

Overview of Commercial Port Operations & Facilities in Victoria Harbour

PURPOSE

The purpose of this paper is to give the Harbourfront Commission (HC) an overview of the commercial port operations and facilities in the Victoria Harbour.

BACKGROUND

2. Members at the 4th HC meeting held on 9 February 2011 have asked Marine Department (MD) to provide comprehensive information on the commercial port operations and facilities in the Victoria Harbour.

THE COMMERCIAL HONG KONG PORT

3. Hong Kong Port is a world-class port and the largest container port serving southern China. In terms of total cargo throughput it is the combined sizes of Vancouver Port, Sydney Port and Hamburg Port together. The port accounts for 1.4% of Hong Kong's GDP amounting to 21 billion dollars; and 108,000 jobs which is 3% of Hong Kong's total employment. The commercial port is an important foundation of Hong Kong's economy serving a key role in the trading and logistics sector, which is one of Hong Kong's four key economic pillars.

4. Annually the port turns over 90% by weight of the cargoes in Hong Kong. In 2010 the port handled a total of 23.7 million 20-foot Equivalent Unit (TEUs) of containers. Some 425,000 vessels arrived in and departed from Hong Kong Port during the year, carrying 268 million tonnes of cargo and about 26.7 million passengers.

COMMERCIAL PORT OPERATIONS

5. Hong Kong Port's core commercial port activities are container ship operations. The key infrastructures of the port are the container handling facilities at the Kwai Tsing Container Basin. The nine container terminals with a total of 24 berths handle 72% of the port's total container throughput.

6. The mid-stream operations at the anchorages and Government Mooring Buoys provide comparatively less costly alternatives to alongside berths at the container terminals. Annually nearly two million TEUs of containers and 30 million tonnes of non-containerised cargo are handled at the buoys and anchorages.

7. Passenger ships, bulk carriers, oil tankers, transiting ships for the Shenzhen ports and local vessel activities also constitute part of the overall operations in the Hong Kong Port.

MANAGING THE PORT OPERATIONS

8. MD administers the port and manages the safe, efficient and orderly use of the waters of Hong Kong. The measures adopted for marine traffic control and management are organising the use of the port's water areas and physical control of vessel movements. Relevant rules, regulations, and prescriptions are stipulated in local legislation.

Specifying Uses of Sea Areas

9. MD implements traffic separation schemes and designates fairways to be used by relatively deeper draft vessels, particularly ocean-going vessels when moving in and out of or around the harbour. Pilotage requirements are stipulated to enhance safety. Prohibited areas or restricted areas such as those in the vicinity of the cross-boundary ferry terminals are prescribed to eliminate traffic conflicts. Some areas in the harbour are set aside as anchorages for ships to stay there to process port formalities, wait for berth, load and discharge cargoes, etc.

Controlling Vessel Movements

10. MD provides vessel traffic services by operating a Vessel Traffic Centre (VTC) to manage the arrival, berthing, unberthing and departure of vessels. The 24-hour manned center is the converging point for signals from radars, closed circuit television system cameras, ships' automatic identification systems and radio communications. In order to cater specifically for the Kwai Tsing Container Basin, MD also operates a marine traffic control station at Kwai Chung (KCCS) which is located immediately westward of Container Terminal No.8. KCCS is a sub-station of the VTC and is for enhancing marine safety and efficiency of vessel operations in its coverage area.

11. Harbour patrol services provide on-site support to complement VTC's work. Apart from responding to maritime emergencies the patrol launches also enforce marine legislation and maintain port and shipping

safety. The patrol operations are controlled from the Harbour Patrol Section Building that is strategically located at the waterfront near the northeast corner of the New Yau Ma Tei Typhoon Shelter.

SUPPORTING SERVICES & FACILITIES

12. There are other operations and facilities in the harbour which are needed for supporting the commercial port operations.

River Trade Vessels

13. Annually some 180,000 river trade vessels ply the routes connecting Hong Kong Port with ports in the Pearl River delta area.

Mid-stream Sites

14. The operation of mid-stream sites at the waterfront serves the function of loading and unloading of ocean and river cargoes from barges to trucks/lorries and vice versa. These include the Mid-stream Terminal at Stonecutters Island, the CRC pier at Cheung Sha Wan, and the China Merchant Wharf on the Hong Kong Island side of the Victoria Harbour.

Public Cargo Working Areas

15. The MD-managed Public Cargo Working Areas (PCWAs) are also vital for the mid-stream and river trade operations, as well as an important part of the logistics supply chain, providing a less costly alternative to the port users and logistics operators. PCWAs are waterfront public facilities designed to cater for direct transfer or short stay cargoes related to river-trade vessels, coasters and local barges/vessels. In general, PCWAs are engaged in trades that are dependent upon the availability of low-cost berths and cargo-handling space, such as waste paper and other recyclable materials, the outlying island trade as well as the majority of breakbulk cargoes. PCWAs provide more than 8,000 employment opportunities most of which are low-end jobs, and handled over eight million tonnes of goods last year. At present there are eight PCWAs in the territory, six of them are in the harbour but closure of two of these is planned. With the closure of these two industrial and logistics facilities along the eastern side of the harbour, there is an increased demand for waterfront land for such uses along the western side of the harbour.

Typhoon Shelters

16. Typhoon shelters are provided to meet the safety need for protection of local vessels and river trade vessels during typhoons and inclement weather conditions. MD manages the typhoon shelters. Although they are primarily built to ensure vessel safety during typhoons, many of the typhoon shelters also serve as day-to-day operation bases of local vessels. Such daily usage obviates the vessels having to stray into

the busy working harbour unnecessarily, causing traffic congestions and giving rise to safety hazards.

17. There are 14 typhoon shelters in the territory and seven of them are located within the harbour. Apart from Shau Kei Wan and Causeway Bay Typhoon Shelters which are mainly used by Class III¹ and Class IV¹ local vessels, the other five typhoon shelters in the harbour play a key role in providing much needed space for over 2,000 port operation vessels (i.e. Class I¹ and Class II¹ local vessels such as ferry vessels, cargo barges, tugs and pilot boats) and river trade vessels to take refuge within the harbour during inclement weather. They are in close proximity to the main working area of the Hong Kong Port and allow the working vessels to operate up till the last moment before seeking shelter from approaching typhoons. The vessels can seek shelter without risking to be exposed to gale force wind and rough sea if they were to go to the other typhoon shelters outside the harbour.

OTHER PORT ACTIVITIES & FACILITIES

Passenger Services

18. The Ocean Terminal provides berths and facilities for deep-sea passenger ships. The MD managed China Ferry Terminal at Tsimshatsui and the Macau Ferry Terminal at Sheung Wan are for cross-boundary passenger ferry services. At these facilities about ten ferry companies operate annually some 200,000 ferry arrival and departure trips that carry 24.5 million passengers to and from Macau and Mainland ports. Cruise ferries are operated in the port by Hong Kong based cruise ships on short international voyages. Most of the cruise ferries use the Government Mooring Buoys in the eastern harbour as their day-to-day operational berths when in port.

Private Mooring Area

19. Private mooring areas (PMA) are sea areas where with MD's permission private moorings can be laid for local vessels. The PMA at Ting Kau is used by the cross-boundary ferry vessels; the PMA at Tsuen Wan Bay is used by oil tankers; the PMA at the New Yau Ma Tei & To Kwa Wan Typhoon Shelters are used by port operation vessels such as ferries, pilot boats and other working craft; and the PMA in the Causeway Bay Typhoon Shelter is mainly used by pleasure vessels.

Vessel Inspection Site

20. Safety inspections are conducted before licences are issued to

¹ Local vessels are of four classes under the Merchant Shipping (Local Vessels) Ordinance, Cap.548. Class I include launches and ferries; Class II include cargo lighters, dumb lighters, dredgers and barges, pilot boats, and tugs; Class III are fishing vessels; and Class IV are pleasure vessels. There are 14,600 local vessels.

local vessels. In the Victoria Harbour, the licensing inspections are carried out at a waterfront site at the northern side of the New Yau Ma Tei Typhoon Shelter.

Pleasure Craft and Harbour Events

21. Various harbour events and marine sporting activities under the auspices of various organizations, clubs and associations take place in the harbour throughout the year. These include firework displays, yacht races, dragon boat races and angling competitions, etc.

Marine Refuse Collection Point

22. MD's responsibilities include scavenging floating refuse and collection of domestic refuse from ships in port. The work is outsourced to private companies. In the Victoria Harbour there are two marine refuse collection points established and one of them is at the northeastern side of the New Yau Ma Tei Typhoon Shelter for landing and transfer of the collected marine refuse to vehicles.

HARBOUR PLANNING PRINCIPLES

23. The economic value of Victoria Harbour is enshrined in the Harbour Planning Principles. Principle 6 on "Vibrant Harbour" particularly sets out: *It is essential to balance the use of the harbour to provide both a maritime and logistics hub for the safe and efficient passage of people and goods, and as a cultural and leisure facility. Both marine and land-side activities must cater to and balance with the aspirations of all sectors of the community.*

CONCLUSION

24. The port serves a key role in Hong Kong's economic activities and contributes significantly to Hong Kong's logistic activities. The myriad commercial port operations and facilities in Victoria Harbour are Hong Kong's heritage as well as an important pillar in sustaining its "Vibrant Harbour" into the future. In providing its utmost support to implement the Government's vision to beautify the Victoria harbourfront for public enjoyment, MD keeps in view the principles and guidelines on harbourfront enhancement.

25. Members are invited to note the information provided in this paper.

**Marine Department
May 2011**