

Task Force on Water-land Interface

For discussion
on 20 September 2017

TFWL/03/2017

Review on Berthing and Sheltered Space for Local Vessels in Hong Kong

PURPOSE

This paper briefs Members on the results of the Report on “Assessment of Typhoon Shelter Space Requirement 2015 – 2030” (“the assessment”), the findings of a Review on Berthing and Sheltered Space for Local Vessels in Hong Kong (“the Review”), and the measures recommended for enhancing the utilisation of existing sheltered space.

BACKGROUND

2. Hong Kong being a sea port is vulnerable to typhoons or inclement weather. Government seeks to provide enough sheltered space within the Hong Kong waters for local vessels to take refuge during typhoons or inclement weather to safeguard vessels and their crew members. Marine Department (“MD”) periodically conducts assessment on the existing and projected situations of demand and supply of sheltered space for local vessels on a territory-wide basis. The recent assessment with projection horizon extended to 2030 provides statistical information for conducting the Review which looks into the challenges faced by the Government and the floating communities; and recommends practical measures with a view to addressing the challenges identified.

3. A consultant was engaged to conduct a survey for stocktaking and assessment of the supply and demand situations up to 2030, and a Working Group comprising representatives from relevant bureaux / departments¹ was set up to review issues related to the berthing and sheltered space for local vessels. Recently, MD has commenced consultation work, and presented the assessment results as well as the findings and recommendations of the Review to Local Vessels Advisory Committee at its meeting held on 14 June 2017. The assessment results, and the findings and recommendations of the Review were circulated to the members of Port Operations Committee on 13 July 2017.

¹ The members of the Working Group include representatives from the Transport and Housing Bureau, the Development Bureau, the Planning Department, the Civil Engineering and Development Department, the Lands Department and MD.

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4. A summary of the assessment results, and the findings and recommendations of the Review are set out in ensuring paragraphs.

RESULT OF ASSESSMENT OF TYPHOON SHELTER SPACE REQUIREMENTS

5. MD conducts periodic assessment of the demand and supply of sheltered space in Hong Kong to ensure sufficient supply of sheltered space for local vessels on a territory-wide basis. Sheltered space includes gazetted typhoon shelters, sheltered anchorages and berthing facilities in marinas.

6. The total supply of sheltered space up to 2030 would increase due to inclusion of sheltered space available in Shuen Wan Hoi, Cheung Sha Lan and Nim Shue Wan, a proposed marina facility in Tung Chung, and reinstatement of sheltered space from some development projects. Generally speaking, sheltered anchorages are used by pleasure vessels (“PV”) while typhoon shelters are used by operational vessels. The water space in marinas is allocated by private clubs to designated PVs.

7. When comparing the demand and supply of sheltered space for Classes I to III and Mainland visiting vessels (i.e. operational vessel), there would be a surplus of sheltered space of over 80 hectares up to 2030.

Table 1: Balance of Demand and Supply of Sheltered Space for Classes I to III and Mainland Visiting Vessels

	Projection			Hectares
	2020	2025	2030	
Supply	405.4	405.5	405.5	
Demand	318.4	319.6	323.3	
Variance	+87.0	+85.9	+82.2	

Note: Figures refer to year-end positions.

8. However, there would be a shortfall of sheltered space for Class IV vessels (i.e. PVs) given the surge in its demand. When

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comparing the demand and supply of sheltered space for Class IV vessels, the projected shortfall would increase and reach 75.5 hectares in 2030.

Table 2: Balance of Demand and Supply of Sheltered Space for Class IV Vessels

	Projection		
	2020	2025	2030
Supply	224.1	227.6	230.9
Demand	250.3	282.7	306.4
Variance	-26.2	-55.1	-75.5

Note: Figures refer to year-end positions.

9. As typhoon shelters and sheltered anchorages are open to all classes of local vessels on a first-come-first-served basis, the shortfall of sheltered space for Class IV vessels could be absorbed by the surplus of sheltered space for Classes I to III and Mainland visiting vessels throughout the period up to 2030. On a territory-wide basis, the projected supply of sheltered space can adequately meet the projected demand up to 2030.

FINDINGS OF THE REVIEW

10. The consultant was also engaged to conduct a large-scale survey to find out the berthing pattern of local vessels on normal days and under inclement weather, as well as the factors affecting the berthing arrangements. The survey revealed that 85% of locally licensed vessels were satisfied with the berthing arrangement during normal weather, and 7% were not satisfied. The remaining was neither satisfied nor dissatisfied, or did not provide information. Regarding the sheltered arrangement during inclement weather, 78% were satisfied and 10% were not satisfied.

11. According to the survey, major factors affecting the choice of berthing location were ranked in order of importance as follows: "Ease of mooring vessel safely", "Availability of berthing space", "Accessibility to land transport" and "Availability of support facilities

such as waste disposal, fuel and water supply”.

12. Suggestions for improving the berthing and sheltered arrangements were also collected in the survey. The majority of locally licensed vessels were in favour of the suggestions of “Efforts should be made to ensure berthing locations have adequate support facilities”, “There should be designated zones in typhoon shelters for different classes of vessels” and “Efforts should be made to improve road access to remote berthing locations”.

13. The Review revealed that during normal weather, there is and will continue to be sufficient berthing space for local vessels, considering that local vessels can station, moor or anchor in the Hong Kong waters except those prohibited or restricted areas. However, there will be increasing competition among different classes of local vessels for typhoon shelter space, particularly due to the anticipated large demand from Class IV vessels.

14. The Review has looked into regional situation, and studied the past occupancy rates of various typhoon shelters. It is noted that the single mooring method currently adopted in Sai Kung has prevented the sheltered space thereat from being fully utilized and resulted in comparatively low berthing capacity. In addition, Hei Ling Chau Typhoon Shelter (“HLCTS”) and Yim Tin Tsai Typhoon Shelter (“YTTTS”) are located in remote areas and lack of transportation support. As a result, utilization of the two typhoon shelters is rather low.

15. In overall term, the regional demand of sheltered space from local vessels would exceed the regional supply in Hong Kong Island South, Hong Kong Island West and Lantau Island North. Indeed, the regional demands would fluctuate overtime when major infrastructure projects are underway, such as the Tuen Mun-Chek Lap Kok Link and the Three-runway System project of the Hong Kong International Airport. Such a hike in demand is largely transient in nature and geographically bound to the locations of the infrastructure projects, it would be neither practicable nor cost-effective to plan for the provision of sheltered space based on short-term changes in regional demands.

MEASURES RECOMMENDED BY THE REVIEW

16. Taking into consideration of the above findings, the Review has recommended four measures to enhance the utilization of the existing sheltered space. These measures are briefly set out below:

(a) Enhancing the Utilisation of Typhoon Shelters

Occupancy rates of HLCTS and YTTTS were found to be low during the passage of typhoons. It is suggested to enhance the utilisation of these typhoon shelters by allowing laying of private moorings and provision of supporting services. In this regard, MD can speed up the processing of the survey and licensing of water boats for providing berthing vessels with water supply services, allow licensed stationary vessels to provide within the two typhoon shelters other supporting services, such as minor repairs, and study the necessity and feasibility of establishing a Designated Bunkering Area in the vicinity of HLCTS. In view of the East Lantau Metropolis (“ELM”) development, this enhancement measure is intended to be temporary in nature. Once there is a clearer picture on the planning directions and development timeline of ELM as well as the need for the re-provisioning of HLCTS, MD would adjust the temporary measures as appropriate.

(b) Increasing Berthing Capacity in Pak Sha Wan (Hebe Haven) Sheltered Anchorage (“PSWSA”)

PSWSA has a low berthing capacity due to the extensive use of the single-buoy mooring method there. While some of these single-buoy moorings are under MD’s management, most are under the management of marinas. Two marinas in PSWSA (namely, the Hebe Haven Yacht Club and the Royal Hong Kong Yacht Club) plan to conduct a trial to replace some of the single-buoy moorings with double-berth pontoon moorings² in 2017 in order to increase the berthing capacity

² A “double-berth pontoon mooring” refers to a mooring arrangement by which a vessel is secured to one side of a double-berth pontoon attached to an anchor, a pile or a sinker at seabed to provide the required holding power. As two vessels can be secured to the pontoon, the berthing capacity of the mooring arrangement is increased even though the two vessels and the pontoon will still swing around.

of the sheltered space under their management. Subject to the outcome of this trial, MD would encourage the users of the 120 single-buoy moorings under MD's management at PSWSA to replace the single-buoy moorings with double-berth pontoon moorings likewise by administrative measures.

(c) *Designation of Mooring Area within Kwun Tong Typhoon Shelter ("KTTS")*

Under existing legislation, all local vessels (including PVs) are generally allowed to use typhoon shelters on a first-come-first-served basis. The Review noted the trade's concern that different classes of vessels berthed in close proximity could lead to minor collision and compensation claim, particularly for PVs and non-pleasure vessels ("Non-PVs"). As a trial arrangement, MD proposed the designation of specific areas in KTTS for exclusive mooring of non-PVs through administrative means on a trial basis, with a view to achieving better mooring management and minimising conflicts amongst different classes of vessels. If necessary, and subject to further consultation with the trade, MD may seek legal advice and consider the feasibility of making relevant legislative amendments in future to enable MD to designate specified locations within typhoon shelters for mooring of a particular class or type of local vessels. MD will also consider the feasibility of applying similar arrangements in other typhoon shelters as appropriate.

(d) *Expansion of Private Mooring Areas ("PMAs")*

Existing PMAs in Sai Kung and Tai Po, such as Tso Wo Hang, Tai Mei Tuk and Shuen Wan Hoi, have room for expansion. Subject to consultation with local stakeholders, MD would provide roughly 330 additional designated private moorings for use under normal weather in the above water areas. These private moorings will generally be allocated to pleasure vessels, but other classes of vessels may also apply to use these moorings if their sizes meet the allocation criteria. This would however help reduce the pressure on typhoon

shelter space for use by non-PVs.

WAY FORWARD

17. MD is consulting relevant stakeholders for formulating the detailed proposals of the recommended measures set out in paragraph 16 above, including designating specific area in KTTS for exclusive mooring of non-PVs through administrative means. With the support of the trade and relevant Government departments, an implementation plan will be formulated to put forward the recommended measures.

Marine Department
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