

PILOTAGE ADVISORY COMMITTEE

Revision to Vessel Traffic Services Procedures and Re-delineation of Very High Frequency Sectors

Purpose

The purpose of this paper is to seek comments from members on the following proposals –

- a. to streamline the Vessel Traffic Services ('VTS') reporting procedures;
- b. to reduce the number of reporting points; and
- c. to re-demarcate Very High Frequency ('VHF') sectors¹.

Background

2. The Vessel Traffic Centre ('VTC') of the Marine Department ('MD') was commissioned in 1989, since then the marine traffic activities and pattern evolved drastically with economic development of Hong Kong over the past decades, however, the operational mode of the VTC is remained more or less the same. With a view to enhancing the efficiency of providing VTS to vessels calling Hong Kong, a comprehensive study on Hong Kong Vessel Traffic Services ('the Study') was conducted in 2013 to review the current Hong Kong VTS from strategic, organisational and operational perspectives.²

3. The Study revealed that all VHF sectors were overloaded by radio reporting of vessels movements. For instance the Harbour VHF Sector is overloaded by berthing reports and the Western Approaches VHF Sector is overloaded by moving reports of River Trade Vessels ('RTVs'). In fact, the current demarcation of VHF sectors of the HK VTS is unable to cope with the actual operational requirements as movement reports from vessels have already saturated the air time available for each VHF sector, which hinders the effective delivery of high level vessel traffic services i.e. Information Services³, Traffic Organisation Services⁴ and

¹ Pursuant to Regulation 3 of Shipping and Port Control Regulations (Cap. 313A), VHF sectors refer to "any VHF sector the boundaries of which are delineated in the Second Schedule of Cap. 313A".

² The Marine Department appointed "Ove Arup & partners Hong Kong Limited" to conduct a study on Hong Kong Vessel Traffic Services to review the current VTS from strategic, organisational and operation perspectives. The study was completed in March 2013.

³ As defined in International Maritime Organisation ('IMO') Resolution A.857(20) –

Navigational Assistance Services⁵, particularly during peak hours and typhoon periods. To cope with excessive workload, the Study recommended that VHF sectors should be tailored according to the nature, volume, and pattern of marine traffic. The study thus proposed to split the current two busy VHF sectors into four VHF sectors (i.e. the Harbour and Western Approach sectors).

4. To ensure the effective delivery of high level vessel traffic services, in addition to the above, it is further proposed to refine the VTS reporting procedures. The refinement will combine some closely-related reports into one and eliminate certain reports and reporting points as presently required in order to simplify the reporting procedure and ease the overburdened air time.

5. In connection with the above, the “Report of the Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012” considers it is a merit to make a small adjustment to the VTS boundary between the area of Channel 67 and Channel 14, that is the boundary between the Western Approaches VHF Sector and the Harbour VHF Sector West of Lamma Island.⁶ The purpose is to include the Yung Shue Wan ferry pier and the Lamma Power Station pier into the Harbour VHF Sector, so that majority of vessels to and from these two piers would be covered under the same VHF Sector. Opportunity is taken to include the above recommendation to form part of the streamlined proposals.

Proposals

Streamlining VTS reporting procedures

6. According to Part II of the Shipping and Port Control Regulations, Cap. 313A, a vessel is required to report to VTC at different stages of its movement, including pre-movement/departure; ready to move/depart; move/depart underway; and move finished stages. With the new VTS system in place, repeated reporting at different stages of vessel movement or departure will be no longer necessary. It is proposed to:

“Guidelines for Vessel Traffic Services”, an Information Service is a service to ensure that essential information becomes available in time for on-board navigational decision-making.

⁴ As defined in IMO Resolution A.857(20), a traffic organisation service is a service to prevent the development of dangerous maritime traffic situations and to provide for the safe and efficient movement of vessel traffic within the VTS area.

⁵ As defined in IMO Resolution A857(20), a navigational assistance service is a service to assist on-board navigational decision-making and to monitor its effects.

⁶ See para. 443(10) of “Report of the Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012 (The Redacted Version)”, April 2013 at <http://www.legco.gov.hk/yr12-13/english/panels/edev/papers/edev0527-rpt20130430-e.pdf>

- i. combine pre-move report, ready to move report and move underway report into a single movement report; and
- ii. combine pre-departure report, ready to depart report and departure underway report into a single departure report;

7. Details of the combined report requirements for vessel movement and departure are depicted in *Annex I*.

Reduction of reporting points

8. With the aid of technology such as Automatic Identification System ('AIS') and Very High Frequency Direction Finding ('VHF DF'), the capability of identification and tracking of vessels has been improved. It is prudent to reduce the frequency of vessel reporting by removing certain reporting points. Having reviewed the need of vessel traffic monitoring, we propose to remove the following reporting points as to reduce ship/shore communications. They are:

- i. Hak Kok Tau (Cape Collinson);
- ii. Lamma Channel Separation Buoy No. 1;
- iii. Chesterman Buoy;
- iv. Green Island;
- v. Shek Kok Tsui;
- vi. North West Ma Wan Traffic Light;
- vii. Ma Wan Buoy;
- viii. Castle Peak No.8 Buoy; and
- ix. West Quarantine Buoy.

Re-demarcation of VHF sectors

9. To take on board the recommendation of the Study so as to enhance the efficiency of vessel traffic services delivery, it is proposed to split the current two VHF sectors, i.e. the Harbour VHF Sector and the Western Approaches VHF Sector, into four sectors by adding two new VHF sectors, i.e. the Harbour East Sector and the Lantau South Sector. Two new VHF Channels, i.e. VHF Channel 02 and VHF Channel 27 are allocated to these two new Sectors.

The Recommendation from the Commission of Inquiry into the Collision of Vessels near the Lamma Island on 1 October 2012

10. We also proposed to adopt the recommendation made in the "Report of the Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012" regarding a small adjustment to the VTS boundary between the VHF Channel 67 and VHF Channel 14 areas.

11. The existing VHF sector layout and the proposed future VHF sector layout are indicated in *Annex II*.

Addition of reporting points

12. To cater for the efficient traffic monitoring and regulation for the additional two VHF sectors, we also propose to add a couple of reporting points for confirming the changeover of VHF sector with VTS participating ships, namely –

- i. Northern 4 Buoy; and
- ii. Cheung Tsing Bridge

Schedule

13. Upon completion of the consultation with the Pilotage Advisory Committee in January 2016 and the Port Operations Committee in March 2016, MD will proceed with the necessary legislative work.

Advice Sought

14. Members' comments are sought on the proposals as outlined above.

Presentation

15. This paper will be presented by Mr. Warren K. P. Li, Senior Marine Officer / Vessel Traffic Centre.

Vessel Traffic Section
Port Control Division
Marine Department
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Details of the Requirements of Reports

i. Movement Report

Prior to a vessel getting underway in the waters of Hong Kong, the master/coxswain shall report the intended movement of that vessel to the VTC and request permission to move on the VHF channel appropriate to the VHF sector and provide the following information:

- (a) the name of the vessel;
- (b) the call sign of that vessel;
- (c) the present berth or other location of that vessel;
- (d) the intended berth or other location of that vessel;
- (e) any special condition of that vessel; and
- (f) any other relevant information, including the intention of the master/coxswain of that vessel to undertake a sea trial during the movement.

ii. Departure Report

Prior to a vessel getting underway in the waters of Hong Kong, the master/coxswain shall report the intended departure of that vessel to the VTC and request permission to depart on the VHF channel appropriate to the VHF sector and provide the following information:

- (a) the name of the vessel;
- (b) the call sign of that vessel;
- (c) the present berth or other location of that vessel;
- (d) the number of the port clearance obtained under section 15 of the Shipping and Port Control Ordinance (Cap. 313);
- (e) any special condition of that vessel; and
- (f) any other relevant information, including the intention of the master/coxswain of that vessel to undertake a sea trial prior to the departure.

Proposed Re-arrangement of VHF Sectors

