Strategic Development Plan for Hong Kong Port 2030

Findings and Recommendations

Date: 02.03.2015
## Agenda

1. Introduction
2. Overview of Supply & Demand
3. Issues & Prospects
4. Strategic Development Plan
Introduction
Our expertise spans Sea

A multidisciplinary consultancy, we specialise in environmental, economic, design & planning, logistics and risk management services.

BMT helps clients make critical decisions at every stage of development.
BMT Hong Kong
Strategic Advisor to Government

Appointed by Transport & Housing Bureau to formulate a Strategic Development Plan for Hong Kong Port (HKP).

- Review of demand and supply
- Assessment of competitiveness
- Update the Port Cargo Forecast
- Estimate capacity of major cargo facilities
- More efficient use of existing facilities
- Devise a future development plan
- Update estimates of its economic contribution
Overview of Supply & Demand
The Market

Two key markets served by HKP

- **South China cargo**: declining market share due to competition, but the rate of decline is diminishing; no longer the main driver of growth.

- **International transhipment**: increasingly significant due to growth in world trade, trends in shipping, and efforts by HKP to attract throughput.
Where is the competition?

Supply: Major Container Ports in the PRD

- The ports share **overlapping hinterlands** and compete for the same South China cargo.
- Number of berths suitable for ocean-going container vessels grew by **141%** in ten years.
Issues & Prospects
Key Issues

Market

• **Broadening range of trading partners** and greater growth opportunities in Asia and other regions – the need for different levels of service and cost.

• A potential increase in **calls by mega-vessels**.

Competitiveness

• **Greater Terminal Handling Charges (THC)** than competing South China ports.

• **Greater trucking costs**.
Key Issues

Barriers to Growth

- **Difficulty of implementing port development projects** – such as time taken and difficulty of dealing with multiple Government departments.

Operational

- **Uneven utilisation** of facilities.
- Increasing demand for barge berths.
- Need to accommodate forecast growth in throughput.
- A growing trend of international transhipment.
What are the growth prospects?

Demand: Forecast Throughput

- Container throughput will grow modestly at an average rate of 1.5% per annum.
- International transhipment is the major constituent of growth, while throughput related to South China is forecast to have a slight negative growth.
- Non-containerised cargo is forecast to slightly decrease.
Future Demand vs Capacity

The forecast **throughput will exceed the capacity of container handling facilities** as follows if no measures to enhance capacity are implemented:

- **KTCT – 2028.**
- Berths and Wharves outside KTCT – Not before 2030.
- Buoys and Anchorages – Not before 2030.

**Throughput and Capacity of KTCT with no Measures to Enhance Capacity in Effect**

000 TEUs

- 0
- 5,000
- 10,000
- 15,000
- 20,000
- 25,000
- 30,000


**Capacity** **Total Throughput**
Strategic Development Plan
The Vision

*To be the preferred transhipment and inbound distribution hub for South China, leveraging the PRD waterway network to minimise the environmental impacts of cargo transport in South China.*
Rationale for Developing Solutions

• Allow **better use** to be made of existing infrastructure,

• Enable HKP to **adapt to trends** in the shipping industry, and

• Increase the **competitiveness** of HKP.

This reflects the competitive nature of the shipping industry and scarcity of land; measures were proposed to tackle these issues facing HKP.
Measures Proposed

Allowing **better use** to be made of existing infrastructure by:

- Upgrading Stonecutters Island PCWA to become a modern container handling facility for ocean or river vessels, with a view to improving operational efficiency.

Enabling HKP to **adapt to trends** in the shipping industry by:

- Developing sites that can physically accommodate ocean vessels as **dual ocean and river facilities**.
- Providing **additional barge berths** at KTCT.
- Making **better use of land** around terminal boundaries to accommodate growth in transshipment and allow efficient operation.
Measures Investigated

Increasing the *competitiveness* of HKP by:

- Establishing an HKP Development and Promotion Team.
- Expedite development of proposed logistics facilities e.g. in New Territories.
- Increase supply of truck drivers for cross-boundary and intra-terminal trucking.

A further option considered:

- Build Container Terminal 10 (CT10).
Appraisal of Proposed Measures

1 - Upgrade Stonecutters Island PCWA
2 - Dual ocean and river facilities
3 - Provide additional barge berths at KTCT
4 - Better use of land around terminal boundaries
5 - Build CT10
6 - Development and Promotion Team for HKP
7 - Proposed logistics facilities
8 - Increase supply of truck drivers

Effectiveness of measure more significant than difficulty of implementation - good chance of successful implementation.

Difficulty of implementation more significant than effectiveness - unlikely that measure will be successfully implemented.
Measures Recommended for Implementation

Measures:

1. Upgrade Stonecutters Island PCWA to become modern container handling facilities for ocean or river vessels (2018)
2. Develop dual ocean and river facilities by allowing RTT to accept ocean vessels as well as river trade vessels (2015)
3a. Construct 1 additional barge berth N. of CT5 (2018)
3b. Construct up to 4 additional barge berths N. of Cheung Tsing Bridge (2018)
3c. Construct up to 5 additional barge berths SW. of CT9S (2018)

Legend:
- In use from 2015
- In use from 2015 / 2016
- In use from 2017 / 2018
- In use from 2018
- In use from 2020
- Public Road abandoned, land included in new lot as part of KTCT Replacement Road

Measures:

4a. Designating land for container storage use, offered on long tenures at Kwai Chung east of DT7 (2015/2016)
4b. Designating land for container storage and handling use, offered on long tenures at Tsing Yi Cheung Fai Road sites (2018)
4c. Designating land for container storage use, offered on long tenures at Tsing Yi Hong Wan Road (2015/2016)
4d. Designating land for container storage use, offered on long tenures at Tsing Yi Tsing Sheung Road (2017/2018)
4e. Designating land for container storage use, offered on long tenures at Kwai Chung north of CT5 (2015/2016)
4f. Designating land for container storage use, offered on long tenures at Kwai Chung north of CT5 (2015/2016)
4g. Re-route Container Port Road South and designate released land east of terminals 4, 6 and 7 for container storage use (2020)
4h. Abandon Tsing Yi Hong Wan Road and make it an internal road as part of the container terminals (2020)

Note:
- Measures 6 & 7 do not affect physical port facilities.
Effects

• The measures proposed for KTCT provide approximately 10% - 20% spare capacity based on the forecast throughput.

• Given that adequate capacity can be provided, it is **not** recommended to pursue the planning of CT10 for operation prior to 2030.

• CT10 is **not considered financially or economically viable** within the timeframe of this study.
CT10

The development of CT10 is considered **NOT** economically and financially viable, mainly because:

- Throughput **forecasts for HKP are now lower** than in previous studies when CT10 was recommended as a possible option.

- A large percentage of HKP’s throughput (about 75% in 2030) will be **transhipment**, which makes a smaller economic contribution and generates less revenue than import/export shipments.

- The development of CT10 requires a total **CAPEX of HK$60.9 billion, much higher** than the estimate in previous studies when CT10 was recommended.

Whilst container throughput at HKP will continue to grow, and exceed existing capacity, it is not of sufficient volume or value to justify building a new container terminal in the challenging conditions found in Hong Kong.

**Other developments are more appropriate.**
Roadmap for Development of HKP

Timeline for physical works:

- 2015: Re-route Container Port Road South and designate released land east of terminals 4, 6 and 7 for permanent container storage use. (Measure 4g)
  - Abandon Tsing Yi Hong Wan Road. (Measures 4h)

2016:
- Upgrade Stonecutters Island PCWA to become a modern container handling facility for ocean or river vessels. (Measure 1)
- Construct up to 4 additional barge berths N. of Cheung Tsing Bridge. (Measure 3b)
- Construct up to 5 additional barge berths SW. of CT9S. (Measure 3c)
- Land at Tsing Yi Cheung Fai Road for permanent container storage & handling use. (Measure 4c)

2017:
- Land at Tsing Yi Tsing Sheung Road for permanent container storage use. (Measure 4e)

2018:
- Land at Kwai Chung east of CT7 for permanent container storage use. (Measure 4a)
- Land at Tsing Yi Hong Wan Road for permanent container storage use. (Measure 4d)
- Land at Kwai Chung north of CT5 for permanent container storage use. (Measure 4f)

2019:
- RTT to be allowed to accept ocean vessels as well as river trade vessels. (Measure 2)
- Construct 1 additional barge berth N. of CT5. (Measure 3a)

Note: all physical works are at existing port facility sites: KTCT and RTT.
Port development until now…

BUT, with a Vision…
... and **Strategic Development Plan**

We are sailing into a brighter future.
Thank You