

Port Operations Committee

**Proposed Amendments to
the Pilotage Ordinance (Cap. 84);
Dangerous Goods (Shipping) Regulation 2012 (Cap. 295F);
Shipping and Port Control Regulations (Cap. 313A);
Shipping and Port Control (Ports) Order (Cap. 313J);
Merchant Shipping (Local Vessels)(General) Regulation (Cap. 548F); and
Merchant Shipping (Local Vessels)(Survey and Safety) Regulation (Cap.
548G)**

Purpose

The purpose of this paper is to seek members' advices and comments on the proposed amendments to the Pilotage Ordinance (Cap. 84), Shipping and Port Control Regulations (Cap. 313A), Shipping and Port Control (Ports) Order (Cap. 313J), Merchant Shipping (Local Vessels)(General) Regulation (Cap. 548F), Dangerous Goods (Shipping) Regulation 2012 (Cap. 295F) and Merchant Shipping (Local Vessels)(Safety and Survey) Regulation (Cap. 548G).

Background

Update of Geodetic Datum System

2 In early 1980s, the Hong Kong 1980 Geodetic Datum (HK80), was used in marine legislation as a reference to represent a geographical location in the Hong Kong waters. Its reference point is the International Ellipsoid (Hayford 1910). Since the development of Global Positioning System (GPS), a new and more precise geodetic datum system, i.e. the World Geodetic System 1984 (WGS84), has been developed and become the most popular nowadays for use in cartography, geodesy, and navigation worldwide.

3. The Marine Department (MD) has been using the WGS84 for representing a position in marine legislation since 1990s. However, for those coordinates

which do not require changes or updates in the past 20 years, they are still being presented in the HK80 format. Hence, there are currently two different geodetic datum systems in the marine legislation.

4. There are also two types of format being used for representing the latitude and longitude of a position in various marine legislation, i.e. Degrees, Minutes and Seconds (DDD°MM'SSS") and the format of Degrees, Minutes and Decimal of a minute (DDD°MM.MMM'). It is the general requirement of the International Hydrographic Organization (IHO) that geographical positions quoted on charts and in related publications should be expressed in Degrees, Minutes and Decimals of a minute at which arcminutes should be represented by the symbol of apostrophe.

Proposals

5. We propose to convert all co-ordinates in Cap.295F, Cap.548G and Schedules to Cap.84, Cap.313A and Cap.313J which are based on HK80 geodetic datum to be under the WGS84 geodetic datum¹, and to unify format of all co-ordinates to Degrees, Minutes and Decimals of a minute with apostrophes representing arc minutes.

6. Having reviewed the existing marine legislation, we also propose some miscellaneous amendments to update the definition of Radio Regulations in several legislation, and to make adjustments to the VHF channel, VHF sector and calling-in point that are related to the provision of Hong Kong Vessel Traffic Service (HKVTS), as well as to adjust anchorages, cable reserves, boundaries of 3 bridge areas for better operation of the Hong Kong port.

Legislative amendments

(a) Items related to geodetic datum and format of coordinates

7. The relevant sections of the legislation requiring conversion and unification of geodetic datum and format of coordinates are detailed in Annex I.

1. The two systems can be converted to each other through a formula, i.e. latitude WGS84 = latitude HK80 - 5.5" (corrected to nearest 0.1"); and longitude WGS84 = longitude HK80 +8.8" (corrected to nearest 0.1").

(b) Miscellaneous amendments

*Regulation 3 of Cap.313A, section 2 of Cap.548F and section 80B of Cap.548G
on the definition of Radio Regulations*

8. A new definition of Radio Regulations in Chapter IV of the International Convention for the Safety of Life at Sea (SOLAS) was adopted by the International Maritime Organization (IMO) through Resolution MSC. 496(105) on 28 April 2022, and the new Chapter IV of SOLAS which will come into effect on 1 January 2024. With a view to aligning with the latest development, we propose to update and replace the definition of Radio Regulations in the abovementioned sections with the new definition adopted by IMO i.e. “Radio Regulations (《無線電規則》) means the Radio Regulations complementing the Constitution and Convention of the International Telecommunication Union which is in force at any given time.”

FIRST, SECOND and TENTH Schedule to Cap.313A

9. The Kwai Chung Control Station (KCCS) is a sub-station of Hong Kong Vessel Traffic Centre (HKVTC) which was established in 1999. It has been providing Vessel Traffic Service (VTS) to monitor, regulate as well as harmonize all marine traffics within the KCCS service area. However, KCCS service area and the VHF channel 74 currently being used for providing VTS were not included and specified in the First and Second Schedule to Cap. 313A. With a view to legalizing the practice for better provision of VTS service, we propose to –

- i. slightly revise the boundaries of the existing Harbor and Harbor East VHF sectors in the SECOND Schedule to Cap. 313A;
- ii. add a new VHF Channel 74 to the FIRST Schedule to Cap. 313A;
- iii. create and specify the KCCS service area as a new VHF sector, namely KCCS VHF sector, in the SECOND Schedule to Cap. 313A; and
- iv. add two calling-in points, namely Shek Ngau Chau and Crooked Island, in the TENTH Schedule to Cap. 313A.

10. The current practices and VTS being provided by KCCS will not be affected by the amendments. A map showing the new VHF sectors after the proposed re-demarcation and the two calling-in Points is at **Appendix A**.

FIFTH Schedule to Cap. 313A on boundaries of Bridge Areas

11. Due to shoreline changes in the past years, boundary of some Bridge Areas specified in FIFTH Schedule to Cap.313A are found either unnecessarily covering reclaimed land or cannot fully cover all the waters surrounding the bridges. It is necessary to slightly adjust the boundaries of the Tsing Tsuen and Tsing Yi Bridges Area, the Ap Lei Chau Bridge Area and the Kap Shui Mun Bridge Area in the FIFTH Schedule to Cap. 313A for better protection of the bridges and the safety of vessels navigating in the vicinities. The revised boundaries of the three Bridge Areas are shown in **Appendix B**.

SIXTH Schedule to Cap. 313A on Cable Reserves Area

12. The Stonecutters Island (West) Cable Reserve in item 2 and the Stonecutters Island (East) Cable Reserve in item 3 of the SIXTH Schedule to Cap. 313A were originally established for laying power cables to the Stonecutter Island. Owner of the cables, CLP Power Hong Kong Limited, has advised that the two Cable Reserves were no longer required as all power cables therein had been disabled. Therefore, we propose to remove these two Cable Reserves from SIXTH Schedule to Cap. 313A.

SEVENTH Schedule to Cap.313A on Special Anchorage

13. The South-east Lamma Anchorage (SELA), South-west Lamma Anchorage (SWLA) and Urmston Road Anchorage (URMA) are Specified Anchorages under Schedule 3 to Cap.84, but they are not listed as Special Anchorages under SEVENTH Schedule to Cap. 313A. In recent years, there have been increasing demands from the marine industry for conducting bunkering activities, person embarkation/disembarkation and/or cargo operations in these anchorages, for which special permission from the Director of Marine is required. With a view to facilitating the trade to undergo aforesaid activities, we propose to specify the SELA, SWLA and URMA as Special Anchorages in the SEVENTH Schedule to Cap. 313A.

Schedule 3 to Cap. 84 on the boundary of Junk Bay Dangerous Goods Anchorages

14. The Junk Bay Dangerous Goods Anchorage (JBDGA1) is a specified anchorage under Schedule 3 to Cap.84, while the Junk Bay Dangerous Goods Anchorage (JBDGA2) is a special anchorage under the SEVENTH Schedule to Cap. 313A. These two anchorages have the same name but are situated at different locations. Given the low utilization rate of JBDGA1, we propose to

remove JBDGA1 from Schedule 3 to Cap. 84 and specify the location of JBDGA2 as a new specified anchorage under Cap. 84. In effect, the area of JBDGA2 will serve as both a specified anchorage under Cap.84 and a special anchorage under Cap. 313A. The revised boundary of specified anchorage JBDGA is shown in **Appendix C**.

Schedule Title

15. The English title of “Schedule 18” to Cap. 313A should be amended to “EIGHTEENTH Schedule” in line with the presentation of other Schedules in Cap. 313A.

Legislative Time Table

16. Subject to members’ comments, HKMD would commence the administrative process for amending the Cap.84, Cap.295F, Cap.313A, Cap.313J Cap.548F and Cap.548G. The legislative amendments are anticipated to be completed by Q1 of 2024.

Advice Sought

17. Members’ comments and advices are sought for these proposed legislative amendments.

**Port Control Division
Marine Department
October 2023**

Items related to geodetic datum and format of coordinates

No.	sections	Proposed revision
Provisions under Shipping and Port Control Regulation (Cap.313A)		
1.	<ul style="list-style-type: none"> • Item 3, 4, 13 of FIFTH Schedule; • Item 1, 5, 6 & 7 of SIXTH Schedule; • Item 2(a), 2(d), 2(e), 2(f), 2(g), 2(h), 3(a), 3(b), 3(c), 3(d), 3(e), 3(f), 3(g), 3(h), 4(a) – (h) of SEVENTH Schedule, and • Part II of ELEVENTH Schedule 	<ul style="list-style-type: none"> (i) To convert geodetic datum of coordinates from the Hong Kong 1980 Geodetic Datum (HK80) to the World Geodetic System 1984 (WGS84). (ii) To revise and unify the format of coordinates to Degrees, Minutes and Decimals of a minute.
2.	<ul style="list-style-type: none"> • Item 5-12, 14- 17 of FIFTH Schedule; • Item (a)-(d) of FIFTEENTH Schedule, and • Item (a) – (k) of NINETEENTH Schedule 	To revise and unify the format of coordinates to Degrees, Minutes and Decimals of a minute.
3.	<ul style="list-style-type: none"> • Item 18-35 of FIFTH Schedule, and • Item 1, 3(l) & 3(m) of SEVENTH Schedule 	To unify the format of coordinates by replacing all right single quotation marks with apostrophes for representing arc minutes of all coordinates under these items.
Provisions under the Shipping and Port Control (Ports) Order (Cap. 313J)		
4.	Schedule	(i) To convert geodetic datum of coordinates from the Hong Kong 1980

		<p>Geodetic Datum (HK80) to the World Geodetic System 1984 (WGS84)</p> <p>(ii) To revise and unify the format of coordinates to Degrees, Minutes and Decimals of a minute.</p>
Provisions under the Pilotage Ordinance (Cap.84)		
5.	<ul style="list-style-type: none"> • Item 1-6 of Schedule 3, and • Item 1-2 of Schedule 4 	<p>(i) To convert geodetic datum of coordinates from the Hong Kong 1980 Geodetic Datum (HK80) to the World Geodetic System 1984 (WGS84)</p> <p>(ii) To revise and unify the format of coordinates to Degrees, Minutes and Decimals of a minute.</p>
Provisions under the Dangerous Goods (Shipping) Regulation (Cap.295F)		
6.	Regulation 13(1)(b)	To unify the format of coordinates by replacing all right single quotation marks with apostrophes for representing arc minutes of all coordinates under this item.
Provisions under Merchant Shipping (Local Vessels)(Safety and Survey) Regulation (Cap.548G)		
7.	Section 2 definition of “river trade limit”.	To unify the format of coordinates by replacing all right single quotation marks with apostrophes for representing arc minutes of coordinates.