



# Manpower Update Report

## Maritime Services Industry

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# 2019

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Maritime Services Training Board

# ACKNOWLEDGEMENT

The Maritime Services Training Board (MSTB) would like to express gratitude to representatives from the trade who participated as members of the focus group, contributed their time in the discussion meeting and shared their valuable views on the manpower situation of the maritime services industry. Their opinions have formed an integral part of this update report.

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# Introduction

## Background

The Maritime Services Training Board (MSTB) of the Vocational Training Council (VTC) is appointed by the Government of the Hong Kong Special Administrative Region (HKSAR). According to its Terms of Reference, the MSTB is to determine the manpower demand of the industry, assess and review whether the manpower supply matches the manpower demand, and to recommend to the VTC the development of

Vocational and Professional Education and Training (VPET) facilities to meet the assessed training needs.

Following the rationalisation exercise for VTC Training Boards in 2017, a new approach for conducting manpower surveys was adopted which aimed to enhance the effectiveness and better reflect the dynamic manpower situation of industries. Under the new approach, one full manpower survey plus two

information updates would be conducted for each industry on a 4-year cycle basis. For MSTB, in addition to this manpower update exercise, another manpower update will be conducted in 2020 and a full manpower survey will follow in 2021.

The 2019 manpower information update was conducted by means of:

- (a) desk research covering the period of Quarter 4 of 2017 to Quarter 3 of 2018, which analysed the job vacancies, salaries, qualifications, experience and skills requirements of principal jobs in the maritime services industry;
- (b) focus group meeting held on 20 February 2019, which collected industry experts' views on the latest development of the industry, recruitment difficulties, manpower and training needs, and suggested measures to tackle the challenges.

## Objectives

The objectives of the manpower update are:

- (i) to examine the latest trends and development of the industry;
- (ii) to explore the job market situation and training needs;
- (iii) to identify the recruitment difficulties; and
- (iv) to recommend measures to meet the training and manpower needs.

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# Methodology

## Overview

With reference to the 2016 full manpower survey of the maritime services industry, this update report aims to provide qualitative descriptions of the recent development of the maritime services industry through focus group meeting, supplemented quantitatively by desk research which tried to derive some useful findings from recruitment advertisements collected from Q4 of 2017 to Q3 of 2018.

## Focus Group Meeting

The focus group meeting was intended to collect the views of industry experts on the latest trends, manpower situation and training needs of the maritime services industry. Focus group members were invited from different sectors of the industry, including ship owner of sea-going vessels, ship agent/manager, ship broker/operator, operator of vessels moving between Hong Kong and the Ports in Pearl River Delta, local water transport, mid-stream operation, container terminal, marine equipment and engineering, shipyard, maritime law, maritime insurance, ship finance, ship surveying/consultant and maritime related training. All members are experienced and knowledgeable practitioners of the industry.

The focus group meeting was conducted on 20 February 2019. An experienced moderator led members to in-depth

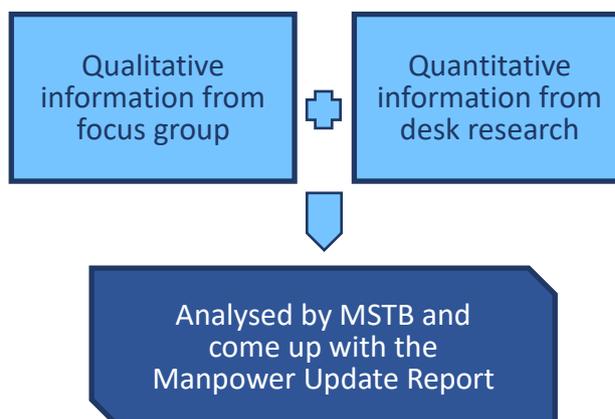
discussions on topics chosen by the Working Party on Manpower Survey of the MSTB. The discussions were recorded and transcribed to facilitate analysis.

## Desk Research

An integrated database was developed to capture the relevant recruitment data from major online recruitment portals on quarterly basis. The data include the number of job advertisements of each principal job, offered remuneration, required qualification, experience, and competency, etc. After a mapping and deduplication process, using the company lists based on the Hong Kong Standard Industrial Classification, 537 records relevant to the maritime services industry were identified during the period of Q4/2017 to Q3/2018. Mapping of the 537 records with the principal jobs of the industry was made to facilitate further analysis.

## Data Analysis

Based on the qualitative and quantitative analysis of focus group discussions and desk research, this manpower update report was drafted, discussed and endorsed by the MSTB.



## Limitations

Different from the extensive quantitative manpower survey conducted in 2016, this updated report aims to identify the trends of manpower demand, training needs as well as recruitment difficulties through the aforementioned focus group and desk research.

While this update report has adopted the qualitative approach for focus group discussion which covered a controlled selection of stakeholders, it might not be generalised to the entire population.

In view that some sectors of the industry are accustomed to other means of

recruitment (e.g. through manning agents or industry referrals), desk research that gathered information of job vacancies from major online recruitment portals might not be exhaustive for the purpose of a quantitative analysis. Thus, the information collected through desk research was only presented as reference supplementary to the observations of the focus group. It is believed that with the improvement in data sources and the accumulation of data for a few years, desk research will be able to generate more useful information for the manpower update exercise.

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# Findings

## Factors Affecting the Development of the Industry

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### Global Political and Economic Influence

Over the past decade, the global shipping industry has gradually recovered from overcapacity since the 2008 financial tsunami. The Belt and Road Initiative will likely open up new trade routes and business opportunities. Although the Sino-US trade war deadlock hampers trade performance for the time being, the demand for global shipping service is unlikely to diminish in the long run since around 90% of international trading products rely on sea transportation.

Have said that, the trade dispute between the US and the Mainland China has dealt a blow to the business of local port and mid-stream operators who have been struggling under keen regional competition. Both the port and mid-stream operators have suffered from a substantial drop in their businesses in recent years.

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### Public Policy

“Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area (GBA)” positioned Hong Kong as

an international financial, transportation and trade centre as well as an international aviation hub. The “Road and Belt Initiative” will also bring a lot of opportunities to Hong Kong since the Hong Kong Port maintains cargo movements with 90 countries along the Belt and Road Corridor.

The HKSAR Government is committed in strengthening Hong Kong’s position as an international logistics hub and supporting the development of high value maritime services. It is putting in place a package of initiatives to enhance the competitiveness of the industry, including offering tax concessions to marine insurance and ship leasing activities, setting up regional desks in overseas and Mainland economic and trade offices to further promote ship registration services of Hong Kong.

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## Infrastructure

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In the past few years, the local vessel sector has benefited from major marine

infrastructure projects including the Hong Kong section of the Hong Kong-Zhuhai-Macao Bridge (HZMB) and the reclamation works for the Three-runway System which is still in progress. Many tug and barge operators have shifted their business from cargo handling to marine works. If mega infrastructure projects like Lantau Tomorrow Vision are to be materialised, local vessel sector expects that their manpower demand will go up in the next ten years.

The commissioning of the HZMB has reduced the river trade business regarding passenger transport. Demand for related ferry repairing services has also deteriorated consequentially. On the other side, shipyards see a new opportunity in cruise repairing. To support the further development of cruise servicing, there is a need for more professionals and sufficient berthing space to accommodate large cruise ships.

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## Existing Manpower Situation and Future Manpower Demand

The 2016 manpower survey projected that the manpower of the industry would have a slight annual growth of around 2% for both 2017 and 2018. The survey also revealed an acute ageing problem for seafarers of the river trade and local vessel sectors. At the time of the survey, over 80% of the chief engineers of the river trade sector reached the age of 51 or above. About 65% of their masters, chief officers and night vision officers were also at that age range. Regarding the local vessel sector, over 40% of their coxswains, assistant coxswains and engine operators were aged 51 or above.

The situation has not been improved since 2016. The industry is still struggling with the problem of ageing and the lack of new blood particularly for marine engineering. Anticipated trends of future manpower demand across sectors are highlighted below:

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### **Ocean Going Sector**

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According to the latest five-year Manpower Report published by the Baltic and International Maritime Council (BIMCO) and International Chamber of Shipping (ICS), the growth in the demand for seafarers would generate a serious shortage in the supply of officers. It was forecasted that an additional 147,500 officers would be required by 2025 to service the world merchant fleet. Unless concerted efforts could be made to increase the supply significantly, the global demand could hardly be met. (Annex 1)

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### **River Trade Sector**

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With the opening of the HZMB, the river trade sector is facing stiff competition from land transportation. Nevertheless, new blood is still urgently needed for this sector, especially for engineering related posts, since the ageing problem has not been improved over the past few years.

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### **Local Vessel Sector**

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Local vessel operators consider that they may take advantages of marine infrastructure projects to sustain or even expand their business. Similar to the river trade sector, they are also facing an acute ageing problem of their crew members and have a high demand for new entrants.

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### **Shore Based Sector**

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Shore-based maritime sector also has a great demand for talent with sea-going experience to take up posts like technical superintendents, fleet managers, licensed pilots, cargo surveyors, and some professional ranks of the Marine Department. While international shipping companies can employ ex-seafarers from all over the world to support their ashore business, many shore-based operations in Hong Kong require local employees with sea-going experience.

The number of participants of the Sea-going Training Incentive Scheme (SGTIS) revealed that there have been very few new entrants as deck cadet and engineer cadet in recent years. The deficiency in the supply of engineering cadets is particularly alarming. As at May 2019, only 10 graduates from relevant programmes in 2017 and 2018 have registered with the SGTIS as engineering cadet. (Annex 2)

Owing to new business opportunities in the GBA and the countries along the Belt and Road corridor, it is also expected that local professionals in maritime law and arbitration, maritime insurance, ship finance and ship management will be in great demand.

Despite challenging operating environment due to keen regional competition and the Sino-US trade dispute, the port operators have been suffering from labour shortage of front-line staff, in particular truck drivers.

Shipyards also require more manpower so that they can speed up ship repairing process to stay competitive.

Findings in relation to the job advertisements captioned during the desk research period are presented in Annex 3.

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## Recruitment Difficulties

The industry has encountered recruitment difficulties across a wide spectrum of jobs owing to the following reasons:

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### Perceived Prospects of the Industry

The biggest obstacle for people joining the industry lies with the perceptions on the career opportunities of the industry. Not only shipping and port operations are perceived as fading industries, ship finance and maritime insurance are also considered less promising in comparison with other streams of the professions, say property finance and life insurance.

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### Characteristics of the Working Environment

A seagoing career requires the practitioners to leave their hometown for a long period of time. Despite the extraordinary life experience and challenging working environment, many people, in particular the younger generation would find it hard to accept the working condition on board as their family and social life would be affected to a certain extent.

The working environment/condition of some shore-based occupations is also different from general administrative work. For example, employees working at the port need to work on shift to support the round-the-clock operation. Shipyard workers have to handle manual tasks including welding, painting and some cleaning works.

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### Certification Requirement

It takes at least 6 years and involves three tiers of certifications for a deck cadet or engineer cadet to be qualified as a ship master or chief engineer of an ocean-going vessel. For river trade and local vessel sectors, usually a sailor needs 4 years or more to progress to a master/coxswain. The stringent certification requirements may deter people from joining the seafaring profession.

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## Competition for Talent

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In general, the younger generation have a higher education attainment which allows them to have more career choices. They tend to prefer those industries which offer better working conditions (say more flexible working hours) or job security.

In the past, a seafaring career was relatively competitive in terms of salary. The monetary reward served as the main incentive for people to join the industry and accept the unusual working conditions. However, nowadays the salary of a seafaring occupation, especially in the first few years of the career, is no longer competitive in comparison with other industries.

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# RECOMMENDATIONS

Focusing on the training needs and manpower shortage of the industry, below are the recommendations.

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## Training Needs

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### Ship Knowledge and other Practical Training to Non-seagoing Personnel

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Many employees in ship management companies do not have sea-going experience and are unable to respond to hiccups or incidents reported on board. It is proposed that in-service practitioners without sea-going experience should be equipped with basic ship knowledge such as ship stability and ship machinery so that they can better communicate with the crew on board.

Other practical training such as marine claims and insurance would also be helpful to staff working in ship management and broking companies.

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### Training related to High Value-added Services

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Training on high value-added services including maritime law and arbitration, marine insurance and ship finance should be enhanced. It was until recent years that local institutions started to have more programmes covering these elements. To improve the quality and efficiency of training, experienced trainers from relevant professions should be engaged.

On the job training through workplace attachment should be arranged alongside classroom learning as students can achieve the best learning outcome in an authentic work environment with exposures to different work scenarios.

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## **Preparatory Courses for Examinations leading to Seafaring Professional Qualifications**

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Owing to stringent certification requirements, there is a constant demand

for preparatory courses for examinations leading to seafaring professional qualifications. To facilitate in-service practitioners to pursue higher qualifications, relevant preparatory courses should be offered with more flexible class schedules and class sizes.

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# **Suggestions on Meeting Manpower Demand**

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## **Broadening Utilisation of the Maritime and Aviation Training Fund (MATF)**

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MATF has been well received and the Government has decided to inject \$200 million to the Fund.

For better nurturing of local maritime talent, it is suggested to explore the feasibility to broaden the usage of the Fund, e.g. for upgrading training facilities and supporting professional development activities of trainers.

To help retain in-service practitioners and encourage them to obtain higher qualifications, enhancement measures of MATF might also be considered to relieve practitioners' financial burden. Possible measures include the removal of the ceiling of subsidy under the Professional Training and Examination Refund Scheme and streamlining relevant subsidy procedures.

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## **Promoting the Prospects and Image of the Industry to Youngsters**

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Employers and trade associations are encouraged to support Life Planning Education of secondary schools through active participation in Business School Partnership Programme to allow students to have an early exposure to the industry. Training providers may also offer applied learning courses relevant to the maritime services industry to deepen secondary school students' understanding on the nature and prospects of the industry and arouse their interests in joining.

Apart from promotion in secondary schools, the Government may also consider engaging PR companies or media partners to formulate and launch thematic promotion campaign/programme at community level to attract new blood to the industry. As many youngsters are interested in extraordinary life experience, short promotional drama series or videos might be produced to highlight the unique and professional job nature of the industry to attract those who look for a challenging career. Promotion through social media should also be considered as the youth spend plenty of time on social media.

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## Developing Hong Kong as a World-class Maritime Training Centre

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In line with the Government's policy to support high value-added maritime services, concerted efforts of local institutions, the industry and the Government could be made to develop Hong Kong into a world-class training centre for maritime professionals. Apart from grooming a pool of local maritime talent, Hong Kong can offer training to students from the Mainland China and other countries to help address the global shortage of seafarers at officer rank.

In addition to traditional seafarer training, local institutions are encouraged to strengthen their training in maritime law and arbitration, marine insurance, ship finance and ship management. Veteran professors/trainers with robust trade expertise should be engaged to teach these programmes. To achieve a more effective learning outcome, local institutions are suggested to provide on-the-job training to students in collaboration with the industry. The Government may also consider supporting local institutions to achieve world-class standards through proper allocation of resources.

In the long run, not only will these measures further improve the local manpower quality, the status of Hong Kong as an international maritime centre will also be reinforced.

# Global Supply and Demand of Seafarers

## Estimated Global Supply and Demand for Seafarers

	Estimated Supply-Demand Balance for Officers		
	2015	2020	2025
Supply	774,000	789,500	805,000
Demand	790,500	881,500	952,500
Shortage/Surplus (+/-)	-16,500	-92,000	<b>-147,500</b>
%	-2.1%	-11.7%	-18.3%

(Source: extracted from the Manpower Report 2015 published by the Baltic and International Maritime Council (BIMCO) and International Chamber of Shipping (ICS) in May 2016;  
[http://www.ics-shipping.org/free-resources/all-free-resources-\(full-list\)](http://www.ics-shipping.org/free-resources/all-free-resources-(full-list)))

## Number of Graduates Joining the Sea-going Training Incentive Scheme (SGTIS)

Number of graduates joining the SGTIS<sup>1</sup> (up to 31 May 2019)

Year of Graduation	Training Providers <sup>3</sup>							
	MSTI	IVE	HKU	HKUST	PolyU		Others	
	Deck cadet	Engineer Cadet	Engineer Cadet	Engineer Cadet	Deck cadet	Engineer Cadet	Deck cadet	Engineer Cadet
2018 <sup>2</sup>	15	3	1	0	3	0	1	0
2017	35	5	0	1	2	0	0	0
2016	36	7	0	2	0	2	3	1
2015	24	7	2	3	6	0	2	0
2014	39	9	1	2	4	4	0	0
2013	24	6	1	1	10	3	0	0

(Source: The Marine Department)

### Note

- The SGTIS aims at encouraging Hong Kong youngsters to take on and complete sea-going training with a view to developing their future careers in the port and maritime support industries. Eligible applicants can receive monthly subsidy in 3 phases.  
(<https://www.hkmpb.gov.hk/en/manpower/sgtis.html>)
- The number of graduates joining SGTIS may be less than the actual number of graduates joining the sea-going sector as it may take some time for the graduates to register with the SGTIS. Figures of 2019 are not shown as most students have not graduated from the institutes.
- Full names of training providers:  
MSTI - The Maritime Services Training Institute  
IVE - The Hong Kong Institute of Vocational Education  
HKU - The University of Hong Kong  
HKUST - The Hong Kong University of Science and Technology  
PolyU - The Hong Kong Polytechnic University  
Others - e.g. Overseas university

## Findings of Desk Research

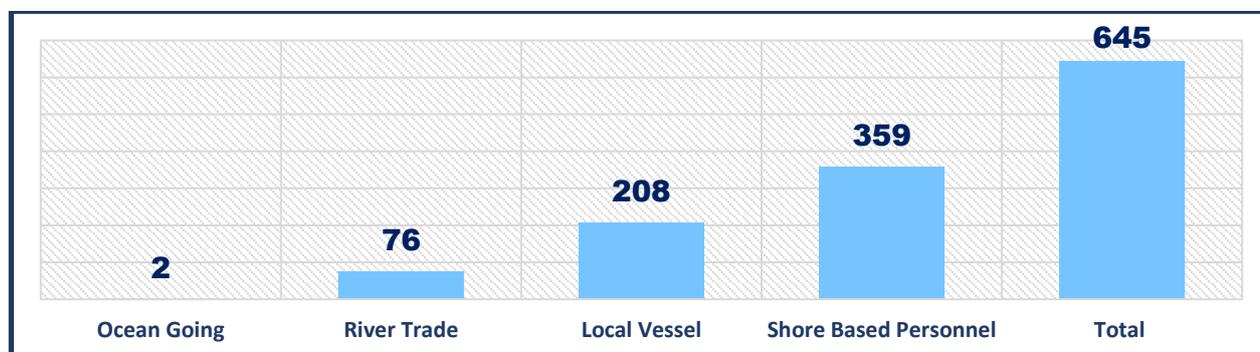
Since the use of online recruitment portals is only one of the recruitment channels, number of recruitment advertisements captured during the desk research period (i.e. Q4 of 2017 to Q3 of 2018) is presented for reference only and should not be interpreted as the actual manpower demand of the Maritime Services Industry.

In view that most of the advertisements did not specify the salary, analysis of salary in relation to the job advertisements would not be presented in this report.

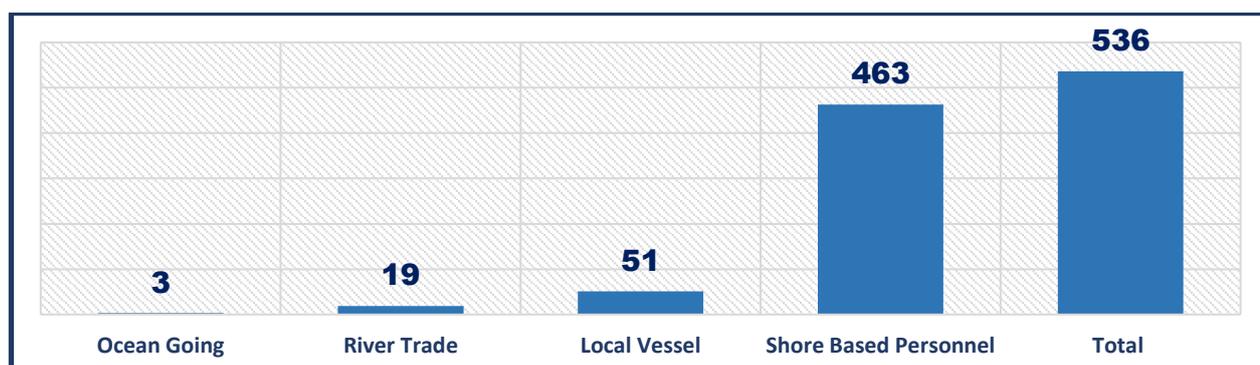
### Distribution of Recruitment Advertisements across Sectors

Comparing with the distribution of vacancies recorded in the 2016 manpower survey, it was observed that the number of recruitment advertisements related to river trade and local vessel sectors captured during the desk research period (i.e. Q4 of 2017 to Q3 of 2018) was relatively few. It is understood that some companies in these sectors employed other means for staff recruitment (e.g. industry referrals) and the advertisements themselves might not reflect the actual number of vacancies since most of them did not specify the number of employees they were looking for.

**Number of Vacancies in the 2016 Manpower Survey of the Maritime Services Industry (by Sector)**



**Number of Recruitment Advertisements related to the Maritime Services Industry for the period between Q4 2017 and Q3 2018 (by Sector)**



## Principal Jobs of High Demand (Shore-based only)

In view that only a limited number of job advertisements were captured for principal jobs in ocean going, river trade and local vessel sectors, relevant findings will not be further analysed. Analysis of principal jobs in high demand here is confined to the shore based sector.

Of the 463 shore based recruitment advertisements retrieved from desk research, the 3 principal jobs with the largest shares are listed below in descending order:

1. Operations (37.1%)
2. Business and Trade (24.8%)
3. Administration, Management and Human Resources (11.4%)

Compared with the figures in the 2016 survey, the number of vacancies regarding “Business and Trade” is particularly high, probably because the companies required more talent for business development. It was noted from the job advertisements that about one-fourth of these vacancies required the candidates to explore new markets or business opportunities.

Below are the descriptions of the above-mentioned principal jobs:

Job Category	Job Description
Operations	<p>Distribution, Delivery, Logistics Operations, Warehouse, Depot, Terminal, Pier Operations, Stevedoring, Ship Onboard Services</p> <p>e.g. Ship Agent, Shipping Manager/Officer, Boarding Officer, Port Captain, Port Agent, Distribution Manager, Traffic Manager, Warehouse Manager, Depot Manager, Terminal Officer, Stevedore, Tallyman, Forklift Truck Operator, Crane Operator, Ship Planner, Operational Superintendent, Cargo Flow Operator, Vessel Operator, Management Trainee</p>
Business and Trade	<p>Commercial, Sales &amp; Purchases, Customer Service, Marketing, Pricing Activities</p> <p>e.g. Commercial Manager/Officer, Freight Manager/Officer, Customer Service Manager/Officer, Shipbroker, Chartering/Sales &amp; Purchase Manager/Officer</p>
Administration, Management and Human Resources	<p>Maritime/Shipping Administration, Management &amp; HR</p> <p>e.g. General Manager/Director, Marine Controller, Cruise/Yacht Manager/Officer, Ship Registration Manager/Officer, Fleet Manager/Officer, Human Resource Manager/Officer, Management Trainee</p>