 million TEUs till 2018, which is an increase of 100% compared with the global container throughput of 2004. Along with the increased container throughput, profits would go upwards as well. As a result, more and more new players start joining container terminal operations. Generally, container throughput would increase at the speed of 5.6% in the coming five years, compared to an increase of about 3.4% in 2013. Fortunately, the utilization of terminals would also be increased from 67% to 75%.

Ships becoming larger and larger, strategic alliances expanding, and container liners facing financial burden, global terminal operators and shipowners rising, and the pace of ports' atomization and mechanization accelerating, all lead to the increase in container throughput. This increasing trend will be particularly significant in Africa and China. Among the top five global container terminal operators, PSA has always been ranked first, followed by HPH, APM and Dubai, reports Drewry. In 2018, however, HPH and APM are projected to compete for the number one market player in terms of carrying capacity.

The World Economic Forum Released the Global Competitiveness Report 2014-2015

The World Economic Forum released the Global Competitiveness Report 2014-2015 in September, 2014. The Global Competitiveness Index has been used by the World Economic Forum to assess the global competitiveness which is defined by the Forum. The Index is used to assess a combination of factors that include factor-driven, efficiency-driven and innovation-driven subsections. Specifically, the factor-driven section contains basic requirements such as institutions, infrastructure, macroeconomic environment and health and primary education; the efficiency-driven section incorporates higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness and market size; and the innovative-driven section involves business sophistication and innovation. After a thorough and systemic assessment by the World Economic Forum, Switzerland tops the Index again this year and Singapore ranks 2nd overall for the fourth consecutive year, followed by the United States, Finland, Germany, Japan, Hong Kong SAR, Netherlands, United Kingdom and Sweden. China ranks 28th this year.

Hong Kong SAR has retained its position in the top 10 club since 2012. It tops the infrastructure pillar and dominates the financial market development pillar, mostly because of its high level of efficiency, trustworthiness, and stability of its system. Though Hong Kong is one of the world's most open economies, the Report implies that Hong Kong must further improve higher

education and innovation in order to continually enhance its competitiveness. The quality of its research institutions and the limited availability of scientists and engineers are two key issues to be addressed as well, according to the Report.

The Chinese Government Attaches National Strategic Importance to Ocean Shipping Industry

The State Council Information Office held a press conference on the morning of September 3, 2014 to give a briefing on the Opinions of the State Council on Promoting the Sound Development of the Shipping Industry. It thus became the first time for the State Council to upgrade the development of China's shipping industry into a national strategy. The Opinions, aiming to boost maritime confidence and deepen the reform of the maritime industry, have covered the following aspects.

First of all, the State Council's initiative will be a great push to developing a modern shipping system which is supported by systemic policies and opinions for the long-term development of the shipping industry. Secondly, it will promote in-depth reform of shipping companies, improve the corporate governance structure, adjust the carrying capacity structure and have transitional and upgrade developments; in particular, the scale of specialized operation for international competitiveness will be accelerated. Thirdly, it will strengthen China's shipping fleet building and the capacity for transport of key materials. Lastly, it will develop China's modern shipping service industry and nurture the development of international maritime centres.

Comparing with the shipping industry of developed countries, there is a significant gap in shipping policy environment. Being upgraded to the national strategic industry means that policies will be more favorable to China's shipping industry. In particular, Chinese shipping enterprises will have chances to increase their international competitiveness and win more market share.

There are four safeguards mentioned in the Opinions in line with the implementation of the above mentioned strategic tasks. The first one is to establish a sound protection mechanism to strengthen the bond between maritime companies and ship owners. The second safeguard is to provide supportive fiscal and taxation policies in compliance with international practices. The third is to further improve the regulations, policies, standards and the supervision of the shipping market. The last one is to improve maritime personnel training and encourage technological innovation in the industry.

Strategic Alliance in Container Liner Shipping After P3 Failure

Recently two shipping alliances were created; one is the 2M container shipping alliance between Maersk Line and Mediterranean Shipping Co (MSC), and the other is the O3 container shipping alliance formed by CMA CGM, China Shipping Container Lines Co. and United Arab Shipping CO.

French container carrier CMA CGM is partnering with China Shipping Container Lines Co. and United Arab Shipping Co. to form the new Ocean Three alliance, also called O3 alliance. It is said that 150 vessels will be deployed by this alliance. The alliance singed the vessel sharing agreement (VSA) which would be applied to trades involving a combination of vessel-sharing, slot exchange and slot charter, covering the Asia-Europe, Asia-Mediterranean, trans-Pacific and Asia-US East Coast. It is said that seven of the world's top 10 business container ports are in China, although Chinese shipping carriers accounted for less than one-third of the market share. As such China Shipping Container Lines Co. teaming with other container lines signals positively that Chinese shipping carriers are also starting to expand their market share through vessel-sharing.

Previously, CMA CGM proposed to partner with Maersk Line and Mediterranean Shipping Co. to form the P3 Network, but this scheme failed. Recently, CMA CGM's two proposed partners announced a new alliance call 2M alliance. The proposed 2M alliance is a 10-year vessel sharing agreement between Maersk Line and MSC on the Asia-Europe, transatlantic and transpacific container trade lanes. The 2M alliance will encompass 185 vessels with a capacity of 2.1 million TEUs deployed on 21 strings. Currently, the 2M alliance is approved by the U.S. regulators, while the O3 is still pending approval from the U.S. regulators.

Definitely we are moving into a brand new era of strategic alliance in container shipping line with some of big players being regrouped with the others in order to increase their market share. For the time being, with the wave of formation of such alliances, four large scale carriers from the top 20 carriers in the world will take control of more than 90% of the global market share. Apart from the 2M and O3 alliances, the other two are the G6 and CKYHE alliances. The G6 carriers are American President Lines, Hapag Lloyd, Hyundai Merchant Marine, Mitsui, Nippon and OOCL. CKYHE carriers are COSCO, K-line, Yang Ming Line, HANJIN and Evergreen.

As can be seen from Figure 7, the G6, 2M and CKYHE alliances dominate the East-West trade lanes with a total market share of 80%. While the 2M alliance dominates the Euro-Far East trade route, and G6, CKYHE and O3 alliances equally have around 20% of the market share. For the Trans-Pacific trade route, the G6 and CKYHE alliances clearly have the advantageous market share, with each of them accounting for more than 30% of the trade route. The 2M alliance, however, shows its competitive advantage on the Trans-Atlantic trade route by occupying 40%

■2M

O3

■ G6

Others

CKYHE

of the market share on this route, and only the G6 alliance can compete with it by taking 38% of the market share.









20%

34%

Euro-Far East

3%

20%

23%







As a result of the formation of strategic alliances, the pursuit of big ships is entering into a new period as well. Strategic alliances and big ships play a significant role in better allocation of resources, further reduction of operational costs, expansion of service coverage, optimization of ports of call and realization of the economies of scale. With regards to the vessel size, O3 has a more advantageous investment in the fleet capacity building compared with the G6 and CKYHE alliances. It is said that members of the O3 alliance own 20 vessels with capacity from 16,000 to 19,000 TEUs. Hence, forming strategic alliance is the key to making greatest use of those big vessels and benefiting from the economies of scale. Only through this can the carrying capacity of the whole industry be further integrated.

Finally, it is hard to predict how long it will take to complete the process of integration. What is surely happening is that the era of strategic alliance is arriving.

MAP THE FUTURE OF HONG KONG IN TERMS OF ITS PORT AND MARITIME DEVELOPMENT

An interview with Dr Simon Su, Director of BMT Asia Pacific

Dr Simon Su is Director and Chief Economist of BMT Asia Pacific Ltd in Hong Kong, a leading consultancy supporting primarily the on and offshore energy, infrastructure, and transport sectors. Throughout our history, government and multinationals have come to rely on BMT for strategic, objective advice and expertise in economics, environment, design and planning, logistics, and risk management.



We recently had the privilege of meeting Dr Simon Su and soliciting his views on how to continuously enhance the competitiveness of Hong Kong both as an International Maritime Centre and a Regional Distribution Centre.

Dr Simon Su shared several of their consultant projects related to issues of concern.

Q1: How do you see Hong Kong's competitiveness as a Regional Distribution Centre?

Dr Simon Su: Despite their high operational costs, Hong Kong logistics operators are renowned for offering high quality and reliable services on time, which are especially important for high value or time sensitive goods. Hong Kong is particularly well positioned to remain as the regional distribution centre (RDC) of Asia. Large scale RDCs in Hong Kong are experienced providers of a full spectrum of value added services and are able to fulfill complicated requirements, especially for high value goods. A recent survey conducted by BMT reveals that Hong Kong is the most competitive RDC location for high-value products with about half or more than half of cargo flowing to/from Mainland China.

Unsurprisingly, costs in particular rentals and the length of land lease contracts, remain key concerns for Hong Kong's logistics service providers. To acquire land for a relatively long term logistics use is crucial for the success of the business. Logistics is an industry that requires sizeable plots of land and long term investments. One alternative is to convert underutilised factory premises and plots of land for logistics use. However, conversions are often hindered by bureaucratic procedures such as difficulties in obtaining permits. Establishing a dedicated logistics park in Hong Kong may provide another workable solution.

Insights from Experts

Map the Future of Hong Kong in Terms of its Port and Maritime Development Volume

Q2: Could you please share your point of view about the future of Hong Kong's port and maritime development?

Dr Simon Su: Hong Kong's maritime cluster consists of more than a dozen industrial services including world-class shipping services such as ship owning, operating, management, broking and chartering and liner/cargo agency; and intermediate professional services such as ship finance, maritime law and arbitration and marine insurance. Thanks to its convenient business environment complemented by the rule of law and a simple tax system, Hong Kong has long been recognised as one of the leading international maritime centres along with London, Oslo and Singapore.

The maritime business is global and competitive. The location of the business is primarily driven by commercial principals of shipping and trading companies. Hong Kong, therefore, should aim to expand the presence of commercial principals such as ship managers, owners, operators and traders as much as possible so that more business decisions will be made in the territory. Riding on her exquisite position as an entrepôt for trade with mainland China, Hong Kong should continue to be a "springboard" that facilitates Mainland shipping companies to operate internationally, and for foreign shipping companies to expand into the Mainland market.

However, the emergence of Shanghai as a free trade zone to develop an international shipping centre by 2030 poses a challenge to Hong Kong. Despite the Central Government of China showing unequivocal support in its 12th Five-Year Plan for Hong Kong's position as an international maritime centre, it is inevitable that Hong Kong must continue exploring niche markets, as well as the finding opportunities for more global cooperation.

Q3: What do you think about the port and maritime development in neighboring port cities, such as those in Indonesia, Vietnam, and Mainland China?

Dr Simon Su: Intra-Asia trade has boomed in the past few years, despite the European & US trading downturn. This has provided an incentive to port cities in the ASEAN region to accelerate port infrastructure development. Meanwhile China, having a comparatively mature port infrastructure landscape, has been focusing on quality and productivity improvement of the port related service provision, such as logistics services.

Q4: Would you like to introduce the Port Choice Model to the readers of the Maritime Insight? How will the Model benefit the shipping industry?

Dr Simon Su: The Port Choice Model, often used together with BMT's Port 360° Model, evaluates the competitive advantage of a given port within its environment. Developed by BMT following years of academic research and professional consultancy assisting governments and stakeholders, these tools uniquely apply both quantitative and qualitative methodology and measure a spectrum of criteria, defined by leading economists and technical port experts.

Given the growing complexity of the port sector, we recognized the need to assess competition with greater and more critical scrutiny. Typical market share studies draw on historical market share data, distance, or travel time estimates, but BMT's assessment tools enable a deeper, and therefore more accurate, analysis. Using the Port Choice Model we can more accurately predict how cargo owners and shippers choose their ports and the value they place on each of these factors, including intangible costs

In today's dynamic port market, stakeholders benefit from knowing how the distribution dynamics of cargo – from ocean to hinterland – will impact future profits. Ultimately, the use of our Port Choice and Port 360° models helps our customers make wiser business decisions.

Q5: We know that you are about to complete a port study - The Strategic Development Plan for Hong Kong Port 2030 (HKP 2030) commissioned by the Hong Kong Transport and Housing Bureau. What are the final deliverables of your study? Would you like to share with the readers of Maritime Insight and help us to visualize the Hong Kong Port 30 years ahead?

Dr Simon Su: Indeed we have been appointed by the HKTHB to undertake The Strategic Development Plan for Hong Kong Port 2030. The report was compiled through BMT's proven methodologies, comprehensive analysis and sophisticated tools. While we are not at liberty to disclose key insights on behalf of our clients, it is clear that as long as Hong Kong remains a hub for trade with mainland China, its port, maritime and logistics industries will remain crucial to the economy.

Hong Kong should maintain its conducive business environment and enhance its competitiveness in these vital industries. To cope with future challenges and the ever-increasing competition, there is an imminent need for a clear development strategy which we believe is covered in the Strategic Development Plan for Hong Kong Port 2030. The conventional "trigger mechanism" approach for future planning of the port is no longer valid; instead a more strategic approach should be adopted. In this regard, the possibility of relocating the entire Kwai Tsing port cluster to a cheaper location in Hong Kong may become a plausible option. After all, this has already happened to other ports and Hong Kong will not be the first to do so.

OVERVIEW OF THE REPORT ON ENHANCING HONG KONG'S POSITION AS AN INTERNATIONAL MARITIME CENTRE

BMT Asia Pacific (BMT) has completed a study¹ which focused on "Enhancing Hong Kong's Position as an International Maritime Centre (IMC)" by way of combining rigorous analysis with continuous stakeholder participation to deliver appropriate and achievable recommendations. In particular, the study has paid careful attention to understanding the underlying constraints and opportunities facing Hong Kong as an IMC. This study has adopted the definition of an IMC as *A location with leading global competitiveness in two or more components of the core maritime cluster and an established critical mass of supporting functions.* Later, it discussed maritime clusters and benchmarked different port cities as IMCs, and these two areas will be separately reviewed in the subsequent sections.

1. Hong Kong's Maritime Cluster in a Regional and Global Context

As is well known, one of the notable characteristic feature of the maritime industry is its clustering effect, and the effect usually integrates multiple interrelated functions/components or maritime services. To analyze Hong Kong's maritime position in the regional and global context is equally important to understand Hong Kong's maritime clustering effect. First of all, Hong Kong's maritime cluster is divided into six broad segments, and different services are included in each segment, according to BMT's study.

- Port Infrastructure and Services (Terminal Operation, Midstream Cargo Handling)
- Shipping Services (Ship owning and Operating, Ship Management, Shipbroking and Chartering, Liner/Cargo Agency)
- Intermediate Professional Services (Ship Finance, Maritime Law and Arbitration, Marine Insurance)
- Marine Engineering (Shipbuilding and Repair, Equipment Servicing and Supply)
- Support Services (Maritime Education, Industry Associations, Commercial Ship & Cargo Surveying)
- Shipping Regulators (Marine Department, Classification Societies)

Based on the above segments and functions, ratings can be made more explicitly. Figure 8 shows the rating results of Hong Kong (HK), Singapore (SG), Shanghai (SH) and London (LON) in terms of strength by different maritime service areas.

¹ *Reference:* BMT Asia Pacific. (2014). *Consultancy Study on Enhancing Hong Kong's Position as an International Maritime Centre. Retrieved on 20 September 2014, from <u>http://www.bmtasiapacific.com</u>.*





Page 17 of 40

Enhancing the Competitiveness of Hong Kong's Maritime Cluster *Overview of the Report on Enhancing Hong Kong's Position As an International Maritime Centre*

Data source: BMT Asia Pacific. (2014)

2. Hong Kong's Future Positioning as an IMC

In their study, benchmarking was conducted in London, Singapore, and Shanghai, as shown in Figure 9. Oslo and Rotterdam have also been reviewed but to a lesser extent, as they have fewer characteristics in common with Hong Kong. The centre role of different IMCs varies from city to city. Singapore focuses on providing world-class physical and professional maritime services, while Shanghai offers services concentrating on the physical side. Commonly, an IMC would be a centre either focusing on the physical flow or the service flow, as with what Shanghai and Singapore do. In contrast to Singapore and Shanghai, London, a city which provides little or even no physical activities, could still be a leading IMC in terms of its world-leading professional services. Figure 9 also shows the major services that London, Singapore and Shanghai provide.

Figure 9. Comparative benchmarking of Singapore, Shanghai and London as IMCs

Singapore World-class physical and professional martime services	 shipbroking and chartering; Liner/cargo agency; Ship finance; Maritime education; Port authority; Terminal operation, and Equipment services and supply
Shanghai World-class services concentrating on the physical side	 Terminal operation; Shipbuilding and repair; Equipment services and supply, and Maritime education (particularly in training seafarers/ratings)
London World-leading professional services with little/no physical activities	 Shipbroking and chartering; Ship finance; Maritime law/arbitration; Marine insurance; Maritime education and industry associations; Commercial ship/cargo surveying, Classification societies.



After having conducted maritime cluster analysis, the study has formulated a sustainable

development strategy for Hong Kong. With regards to Hong Kong being an IMC, the study has taken into account the forecasts of market demand and productivity and capacity of port facilities looking up to 30 years ahead.

The study recommended the Hong Kong model, which is to create an environment conducive to doing business, and remove barriers to growth – and not to provide direct subsidies to individual companies.

More specifically, the target model has different objectives at different levels. At the local level, it should expand the presence of commercial principals such as ship managers, owners, operators and traders in Hong Kong, and also enhance capabilities in high value-added maritime services (e.g. ship finance, maritime insurance, maritime law and arbitration). In the regional/national level, Hong Kong needs to become the preferred location of global (and in particular Mainland China) commercial principals sourcing intermediary services. At the global level, Hong Kong needs to be differentiated from other IMCs by positioning itself as a maritime service centre and springboard that facilitates Mainland shipping companies to operate internationally, and for foreign shipping companies to expand into the Mainland market.

Based on the previous analysis, the study identified corresponding initiatives to be taken from four perspectives, which are suggested as follows.

Solution Government Policy "GP" Initiatives

Desired outcome: *Efficient organizations and effective policies and systems that facilitate competitiveness, innovation and best practice in maritime services.*

- Continued support for Hong Kong as an IMC at the local Government policy level.
- Continued support for Hong Kong as an IMC at the national level.
- Cooperate with Shanghai in terms of maritime development by exploring pilot schemes employing the strengths of the two IMCs.
- Establish a new institutional body set up by the Government ("the new maritime body") to conduct policy research, propose policy measures that drive maritime development, and champion the trade's interests in Government's policy-making.
- Actively pursue trade and investment facilitation supplements under CEPA on behalf of the maritime cluster.
- Enhance the feedback mechanism between the Government and the industry on the

progress and priority of negotiation of double taxation agreements and Free Trade Agreements, as well as closer cooperation in lobbying work.

• Develop policies to promote Hong Kong's maritime industry as environmentallyconscious and sustainable.

People "PE" Initiatives

Desired outcome: An adequate pool of maritime skills and experience available locally and a destination of choice for international maritime talent.

- Develop Hong Kong as a centre of excellence for maritime education and enhance the quality of maritime-related courses / programmes at local institutions.
- Maintain a central registry of the maritime-related programmes and courses on offer in Hong Kong.
- Keep in view the need for continued operation for the Maritime and Aviation Training Fund beyond the current 5-year timeframe.
- Set up an electronic platform to enhance the transparency of career opportunities in the maritime industry.
- Empower the new maritime body to oversee the manpower situation of the industry, and implement initiatives to support training for the industry in Hong Kong.
- Review and enhance the supply of courses offered by MSTI and their related arrangements.
- Explore distance learning for maritime industry practitioners to increase flexibility.
- Enhance exposure of local youngsters to the maritime industry.
- Employ non-traditional promotion strategies to update the concept and image of careers in the "maritime industry".
- Explore measures whereby the immigration regime can facilitate the recruitment of overseas talent for Hong Kong's maritime industry.
- If and when there is consensus among the industry to create an all-encompassing body of maritime professionals, the Government to facilitate and assist the industry in the establishment of such body.

***** Marketing, Promotion and Communication "MPC" Initiatives

Desired outcome: International recognition of Hong Kong as a premier IMC and a positive shift in attitude/perception by the local community.

• Empower the new maritime body to devise effective strategies and to market and promote initiatives to enhance Hong Kong's status as an IMC, to attract commercial

principals and raise awareness of Hong Kong's strengths in providing quality maritime services.

- Devote resources for marketing and promotion for the purpose of attracting commercial principals from all around the world and in particular those from the Mainland to establish operations in Hong Kong.
- Attract, support, and assist the organization of international and regional maritimerelated conferences/events.
- Creation of a One-Stop-Window for information and communication to be managed by the new maritime body.

✤ Infrastructure, Innovation & Technology "IIT" Initiatives

Desired outcome: *Resources available for firms, research and educational institutions to conduct maritime specific R&D and innovation activities underpinned by a forum to shape overall direction.*

- Empower the new maritime body to drive and coordinate research and development activities in the industry that are relevant to Hong Kong.
- The Government to support and encourage research and development by the industry / academia in aspects such as maritime policy, services, infrastructure, innovation and technology that will drive the further development of Hong Kong as an IMC.



Photography by Fang Zhang, 2014

CONTAINER TERMINAL 10 IN HONG KONG: OVER CAPACITY OR SUSTAINABLE STRATEGY?

Ms Judy Tong and Prof. Hong Yan

Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University

Transshipment Port: Iron or Fragile

Having been the most reliable and competitive gateway or window for foreign investment trading hub-and-spoke with the Chinese mainland, the Port of Hong Kong has successfully shaped her role as a worldwide, well known transshipment port in Asia in the past 30 years. Being an efficient port in a small city, the port of Hong Kong was ranked the most busiest container port from 1987 to 1989, from 1992 to 1997 and from 1999 to 2004*¹.

Starting from 1997, over 30% of transshipment cargoes were recorded out of the overall laden container throughput and for the following intervals of every 3-4 years, 40%, 50% and 60% of laden transshipment container throughput were reached in 2000, 2003 and 2007 respectively. By the end of 2012, a record high percentage of 70% was reached (see Table 1).

Year	T/S Laden Cntr Tput ('000 TEU) in HKG	TTL Laden Cntr Tput ('000 TEU) in HKG	% of T/S Laden Cntr to TTL	TTL Laden Cntr Tput YoY C.f. (%) in HKG
1992	1,005	6,723	14.95%	29.24%
1993	1,067	7,723	13.82%	14.87%
1994	1,792	9,453	18.96%	22.40%
1995	2,560	10,515	24.35%	11.23%
1996	2,678	11,104	24.12%	5.60%
1997	3,960	11,751	33.70%	5.83%
1998	3,887	11,489	33.83%	-2.23%
1999	4,883	12,801	38.15%	11.42%
2000	5,934	14,249	41.65%	11.31%
2001	6,457	14,189	45.51%	-0.42%
2002	7,407	15,322	48.34%	7.99%
2003	8,534	16,532	51.62%	7.90%
2004	9,487	17,883	53.05%	8.17%
2005	10,151	18,453	55.01%	3.19%
2006	10,965	19,343	56.69%	4.82%
2007	12,196	19,907	61.26%	2.92%
2008	12,818	20,272	63.23%	1.83%
2009	11,427	17,726	64.46%	-12.56%
2010	13,222	20,002	66.10%	12.84%
2011	14,247	20,696	68.84%	3.47%
2012	13,939	19,652	70.93%	-5.04%

 Table 1: Laden container throughput by transshipment and total cargoes

Data Source: <u>http://www.mardep.gov.hk/en/publication/pdf/portstat_2_y_b3.pdf</u>

The trend and growth seems to remain strong even with the rise of various mega size terminals in the nearby Shenzhen and Pearl River Delta Area, such as the Ports of Yiantian, Shekou, Chiwan

This article is partially supported by the C.Y. Tung International Centre for Maritime Studies Policy Research Fund, ¹ Data Source: "World Port Rankings 1987 to 2013" by American Association of Port Authorities.

and Daicha. These ports, operating as a Group or Corporate invested in the Port of Hong Kong as well. They did not just learn or leverage from the success story of Hong Kong and other ports, and starting with an advanced system, technology, equipment and facility and management methods, and also supported by the more robust and flexible connecting infrastructure, such as rail network, high-ways and river lines with more abundant land and water resources. They have continued to make advances. These factors are not achieved by Hong Kong current container terminal, neither in the Kwai Chung main terminal area nor in the ancillary terminal area in the opposite Tsing Yi Island.





Data source: http://www.mardep.gov.hk/en/publication/pdf/portstat_2_y_b3.pdf



Chart 2. Laden container throughput by overall (Direct + Transshipment) cargoes

Data source: http://www.mardep.gov.hk/en/publication/pdf/portstat_2_y_b3.pdf

On the other hand, the trend (see Chart 1) of this on-going percentage increase by transshipment cargoes to the total throughput covered some hidden risk of rapid overall throughput drop. One could imagine the other side of the risky coin: with over 70% of cargoes contributed by

transshipment cargoes, any structural change of the demand in the region shall seriously impact the total slow growing throughput of Hong Kong, which is currently slow growing (Chart 2). Instead of hoping the percentage to grow further, this implies a further shrinking of both local demand and intermodal transport volume. The question becomes a primitive one: how to boost throughput volume with competition strengthening, and inertia in the Port of Hong Kong?

Stonecutters Bridge

The building of the Stonecutter Bridge was regarded as one of the main links to the future Hong Kong – Zhuhai – Macao Bridge (HZMB) and highways. It was opened on December 16, 2009, without any bridge-crossing charges if one vehicle, include loaded truck or lorry moves from Kwai Chung terminal side to Tsing Yi terminal side. (Figure 9). For a typical operation day without accident or severe weather, the time for one vehicle to do such a move only requires less than 5 minutes.





Photography by Fang Zhang, 2013

It aims to provide a vital link between Kwai Chung (KC) and Tsing Yi (TY) Terminals, and most importantly, towards the airport, and further to the Pearl River Delta area in the Chinese mainland in near future. The extent of the expected high synergy can only be visualized when the other supporting infrastructure and construction work is completed in 2016 (tentative schedule), include the HZMB and Tuen Mun – Chek Lap Kok Link. While it is of high hope that the new infrastructure shall offer much shorter transportation time resulting in lower freight charges to

the industry, it also comes to our consideration the need of the previously well discussed Container Terminal 10 (CT10) construction, based on the said new land transport network which will soon be available. Two interesting questions come out again: "when" and "where". They are: (a) the best timing to build the CT10 and (b) the most suitable location for CT10.

Normally expansion of one facility is carried out based on the estimated over-capacity situation that occurs in a reasonable foreseeable time horizon. Given Hong Kong current slow growth situation, *the need seem to be far away and without high urgency*. However, this might be a chicken-and-egg problem: without the new capacity, especially the increased ability to handle congested vessels during peak seasons, customer might prioritize the port of Hong Kong with a lower ranking and be attracted to surrounding bigger ports. Therefore this is not an absolute yes or no decision based only on existing throughput statistics. The whole regional throughput and economic growth should be considered for the potential to continue a growing trend, especially as over 70% of the container throughput is contributed by transshipment cargoes.

Lantau Island: abundant land and spatial capacity

As shown in many government papers in the past 20 years, Lantau Island is one of best locations for the new main terminal to location^{*1}. The discussion was made well before the building of Container Terminal 9 (CT9) on the South of Tsing Yi Island (completed in mid 2004). The need to locate the secondary terminal before the new main terminal was built was important and it was finally located next to the main terminal at Kwai Chung area, in the Southern part of Tsing Yi. It is very important for the industry that it is adjacent thereby allowing inter-terminal boxes to be transferred between terminals. The transfer could not be avoided by advanced planning due to the nature of the liner alliance set up, and each of their contributing vessels arrival time. In addition, the corresponding berthing arrangement is not deterministic. Rather, it subject to various factors, include:

- (a) Last Port Operations and Departure Time lines
- (b) Navigation dependent on Ocean weather situation
- (c) Cost saving consideration (slow steaming) decision making
- (d) Port congestion during adverse weather seasons (such as fog conditions)
- (e) Berthing terminal (contract terminal by default)

HZMB construction under work

The Hong Kong – Zhuhai – Macao Bridge (HZMB) project consists of a main bridge which is a mega size sea crossing bridge, and related boundary crossing facilities and roads connecting the three places. It aims to establish a new land transport link from Hong Kong to the Pearl River Delta area. It is expected to meet the future demand of three places: Hong Kong, Zhuhai and

Macao in terms of passenger and freight land transport. The main bridge is expected to be finished in 2016 together with the construction of tunnels and various artificial islands.

Lantau Island, as compared with Tsing Yi island, is relatively far away in terms of travelling time and distance, and there is extra transportation cost if large volume of inter-terminal transfer is required from Kwai Chung/Tsing Yi terminals to the future Lantau CT10 terminal (if it is located there). Unless there is strong statistical support showing a high increase in volume, it is not likely for the government and the city to take such a big risk as building CT10 so far away, especially considering the Tsing Yi CT 9 experience.



If we are talking about long term city development over 20 or even 30 years, there is a possible location change for the whole set of terminals in Kwai Chung and Tsing Yi, which could release land near the city centre, although this will not happen in the near future.

Photo courtesy by Low Carbon Logistics, http://www.lowcarbon.polyu.edu.hk

For such a long term vision, in terms of water draft, the western area near Tai O is an ideal area but the travelling distance is relative long as compared with the southern area, near the North Lautau Highway. Moreover, there is aviation height limit on northern Lantau Island, and therefore it is not an option. On the other hand, on the southern part of Lantau Island, the small islands (Small and Big Kau Yi Chau Islands) in the nearby sea front could also be regarded as future reclamation linking points, just like the current Container Terminal No. 8 located on the reclaimed Stonecutter Island. This area was also listed in some previous old government papers before as one of the potential areas, without mentioning it as a total replacement of current Kwai Chung (and Tsing Yi) Container Terminals. However, separation of container terminals piece by pieces with a long travelling distance is definitely not favorable to daily port operation from a practical perspective. Before the long term plan is considered, it should be noted that currently Stonecutter Bridge serves as a fast-pass link, allowing freight transport vehicles to use the alternative faster lane without merging with the Number 3 highway, which is always congested with other types of vehicles especially during peak hours in the morning and in the evening. One might ask whether the city should proactively take the synergy or advantage of the new HZMH Bridge Project, and consider the new main container terminal location on Lantau Island or not, instead of locating it on Tsing Yi or nearby areas.

Strategic Alliance Effect on Port's Land Operations

For a typical strategic alliance X, it might consist of various liners (normally about 3 to 5 liners) as its alliance members. While some of the members might be NVOCC and cooperate in terms of slot chartering, most (not necessary all) of them shall pool in their vessels in order to form a steady weekly sailing schedule servicing most or all ports along the service loop. For example, it takes about 2+ weeks from the port of Hong Kong to the port of Long Beach, and another 2+ weeks for the return trip. So a total of 4 vessels are required to form the service loop to ensure weekly services between the port of Hong Kong and the port of Long Beach. When more ports are added to the route, the number of vessels shall increase accordingly due to more time required for port stays and potential port congestion.

For a particular vessel belongs to Ship Operating Agent (SOA), A, all the ship planning shall be the responsibility of the vessel planner under the company A. They shall give priority to their own customers, of course and offer capacity for the other alliance members (e.g. B, C, D and E) to put their boxes on this vessel Va. As each of the alliance members has their own contract set up with their home terminal, boxes might not be directly gate-in to the contract terminal of SOA A. This clearly explains need for inter-terminal transfer. The situation gets more complicated when boxes are not purely outbound but transshipment cargoes. Unless the business deals between the liner and container terminal revolute, the situation could be prolonged.

Major strategic alliances^{*2}: G6 Alliance, P3 Alliance and CKYHE Alliance are listed below:

<u>G6 Alliance:</u> American President Lines (APL), Hapag Lloyd (HPL), Hyundai Merchant Marine (HMM), Mitsui, Nippon and OOCL. **<u>P3 Alliance:</u>** Masrsk Line, Mediterranean Shipping Co. and CMA CGM. <u>**CKYHE Alliance:**</u> Cosco, "K" Line, Yang Ming, Hanjin and Evergeen.

Sustainable location; connecting intrastructure and network

² "Strategic alliances in container liner shipping" listed in Research in Transportation Economics, Volume 32, Issue1, Page 25 to 38.

The addition of an extra terminal and berth lines in Lantau Island might not be attractive to Liners until the addition is big enough for multiple container operators to operate as now in Kwai Chung for efficient inter-terminal box transfers. Does it mean an overnight relocation, just like moving the old Kai Tak airport from the city centre area in Kowloon (Kowloon City area) to Lantau Island is a more favorable option? The most important determinant is the total time which is also reflected in the overall transportation operation cost per box unit in the long run. If there is a reduction in transportation time from the cargoes source to the Port of Loading, the options shall be a possible one. However, such a big movement requires not only giving up the existing mature system but also taking a bit risk in case of any unfavorable delay or chaotic situation happening.

Short to midterm: Higher value added services and certification

While the decision to build CT10 is not going to be made in the near future, there is a high need to create higher value added services to strengthen the essential need for transshipment cargoes passing through the port of Hong Kong.

In terms of infrastructure and facilities, Hong Kong is no longer the only highly efficient and productive one. However, taking advantage of the unstable product quality that is produced in Mainland China, Hong Kong could definitely set up some kind of Food, Toy and/or Clothes Quality Test and Certification Centre before the cargoes are exported worldwide. "Made in China" is a questionable label according to many customers in the West but it could be improved with proper brand name. Customers trust also the quality control exercised by the well-known brand name and Hong Kong, itself, is one indeed. "Inspected in Hong Kong" or "Tested in Hong Kong", thereby ensuring that the product compiles with proper rules and regulations of the exporting countries, would be valued added to some products created by SMEs in Mainland China. Hong Kong could serve as an independent agent and accumulate certain volumes of products, and set up further annual EXPOs or shows in order to strengthen the role of Hong Kong: being a city of high quality.

Long term: regional arbitration centre?

Having Singapore recently accepted by the London Arbitration Group as the third arbitration point worldwide and the first one in Asia, it is not easy for Hong Kong or even Shanghai to transform herself to be a competitive one in the near future. While Shanghai is also progressively preparing the city to be the one, backed by its strong historical maritime education, business and hard-core ship building, trading and dry docking services environment, Hong Kong could be a good place to serve as an alternative centre for relative smaller cases in terms of claims value or loss of damage volume. Other than the needed authorization and support by the London Arbitration Group, the city does need to review whether the existing education programs in the

area are adequate to generate the needed young expertise for sustainable growth, even if the first batch of experts are expected to be imported from London or New York. If Hong Kong could develop herself as an alternative arbitration centre, she might focus on China or regional cases. However, there is a lot of support required from the Government of Hong Kong in terms of arbitration law and regulations' application, other than more resources needing to be inputted into education for the long term development.

Summary

Hong Kong has been gradually changing from a hub-and-spoke serving the whole or majority area of the Mainland to one focusing currently on the southern part of the Chinese mainland, surrounding the Pearl River Delta.

While the container throughput of the Port of Hong Kong is still showing a slow increase in the past ten years, the composition of the overall throughput relies heavily on the transshipment cargoes which need to be strengthened by the creation of higher value added services in the near future. Taking advantage of the high product quality standards and requirements in Hong Kong, she could consider preparing herself to be a test and inspection center with high standards for the importing countries. There can be a range of products including food, clothes and toys. With the creation of the new brand label "Tested in Hong Kong" on top of "Made in China", it is hoped that higher customer confidence and demand in the long run can be generated, and that this will result in a win-win business situation. This is just one of the proposals to create higher value, and the ultimate purpose is to maintain the sustainable growth of the laden container throughput in Hong Kong, and avoid Hong Kong becoming a regional empty depot terminal in the long term.

Existing Kwai Tsing container terminal infrastructure requires expansion (not relocation) for continuous terminal development, include wider deck width and more robust terminal design to cope with higher levels of technology and automation for quay side operation, such as tandem lifting which is already becoming common in other terminals. Expansion is definitely needed to enhance the overall capacity and technological level, and also minimize vessel port omissions during severe weather or peak seasons when high vessel congestion situations occur. However, a standalone terminal (CT 10) somewhere far away from the existing terminals in Kwai Chung and Tsing Yi should be avoided as it shall prohibit intension interaction with the existing facility. CT 10 should be considered to be built with minimal driving time and distance from Kwai Tsing terminals. This implies that the best location should still remain locate at some spots on Tsing Yi island, without crossing the Tsing Ma bridge to any part of Lantau Island which would add additional transportation costs including tonnage and extra time.

In a long run, the government should probably only consider an overall removal of the existing terminal facility as a group to an entirely new area on Lantau Island, only if the overall port

Laden container boxes (include both transshipment boxes) throughput volume shows a strong increasing pattern in the region, which implies a possible cut of a growing bigger cake in the region. Otherwise such a and risky high total relocation decision should not be carried out for it would require high investment to make such a super new terminal group to be an attractive one. including a rail network building and intermodal traffic lane design. This would make it into a successful one and stand-out from the surrounding ports in the region. We shall explore further the various possible designs of terminal design, which suit the needs of Hong Kong in the next article.



Photography by Oliver Bu, 2012

MARITIME SECURITY, PIRACY AND CONTAINER SECURITY

Dr P.K. Ghosh¹, Dr Girish Gujar² and Prof. Hong Yan² ¹The Observer Research Forum, India ²The Hong Kong Polytechnic University

The nefarious linkage between organized crime syndicates, powerful influences ashore and the pirates who carry out the attacks have been described as, "They are the foot soldiers," according to Andrew Mwangura, who heads the East African Seafarers' Assistance Program that negotiates frequently with pirates. Thus the extensive intelligence networks developed across regional ports in different countries by the pirates through organized crime syndicates enables them to have an up to date knowledge of the types of cargo and ships that intend to pass through an area. This also facilitates the identification of valuable cargo and hence leads to attacks on ships that carry them.

With Somalian pirates operating in ranges in excess of 1500 nautical miles from their base port while waiting in mother ships for the appropriate ship to attack – the level of technical sophistication required is large. While most depend on hand held GPS for positional accuracy – high tech communication systems keep them abreast of the latest intelligence on commercial ships approaching the area.

With most of the cargo in ships being carried in containers – it may not be farfetched to presume that in the near future pirates may choose against hijacking the entire ship. Instead they may just take the crew and some containers that may have valuable cargo. While this scenario has yet to develop due to the logistical problems involved in unloading containers or the cargo at sea - the scenario has considerable potential as the returns (on stolen cargo) will be much quicker than the long winded ransom negotiations which can stretch for months. With a desire for faster monetary returns, pirates under the influence of organized crime and impatient financers may well choose this methodology of operation in the near future after overcoming the logistical hurdles.

The logistical problems are not insurmountable. Details of cargo manifest and containers in a particular ship can be obtained easily as intelligence information by the pirates. The current involvement of trans-national organized criminal syndicates and the availability of "pliable" officials at various ports would easily help in obtaining this information. The other logistical issue of identifying particular containers and opening sealed ones again can be achieved through coercion / inducements to crew and the necessary skill to open locked containers. In some cases the level of skill is so high that the containers can be re-sealed after pillaging the cargo making it

difficult for concerned companies to claim insurance on the stolen items. Thus, the scenario of containers being looted at sea by pirates is neither farfetched nor implausible and can easily develop in the future as monetary returns are likely to be quicker for the pirate financers and the operation less cumbersome. Additionally, with human lives not at stake (in case hostages are not taken) – the political will of governments may also waver.

The Future of Piracy

fter considerable effort in January 2009 the UN chose to adopt Resolution 1851(2009) which called for the establishment of a contact group on piracy off the coast of Somalia. Today its membership has grown from 30 countries to more than 50 and it includes six international organizations. This UNSC resolution did little to address the root causes of Somalian piracy even though it was welcomed by shipping companies and insurers. In many ways it opened the flood gates for military action- which despite the successes in initial years, eventually has proved ineffective.

Consequently, the normal tendency of most governments that were alarmed by the rise in the number of piracy attacks on their merchant shipping in the Horn of Africa, was to use navies and military force to abate the problem, rather than countering it at the socio politico level. Subsequently the entire area becomes a melee of warships. A majority of these ships operate in coalitions and formal Task Groups while others prefer independent operations while collaborating closely with other such anti-piracy patrols. The primary objective was to prevent piracy attacks and ensure the safe passage of ships.



Photography by Oliver Bu, 2012

However, this is an onerous and a difficult task. The main reason is to ensure that the rules of engagement with captured pirates is unclear, hence ensuring the success of legal prosecution and that the pirates are repatriated to their own country is problematic. Additionally any attempt to liquidate these pirates without seeking legal recourse is frowned upon the by international community at large and the human rights

community in particular. These have led to many naval ships to face difficult situations. Apart from the naval forces in the area, the other initiatives that have been taken to enhance anti piracy measures include:

- 1) Opening of a Maritime Security Centre (Horn of Africa) MSC (HOA) as a Coordination Centre that monitors all vessels transiting through the Gulf of Aden and also issues alerts to ships in the region through a website.
- 2) Inspired by the ReCAAP (Regional Co-Operation Agreement on Combating Piracy and Armed Robbery against Ships) initiative, nine countries from the region of the Horn of Africa have signed a Code of Conduct known as the Djibouti Code of Conduct These countries have agreed to the establishment of Piracy Information Exchange Centers in Kenya, Tanzania and Yemen, and a regional training centre in Djibouti. Currently this document on the Code of Conduct is open for signature by 21 countries in the region.

Given the vast sea area under scrutiny with the potential to face piracy attacks it was decided to sanitize a more manageable and restricted area. This led to the establishment of a 560 nm long sanitized corridor in the Gulf of Aden on 22 August 2008 by the US Navy Central Command (CENTCOM). Initially known as the Maritime Security Patrol Area (MSPA) it is now termed as International Recommended Transit Corridor (IRTC). This sanitized corridor is expected to provide a safe passage to all merchant ships sailing through it since it is patrolled by the coalition forces, NATO and EU. However there have been incidents of piracy attacks within this sanitized area leading to a major embarrassment to the states providing security.



Source: Piracy in the Horn of Africa, IMO Somali Piracy Update, Nato UNclassified

The large naval presence around the region of Horn of Africa as an anti-piracy patrol would lead to the logical conclusion that capture and prosecution of pirates would be a matter of common occurrence - however that is not the case. There are many legal complications. Piracy is a form of barratry and has to be viewed in the context of both international as well as domestic laws. The first, *jure jentium* is concerned with piratical attacks against international laws to which a large number of States subscribe while the second concerns national legislation. It is regrettable that international law and domestic laws have not always been in congruence leading to lacunae which has come to the aid of the pirates.

Apart from that, boarding of hijacked vessels or pirate ships can be conducted under a variety of legal rationales, including the consent of the flag state under articles 92 and 94 of the Law of the Sea, the exercise to the right of self-defence under article 51 of the United Nations (UN) Charter, the right of visiting a vessel under article 110 of the Law of the Sea which can be undertaken if there are reasonable grounds to believe it is engaged in piracy. However the situation becomes difficult and tricky when pirates are apprehended due to these boarding's and are required to be tried by either the courts of the Flag state of the ship or of the warship which apprehended them or carried out the seizure.

The current thought process favours some captured pirates to be turned over to local authorities in Somalia or Puntland in an effort to encourage the nascent judicial and jail system. But these are being done in minuscule numbers so as to assess the efficacy of these institutions in delivering justice.

One of the most commonest solutions against piracy that has been often forwarded seeks to arm merchant ships with arms for the ship crews or with professionals called Sea Marshalls, ostensibly making them "self reliant" in the process. Presently, the authorisation to carry firearms onboard ships is a decision of the Flag state but this is subject to the laws of the country being visited when in Port or in territorial waters. Many countries do not "encourage armed merchant ships" to enter ports without proper authorization and such ships can face long delays at each port trying to get necessary clearances – often proving uneconomical for the concerned shipping companies. This regulation of disallowing arms to enter ports by most countries is not arbitrary and stems from the fact that IMO and IMB regulations do not support armed protection of ships with the rationale that it may to lead to increased violence at sea. Hence a mistaken appreciation by the trigger happy armed guards (Sea Marshalls) and pirates could lead to secondary/ collateral damage as clearly was the case when Italian Gunmen shot two innocent Indian fishermen after mistaking them for pirates.

On the other hand, the capture of MV Maersk Albama, has led the US government to advise all merchant vessels flying its flag to carry armed guards as security. In addition, a recent executive

order passed by President Obama of the United States of America declared piracy as a threat to the national security of the USA and forbade material or financial assistance (read ransom) to pirates.

Despite these measures and immense pressure from the shipping industry to universally legalize the deployment on board of Sea Marshalls by merchant ship – the subject remains deeply controversial. The emergence of dangerous "floating armouries" in the Indian Ocean is another dimension of the same problem that has risen recently. These ships carry a large amount of light/ heavy weapons and serve as floating armouries for the Sea Marshalls who board and disembark ships at pre-appointed places. With all these ships under the dubious control of private companies, the security implications for the littorals are vast and potent.

Towards Resolving the Issue

t is obvious that the problem of piracy emanating from Somalia is unique in more ways than one and that common anti-piracy responses aimed at increasing the naval presence in the region have not entirely proved successful in eliminating this scourge though they have effectively reduced the number of attacks in the area. A more sustainable solution to these problems is discussed below.

There is little doubt that the permanent solution to piracy in the region of Somalia lies on the land and not at sea which is symptomatic of the ailments on the land. Hence the land based effort needs to be viewed from the following perspectives:

- a) The need to foster a strong government lies at the heart of the piracy issue. The current government's effort to combat piracy needs encouragement despite its weak fundamentals and other constraining factors such as corruption. The efforts of the Puntland Government are also noteworthy and it needs encouragement which does not necessarily have to be in terms of financial aid.
- b) The local populace of coastal Somalia and Puntland are an aggrieved lot who are convinced of the injustice that has been meted out to them by Western powers. A special cleaning effort has to be made to ensure that toxic and radiation hazards are reduced considerably to make the beaches around habitable.
- c) Somalian piracy is a transnational crime and currently Somalian pirates are partly the façade of large, well-organized criminal organizations based inland. Interestingly, Canada, home to the largest Somali diasporas outside Africa, hosts logistical and organizational cells for some Somali pirates. These financial and logistic support links must be investigated and severed as it is being done for declared terrorist organisations.

d) The legal support systems and national anti piracy laws need to be strengthened. Not all actions need to be taken in Somalia - most countries that are affected by maritime piracy have weak or nonexistent anti piracy laws making the task of prosecuting captured piratesa herculean task. Countries like India have not yet passed The Piracy Bill 2012 which is regrettable.

The second thrust must come from the sea:

- a) Anti-piracy patrols and the naval role of escorting merchant ships in convoys or individually must continue unabated since they are the visible format of anti-piracy measures and they have a deterrence and salutary effect on reducing the number of incidents. However, there is a need to coordinate more effectively. Ostensibly there are numerous naval initiatives like SHADE (which has regular meetings); there should be more sharing of information regarding frequencies of operations and data exchange methodologies.
- b) Common rules of engagement: A commonality in rules of engagement by warships in the area will ensure a unity in approach by all operating anti-piracy patrols.
- c) Better Intelligence gathering both at sea and on land to pre-empt and neutralize piracy attacks.

The final thrust and effort must come from shipping companies themselves which are often loath to adopt expensive security methods for reasons of attempting to keep operating costs low. Ships fitted with security devices are obviously better equipped than those without. Several attempts at hijacking have been successfully thwarted due to adoption of either active or passive means adopted by the concerned ship under attack.

What Next?

It is quite likely that the continuously evolving nature of piracy may yet undergo another change and affect global container trade. The scenario of pirates looting particular containers with valuable cargo – out at sea – with or without the crew as hostages promises quicker financial returns as it partly obviates long drawn ransom negotiations in case of the stolen cargo. This scenario has yet to develop due to the logistical problems but given the desire for faster monetary returns, pirates under the influence of organized crime and impatient financers may well choose this methodology of operation in the near future after overcoming the logistical hurdles. With human lives not at stake (in case hostages are not taken) – the political will of governments in overcoming piracy may also waver. The other most disturbing aspect concerning Somalian piracy concerns their increasing linkage with terrorist organisations like Al Qaida based in Yemen and the Somali Al Shabab – both of whom are keen to create Maritime Wings of their organizations with the help of former pirates. Action to prevent his progression must be taken without immediately.

Somalia is regarded as a failed state hence governance and the efficacy of basic governmental institutions are low. In such an atmosphere– the solutions to eradicate piracy do not exclusively lie at sea as is often perceived by most governments. The innumerable warships in the region can at best suppress the number of incidents, as has been done currently. However, complete eradication demands the adoption of a multi-pronged proactive approach that needs collaboration by all the major stake holders and affected nations. Such diverse approaches is the only way to strike at the root of this intensely complex problem that is continuously evolving and would rise again with a vengeance soon after the navies on anti-piracy duties have been withdrawn.

Know Our Authors

Dr PK Ghosh Senior Fellow Observer Research Foundation

Dr Girish Gujar Deputy Director Laboratory of Container Security Department of Logistics and Maritime Studies The Hong Kong Polytechnic University

Prof. Hong Yan Director of the Laboratory of Container Security Professor at Department of Logistics and Maritime Studies The Hong Kong Polytechnic University



ADVERTISING OPPORTUNITIES

Maritime Insight is now circulated to a wide and varied audience of nearly 2,500 contacts in Hong Kong, the Mainland and Taiwan. It is read by senior decision makers and influencers from key industrial sectors, professional associations, business development and investment organizations. We are now offering companies the opportunity to connect with this highly influential readership through advertising of your products and services. Our highly competitive rates offer an excellent way to access the maritime and allied industries throughout the Greater China Region. Should you be interested, please feel free to contact us.

Note: Here are the key dates for your kind reference. This can help you to decide which issue you want to publicize your ad or article. (March 14 is the deadline for Spring issue, June 10 for Summer, September 8 for Autumn, and December 8 for Winter issue.)

Should you have any questions about advertising and/or submitting articles, please feel free to contact Ms Fang Zhang via email at <u>fang.zhang@polyu.edu.hk</u>.













TECHNICAL

MANNING INSURANCES INSPECTIONS

SUPPORT

TOTAL SHIP MANAGEMENT SOLUTION



Crowley Accord Ship Management

AMSTERDAM | HONG KONG | JACKSONVILLE | MUMBAI www.crowleyaccord.com | info@crowleyaccord.com

CALL FOR ARTICLES

Professions of the industry and academics interested in publishing an article in Maritime Insight should submit articles to Maritime Insight either on a one-off or more regular basis.

- We are always open to guest writers on issues related to maritime issues, transport logistics, maritime law, shipping finance, insurance and container security, as long as the writing is of high quality and a good fit with our style and your expertise.
- We do not guarantee to publish your submission, but we will review it and make a decision on publication. Feedback is always provided.
- Please try to advise an engaging or persuasive headline; please avoid lengthy paragraphs that are not suitable for online content reading.
- By submitting an article to us, you are affirming that the content is original to you, the author, and has not appeared elsewhere online or in print.
- You can provide a short bio (three to five sentences) at the end of the article and also you can link to your company, blog and projects.

Open For Enrollment

The training of Business of Shipping and Logistics

Provided by C.Y. Tung International Centre for Maritime Studies

<u>Subjects (4 hours / subject):</u>				
Maritime Economics and Shipping Markets	Global Sourcing and Supply Management			
Shipping Revenue and Costs	Marine Insurance in Shipping and Transport Logistics			
Carriage of Goods by Sea Law	Container Ports and Cargo Management			
Finance for Shipping	Sales and Marketing in Container Shipping			

<u>Dates</u>: 10, 17, 31 January and 7 February (Saturday) 2015 Fee: HK\$5,000 (32 hours)

The programme has been included into the pre-approved list under "Professional Training and Examination Refund Scheme" (ProTERS) in Hong Kong. Each successful applicant will be refunded 80% of their fees. **Website**: www.icms.polyu.edu.hk/training







TCC GROUP



TAI CHONG CHEANG STEAMSHIP CO. (H.K.) LTD. ROOM 4411, 44/F., COSCO TOWER, 183 QUEEN'S ROAD CENTRAL, HONG KONG TEL: (852) 2522 5171 FAX: (852) 2845 9307 WEBSITE: WWW.TCCFLEET.COM

Your global shipment details at your fingertips

Today's ever increasingly complicated and demanding global supply chain requires equally demanding e-commerce solutions that are informative, robust, and accessible anytime, anywhere you happen to be.

As an industry leader in the use of information technology and e-commerce to manage the entire cargo process, OOCL offers a comprehensive suite of online tools and mobile solutions that will give you all the shipment visibility and real time information you need to keep up with the pace of your business, right at your fingertips.



OOCL makes managing your shipment easier, because we take it personally.

www.oocl.com

C.Y. Tung International Centre for Maritime Studies Maritime Education | Research | Consultancy

Editorial Advisor: Prof. Chin-Shan Lu Editors: Dr Xinyu Sun, Dr Girish Gujar, Miss Fang Zhang

DISCLAIMER

All opinions stated in the articles and "Interviews" are those of the respective authors and do not necessary reflect the views of the editors or ICMS. We hereby express our gratitude to all the authors for their photographs and articles. If you are interested in subscribing an e-alert or you have any inquiry about the Maritime Insight, please feel free to contact us.

Tel: (852) 2766 6636 | Email: cyt.icms@polyu.edu.hk | Website: www.icms.polyu.edu.hk



