

High Speed Craft Consultative Committee
Local Vessels Advisory Committee
Pilotage Advisory Committee¹
Port Operations Committee

Draft Boundary of the Proposed Marine Park for the Integrated Waste Management Facilities Phase 1

1. Purpose

1.1 The purpose of this paper is to brief and seek members' views on the Environmental Protection Department (EPD)'s proposal on the draft boundary and management plan of the proposed Marine Park for the Integrated Waste Management Facilities (IWMF) Phase 1.

2. Background

2.1 The Environmental Impact Assessment (EIA) Report for the development of the IWMF Phase 1 was completed in 2011 and subsequently approved on 17 January 2012. Taking into account the EIA results, the Government has decided to construct an artificial island near Shek Kwu Chau as the site for the IWMF Phase 1 ("the Project"). The formation of the artificial island would require about 11.8 hectares of reclamation and construction of 4.1 hectares of breakwater.

2.2 In accordance with condition 2.8 under the Environmental Permit (EP-429/2012) issued for the Project, a marine park shall be designated immediately following the completion of construction works of the IWMF Phase 1. The project proponent, i.e. the EPD, is required to submit the detailed design of the proposed marine park at least one month before the commencement of the construction of the Project, which shall include details of the proposed marine park in the waters between Soko Islands and Shek Kwu Chau with an area of at least 700 hectares.

2.3 A detailed study commenced in June 2015 to investigate the technical and practical aspects of the proposed marine park in the waters between Soko Islands and Shek Kwu Chau (i.e. the Marine Park Study Area (MPSA)) and to prepare for the submission of its detailed design.

¹ Same content as LVAC Paper No. 12/2016.

3. Environmental, Ecological Profiles and Marine Usage

3.1 A review on the latest available information was conducted to understand the environmental, ecological profiles and marine usage of the waters between Soko Islands and Shek Kwu Chau.

3.2 In order to identify important Finless Porpoise (FP) habitats within the MPSA which will be subsequently considered for delineating the draft boundary of the proposed marine park, Porpoise Habitat Index (PHI) has been derived in a robust and scientific manner based on survey data on FP collected by the Agriculture, Fisheries and Conservation Department (AFCD) between 2005 and 2014 (**Figure 1**). When deducing the PHI, reference was made to the Dolphin Habitat Index methodology that was used in the design of the proposed The Brothers Marine Park, proposed Southwest Lantau Marine Park and proposed Soko Islands Marine Park. Results showed that a majority of waters to the south and east of Soko Islands is regarded as important FP habitats.

3.3 In addition, information from AFCD Port Survey 2006 indicates that the estimated value of overall fisheries production (adult fish and fish fry) was relatively high in the southern and eastern waters of Soko Islands (**Figure 2**), confirming the fisheries importance between the waters of Soko Islands and Shek Kwu Chau. The South Lantau waters were also identified as spawning and nursery grounds for commercial fisheries resources and this corroborated the importance of the waters between Soko Islands and Shek Kwu Chau as important fisheries habitats, supporting fish prey for FP. To further update the fisheries resources profile, a 12-month fisheries resources survey has been conducted since September 2015 covering waters within the MPSA and its vicinity.

3.4 A number of existing and planned marine facilities, in particular the Lantau Channel Traffic Separation Scheme (LCTSS), recommended Traffic Separation Schemes at South of Lantau (SLTSS) and South of Cheung Chau Sediment Disposal Area (**Figure 3**), are however present, which must be considered carefully in order to improve the overall compatibility of the proposed marine park.

3.5 A Marine Traffic Impact Assessment (MITA) was also carried out by consultant in September 2015 to assess the potential marine impacts and

navigational risks posed by the proposed marine park, and to propose mitigation measures addressing any identified impacts and risks. The findings of MTIA suggested that careful consideration should be given to the southwestern corner of the MPSA, which was identified as area of high vessel traffic density (**Figure 4**). In addition, sufficient buffer zone should be maintained between the marine park boundary with the Traffic Separation Schemes (TSS) and the Hong Kong Special Administrative Region (HKSAR) boundary to allow local vessels to navigate within Hong Kong waters with neither speed restriction nor conflicting with the through traffic of the TSS and HKSAR boundary. The buffer zone of at least 603 m in width shall be maintained between the boundary of the proposed marine park and the nearby recommended SLTSS/ HKSAR boundary to allow an unrestricted and safe channel for navigation and to minimise potential impacts to marine users.

4. Draft Boundary and Management Plan

4.1 Taking into consideration the latest desktop reviewed scientific data and the MTIA findings, the draft boundary of the proposed marine park is derived as shown in **Figure 5**. This location adequately covers important habitats for FP and important fisheries production areas. The proposed draft boundary is adjoining the eastern boundary of the proposed Soko Islands Marine Park, thus achieving connectivity and continuity while allowing integrated marine park management to optimise future management and enforcement of the marine parks. The proposed draft boundary has also avoided the identified TSS and areas with high density of marine traffic activities and will not encroach into other existing and planned uses such as the South of Cheung Chau Sediment Disposal Area. The draft boundary of the proposed marine park between the waters of Soko Islands and Shek Kwu Chau covers about 797 hectares of waters.

4.2 The proposed marine park will be managed and controlled in a similar manner as the existing marine parks in accordance with the *Marine Parks Ordinance (Cap 476)* and the *Marine Parks and Marine Reserves Regulation (Cap 476A)* for conservation, recreation, education and scientific research purposes. Activities such as boating (within the 10 knots vessel speed restriction) and dolphin watching will be allowed in the proposed marine park. Eligible bona fide fishermen will be allowed to continue fishing within the marine park subject to a permit system.

4.3 In addition, to conserve and enhance fisheries resources in the South

Lantau waters, the deployment of artificial reefs and restocking of fish fry would be considered. A 12-month fisheries resources survey has commenced since September 2015 to provide up-to-date scientific data for drawing up the practical fisheries enhancement measures. Such data will also be reviewed to determine the feasibility and effectiveness of implementing zoning for the management of the proposed marine park.

5. Potential Implication on Marine Usage

5.1 The waters between Soko Islands and Shek Kwu Chau are currently used by the public and the Government; the major marine users include:

General Users

- Fishing vessels operating in the vicinity of Soko Islands and Shek Kwu Chau;
- Vessels plying through the waters between Soko Islands and Shek Kwu Chau; and,
- Vessels using the recommended SLTSS, mainly including operators of high speed passenger ferries, rivertrade and pleasure vessels.

Government-related Users

- EPD vessels to and from the Low-level Radioactive Waste Storage Facility on North Soko; and
- Marine Department's, Fire Services Department's and Hong Kong Police Force's launches patrolling in the vicinity of the Soko Islands and HKSAR boundary.

5.2 The MTIA identified that the waters within the proposed marine park are not engaged with busy marine traffic. Potential impacts will mainly be to small craft and fast launches at speed exceeding 10 knots passing through the proposed marine park area to and from Soko Islands, which have alternative route options. A buffer zone of at least 603 m in width between the boundary of the proposed marine park and the nearby recommended SLTSS/ HKSAR boundary is also expected to be sufficient in accommodating the nearby marine traffic.

5.3 According to the *Marine Parks and Marine Reserves Regulation (Cap 476A)*, vessels speed should not exceed 10 knots within marine parks. Apart from the 10-knot speed limit, there is no special restriction or regulation on the

entry or passing through the proposed marine park for marine traffic. Whilst, no person shall moor or anchor a vessel in a marine park except under and in accordance with a permit or at mooring buoys or mooring sites provided by AFCD.

6. Consultation

6.1 As there are existing uses of the waters, including the LCTSS, recommended SLTSS and South of Cheung Chau Sediment Disposal Area in the vicinity of Soko Islands and Shek Kwu Chau, it is thus important to address and balance the concerns of these existing marine users for the successful implementation of the proposed marine park. We would like to collect views from marine users on the draft boundary and management plan of the proposed marine park during this meeting, which will then be taken into consideration to refine the boundary and management plan of the proposed marine park.

6.2 There are two rounds of stakeholder consultation on the proposed marine park: Round 1 from May to October 2016 and Round 2 from October 2016 to February 2017, respectively. The stakeholders involved in the stakeholder consultation are listed in **Figure 6**.

7. Way Forward

7.1 Following the Round 1 of stakeholder consultation on the draft boundary and management plan for the proposed marine park, we will revise the boundary and management plan taking into account the views and comments from the Round 1 of stakeholder consultation. The revised draft boundary and management plan for the proposed marine park will be carried forward to the Round 2 of stakeholder consultation, including Marine Department's Consultative and Advisory Committees to determine the final marine park boundary and management plan. Subsequently, AFCD will follow the statutory procedures under the *Marine Parks Ordinance (Cap 476)* to designate the proposed marine park. It is expected that designation of the proposed marine park will be in effect before the completion of construction works of the IWMF Phase 1.

8. Advice Sought

8.1 Members are invited to comment on the proposal set out in this paper.

8.2 In case there is any enquiry on details of the project, please contact Ms. YUNG Ting Fong, Joanne of EPD by phone at 3529 2907, email tfyung@epd.gov.hk or fax at 3529 2991.

Environmental Protection Department
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Figure 1 Habitat Ratings of Finless Porpoises in the South Lantau Waters between 2005 and 2014

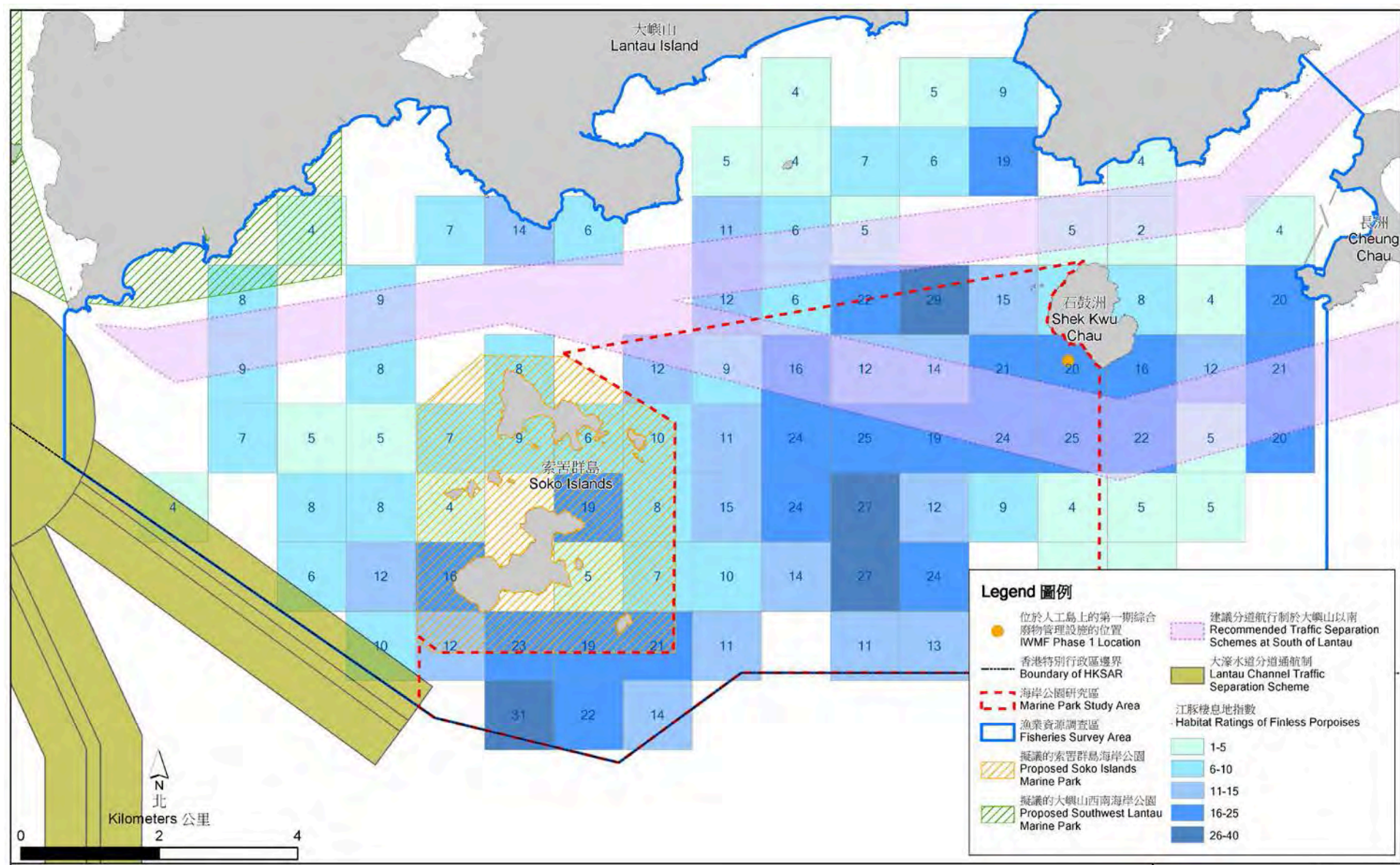


Figure 2 Distribution of Fisheries Production (Adult & Fish Fry) in Hong Kong based on AFCD's Port Survey 2006

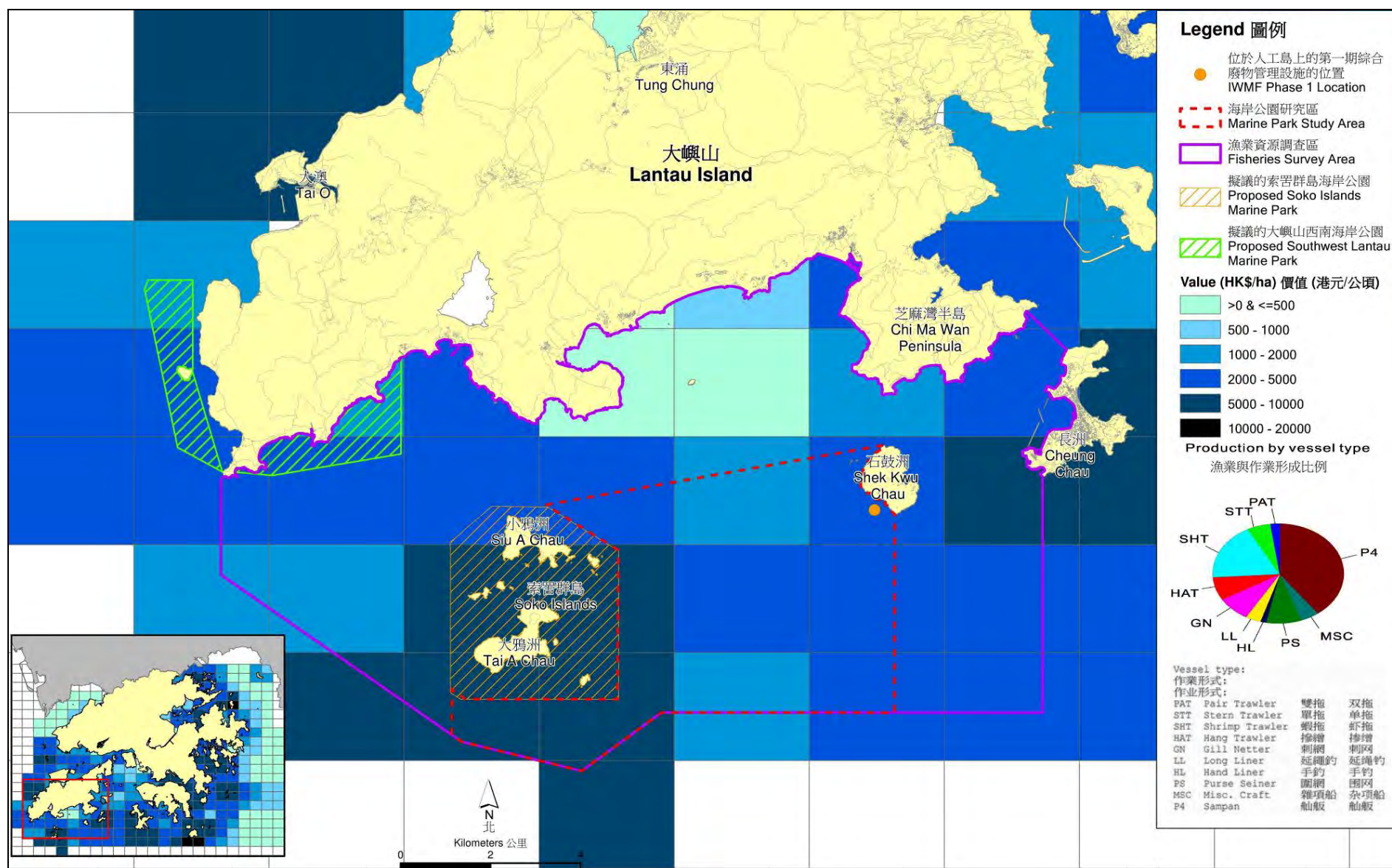


Figure 3 Major Existing and Planned Marine Facilities and Development Projects

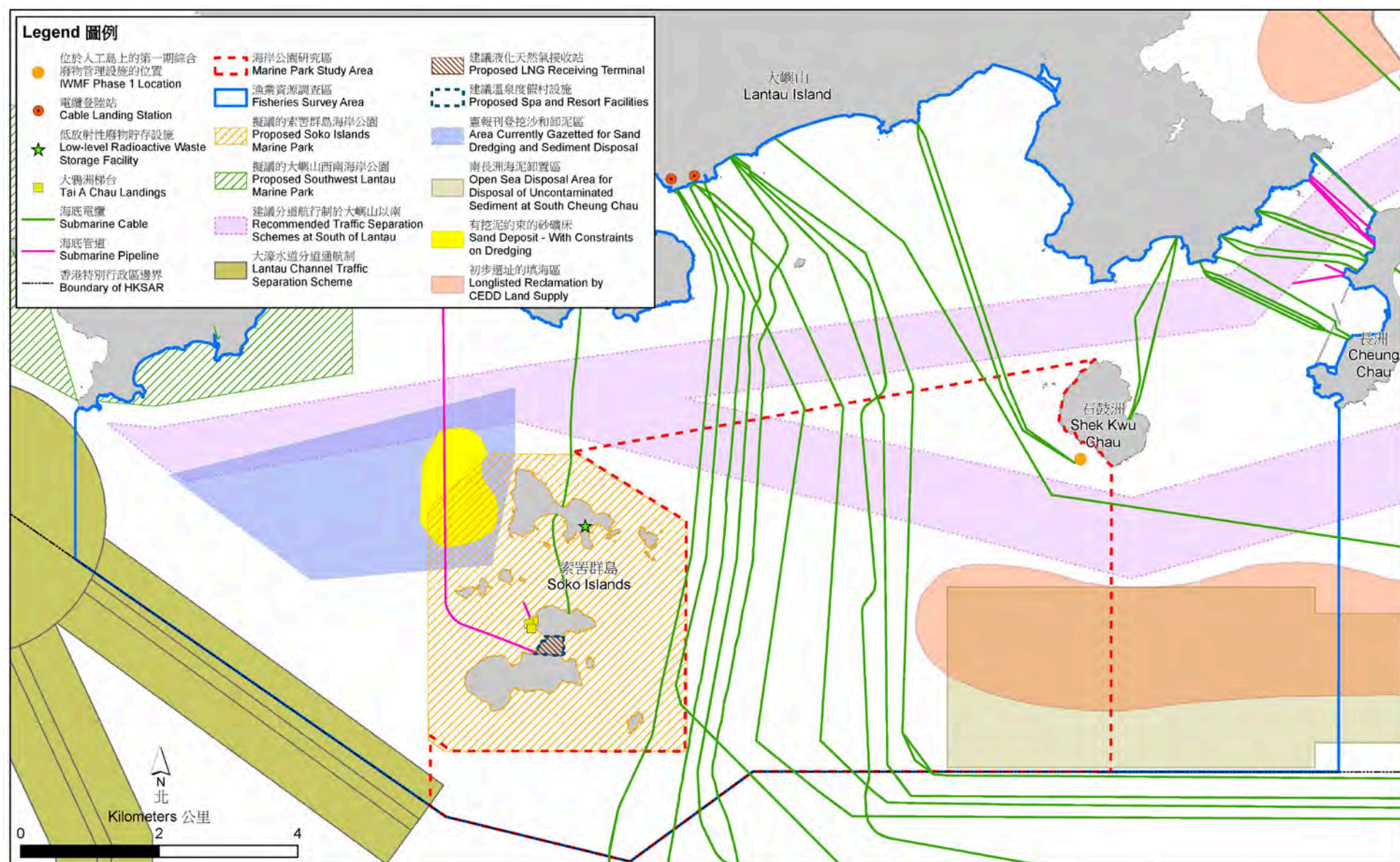


Figure 4 Daily Transits of All Classes Vessels based on Marine Department's AIS and Radar data in October 2015

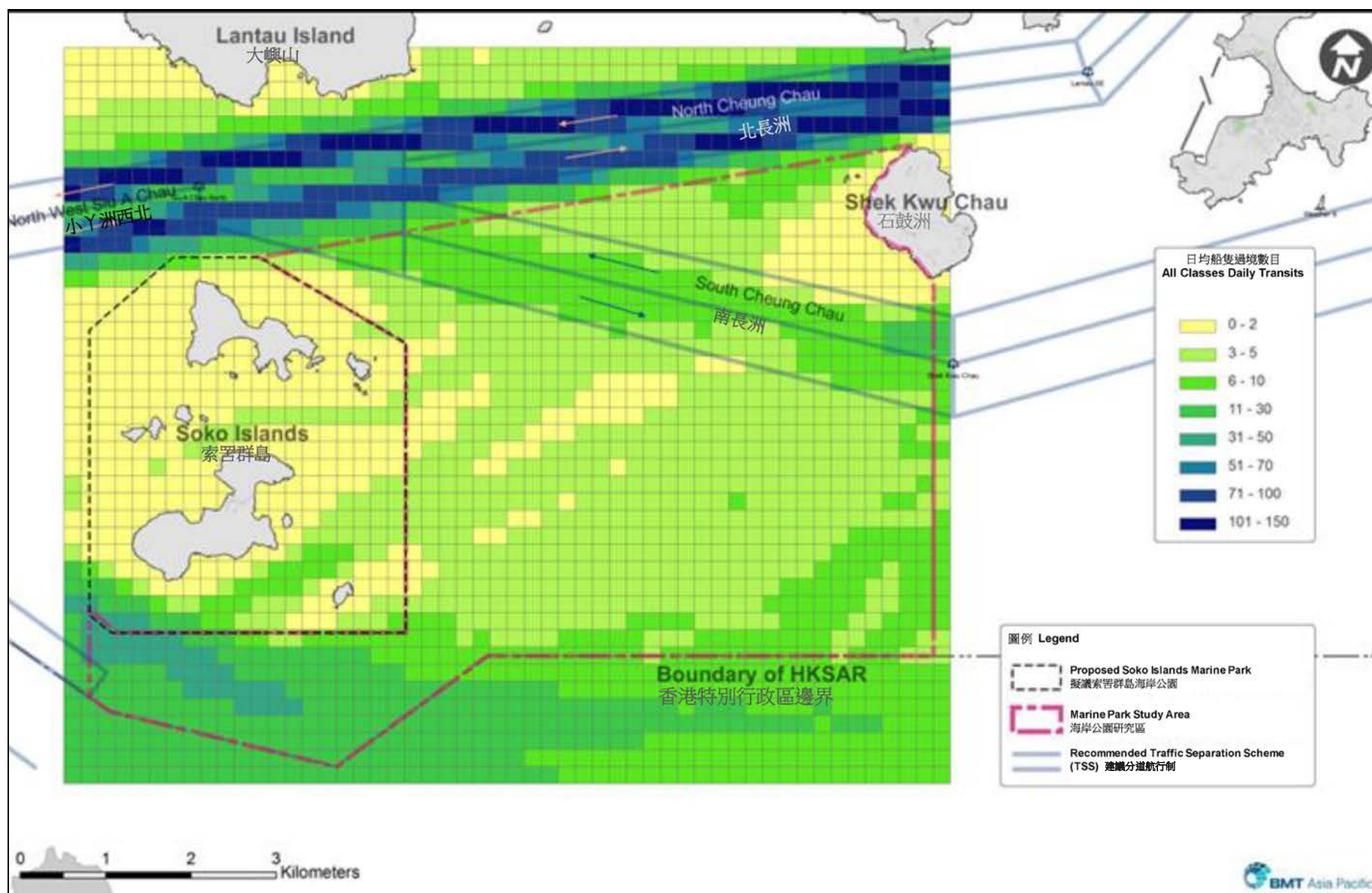


Figure 5 Draft Boundary of the Proposed Marine Park for the IWMF Phase 1

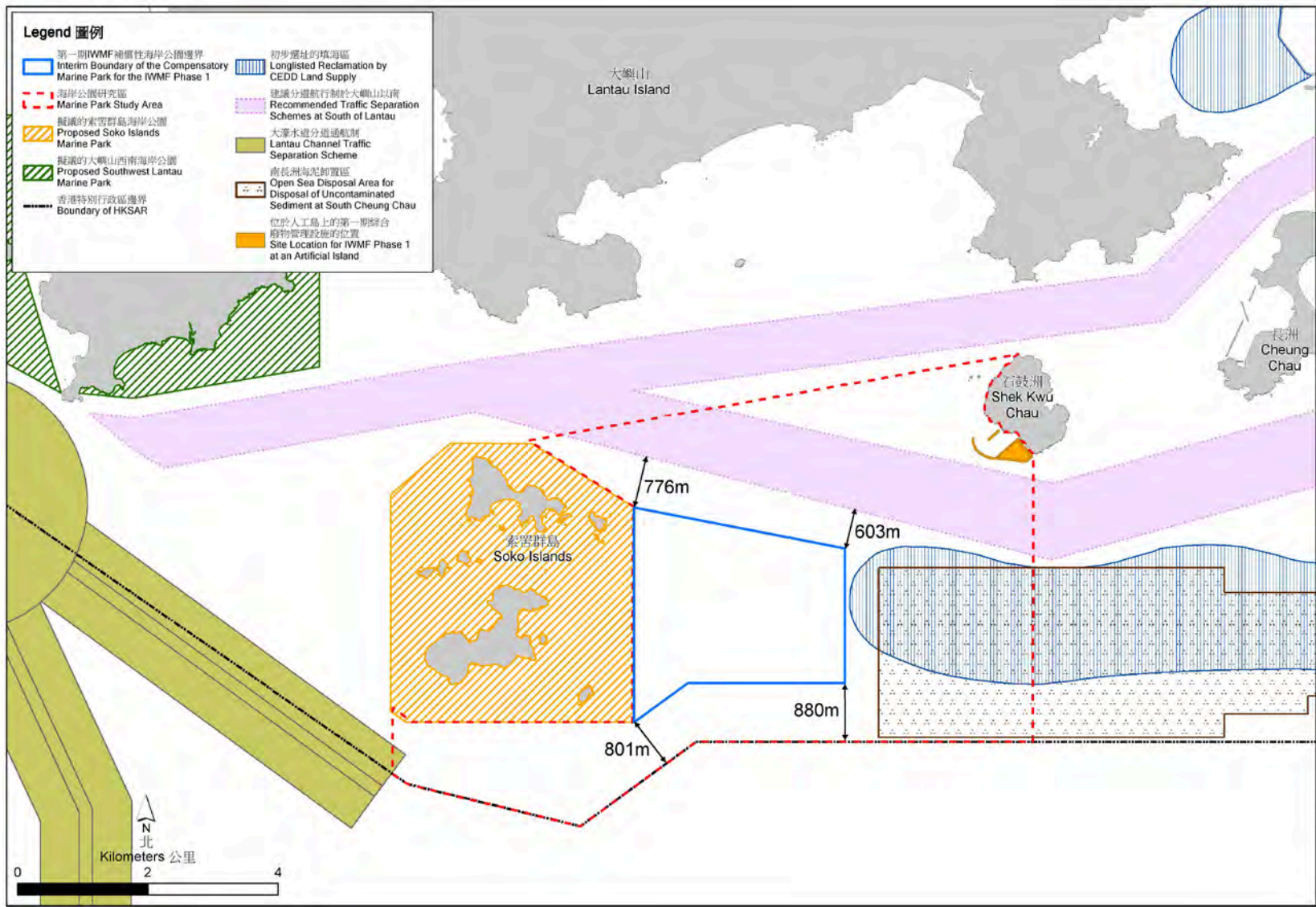


Figure 6 Stakeholders Involved in the Stakeholder Consultation



*Note: The Round 1 Consultation has been completed