PILOTAGE ADVISORY COMMITTEE

Establishment of Traffic Separation Scheme and Pilot Boarding Stations in Mirs Bay

Purpose

This paper informs members of a proposal to establish a set of Traffic Separation Schemes ('TSSs') in Mirs Bay (太鵬灣) in relation to the development of liquefied natural gas ('LNG') terminals in Mirs Bay. The paper also seeks members' comments on the establishment of three pilot boarding stations in Mirs Bay to facilitate the embarkation and disembarkation of pilots.

Background

Marine Traffic Situation in Mirs Bay

2. In Mirs Bay, 90% of the marine traffic is container ships to and from Yantian harbour (鹽田港), of which some of them are mega container ships with length of up to about 400 metres. Apart from river-trade cargo vessels and oil tankers, there are also high risk LNG tankers calling at the Dapeng LNG Receiving Terminal in the eastern part of Mirs Bay; the weekly average is about two movements per week. Currently, another LNG terminal at Xiadong harbour (下洞港) is under construction and two more LNG terminals are planned to be built in Mirs Bay. On this basis, it is anticipated that the LNG tanker movements would increase significantly to about 13 movements per week.

Need and benefit of establishing TSSs

3. In order to better organise the marine traffic in Mirs Bay and to cope with the growing number and size of vessels navigating in the area, in particular the LNG carriers, the China Waterborne Transport Research Institute ('CWTRI') of the Ministry of Transport of the People's Republic of China ('PRC') (中華人民共和國交通運輸部水運科學研究院) has undertaken to conduct a ship's routing study ('the Study') (大鵬灣水域船舶定綫制研究) for better management and regulation of vessel traffic in Mirs Bay. The Study

was conducted in consultation with Shenzhen Maritime Safety Administration of the PRC ('SZMSA') (中華人民共和國深圳海事局), Shenzhen Pilots, vessels operators, Marine Department of the Government of the Hong Kong Special Administrative Region ('HKMD') and other stakeholders.

4. According to CWTRI's study report, the average daily marine traffic in Mirs Bay was about 128 trips in 2014. The daily average was estimated to increase to 179 trips by 2030, representing an increase of 40%. To better organise the increased marine traffic, CWTRI proposed to establish a set of TSSs to separate LNG tankers from other stream of vessels, such as container ships and oil tankers.

Progress of the establishment of TSSs

- 5. The latest proposed TSSs would span across in both Hong Kong and Shenzhen waters and run in a general northwest-southeast direction between Ping Chau (平洲) and Shek Ngau Chau (石牛洲) with a buffer distance of 1400 metres and 950 metres from the aforementioned islands. It comprises two TSSs lying side by side the eastern TSS will be designated for LNG tankers and the western TSS for other vessels. The design of the proposed TSSs is also based on the current general direction of traffic flow in Mirs Bay. The study is expected to be finalised in July to August 2016.
- 6. As a result of introducing the proposed TSSs, the Mirs Bay Dangerous Goods Anchorage ('DGA') at southwest of Ping Chau would need to be re-located. A chart showing the proposed TSSs, current general direction of traffic flow of vessel traffic services ('VTS') participating vessels and the DGA is attached at *Annex*.
- 7. As the proposed TSSs will lay across both Hong Kong and Shenzhen waters, HKMD as an associate member of the International Maritime Organization ('IMO') (國際海事組織), will prepare to submit the proposal jointly with MSA of the PRC (中華人民共和國海事局) to IMO for adoption in early 2018.

Concerns of Mirs Bay

8. Mirs Bay is a major marine reserve with three designated marine parks namely, Hoi Ha Wan Marine Park (海下灣海岸公園), Yan Chau Tong Marine Park (印洲塘海岸公園) and Tung Ping Chau Marine Park (東平洲海

- 岸公園). All of these marine parks are within close reach of the traffic routes, any pollution resulted from a marine incident could cause disastrous impact to the marine environment and eco-system of the area.
- 9. During the period from 2013 to 2015, there were 15 marine accidents occurred in the vicinity of Mirs Bay. Fortunately none of the accidents was of serious nature nor resulted in serious pollution. However, giving the high level of marine activities and foreseeable development of LNG terminals in the area, it is necessary to tighten the level of marine traffic regulation in this area.

Enhancement of Pilot Services and Establishment of Pilot Boarding Stations in Mirs Bay

10. In view of environmental sensitivity and the ever increased number and size of vessels in Mirs Bay, it is considered necessary to enhance pilotage services in that area. As discussed with the Hong Kong Pilots Association Ltd., it is necessary to establish three pilot boarding stations as indicated at *Annex* with a view to facilitating the embarkation and disembarkation of pilots during the passage to and from Yantian and the LNG terminals

Implementation

11. Subject to members' comments on the proposed locations of the pilot boarding stations, HKMD would commence the process for legislative amendment to amend Schedule 2 Pilot Boarding Stations of the Pilotage Ordinance (Cap. 84). The legislative amendment is anticipated to be completed in 2017.

Advice sought

12. Members are invited to take note of the proposal to establish TSSs and to comment on the locations of pilot boarding stations in Mirs Bay.

Pilotage Unit Port Control Division Marine Department June 2016

Chart Showing Traffic Separation Schemes and Pilot Stations

