Report on the Reform Measures Introduced by the Task Force on Reform of the Marine Department

Marine Department

May 2019

Table of Contents

		Page
Executive Summary		i-iii
Chapter I	Background	1-2
Chapter II	Regulation on Passenger Safety and Local Vessels	3-15
Chapter III	Business Processes and Work Procedures of the Marine Department	16-25
Chapter IV	Manpower Strategy and Training for Professional Grades in the Marine Department	26-39
Chapter V	Way Forward	40-41

List of Annexes

Annex A Other measures implemented to strengthen management

and internal governance

Annex B Proposed new organisation chart of the Marine Department

List of Abbreviations

(E&S) Engineer and Ship stream

(N) Nautical stream

(S) Ship stream

ADM Assistant Director of Marine

AIS Automatic Identification System

AMO Assistant Marine Officer

ASoS Assistant Surveyor of Ships

ASs Authorised surveyors

CC Competition Commission

CCTV Closed circuit television

CMarTech Chartered Marine Technologist

Col Commission of Inquiry into the Collision of Vessels near

A lifejacket that is suitable for use by both adult and child

Lamma Island on 1 October 2012

Lifaiockat

Common Lifejacket

CoS Certificate of Survey

CSB Civil Service Bureau

DD Deputy Director

DD(SD) Deputy Director (Special Duties)

DDM Deputy Director of Marine

DM Director of Marine

ED Panel Legislative Council Panel on Economic Development

EIM Enterprise Information Management

ERKS Electronic Recordkeeping System

EU Efficiency Unit

FC Legislative Council Finance Committee

Final Report Final Report of the Steering Committee on Systemic

Reform of the Marine Department

GD Government Dockyard

FOS Fleet Operations Section

GFD Government Fleet Division

GFIS Government Fleet Information System

GNCS Government New Construction Section

GSR Grade Structure Review

HKIE Hong Kong Institution of Engineers

HKPU Hong Kong Polytechnic University

HKSOA Hong Kong Shipowners Association

IMarEST Institute of Marine Engineering, Science and Technology

IMF Information Management Foundation

LegCo Legislative Council

LPOA Hong Kong Marine Department Local Professional

Officers' Association

LVAC Local Vessels Advisory Committee

LVD Local Vessels Division

MD Marine Department

MO Marine Officer

MOA Marine Officers Association

MS Maintenance Section

MSU Management Services Unit

PMO Principal Marine Officer

Programme Government Internship Scheme Programme

PRSC Post-retirement Service Contract

PSC Public Service Commission

PSoS Principal Surveyor of Ships

SMO Senior Marine Officer

SoS Surveyor of Ships

SRC Form Servicing Requisition and Completion Form

SSoS Senior Surveyor of Ships

Standing Commission on Civil Service Salaries and

Commission Conditions of Service

Steering Committee on Systemic Reform of the Marine

Committee Department

Task Force on Reform

THB Transport and Housing Bureau

VHF radio Very High Frequency radiotelephone

VTC Vocational Training Council

EXECUTIVE SUMMARY

- 1. In response to the call for a systemic change in the Marine Department ("MD") by the Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012, the then Secretary for Transport and Housing set up the Steering Committee on Systemic Reform of the Marine Department ("Steering Committee") on 3 May 2013 to advise and steer the review and reform of MD. The Task Force on Reform ("Task Force") was set up to support the Steering Committee in taking forward the reform measures.
- 2. After three years of work, the Steering Committee published the Final Report of the Steering Committee on Systemic Reform of the Marine Department ("Final Report") in April 2016 and identified three priority areas for MD to work on, namely (i) regulatory and operational issues of local vessels; (ii) organisational review on the business processes and work procedures of MD; and (iii) manpower strategy and training for professional grades in MD.
- 3. With the guidance and recommendations of the Steering Committee in the Final Report and the policy steer of the Transport and Housing Bureau ("THB"), the Task Force has made significant and considerable progress in taking forward the reform measures of the three priority areas since 2016.
- 4. On regulatory and operational issues of local vessels, the Task Force has introduced a series of improvement measures to enhance marine and navigational safety and taken forward fundamental changes to the regulatory regime and practices for local vessels. This includes enhancing the provision of lifejacket on board local vessels, installation of navigational and communications equipment, implementing reform of the regulatory regime for local pleasure vessels, regulating drink and drug boating, strengthening the training and examination of coxswains, etc.

- 5. On business processes and work procedures of MD, the Task Force has replicated the good practices introduced in the Local Vessel Safety Section and the Shipping Division of MD to address similar deficiencies in the business processes and operational procedures in the Government Fleet Division ("GFD"). In particular, the Task Force has helped GFD streamline its procedures on vessel procurement, strengthen financial control on maintenance expenditures, improve the reporting and documentation of vessel maintenance activities, etc. A Management Services Unit under the Administration Branch will be established upon the disbandment of the Task Force to ensure that the good practices introduced in previous reviews can be sustained and fully followed.
- 6. On manpower strategy and training, a Grade Structure Review for the two professional grades, namely the Marine Officer ("MO") grade and the Surveyor of Ships ("SoS") grade, was conducted. Two assistant ranks for the MO and SoS grades have been successfully created with designated training programmes devised. The Task Force has also implemented a series of stop-gap measures to meet the daily operational needs before the manpower shortage and succession problems of the two professional ranks could be fundamentally resolved.
- 7. While the Task Force has made significant progress in taking forward the review and reform measures of MD in the past three years, in view of the long-term commitment of many reform recommendations and initiatives, there is a need to sustain the momentum of change and improvement by revamping the organisational structure of MD and rationalising the responsibilities among divisions and sections. Subject to the approval of the FC, a new Deputy Director of Marine ("DDM") post pitched at Administrative Officer Staff Grade B (D3) will be created upon the disbandment of the Task Force to rationalise duties with the existing DDM and strengthen management and internal governance of MD. A new Assistant Director of Marine (D2) post will also be created to lead the newly established Local Vessels Division to continue to carry out the on-going duties of reforming the regulatory regime of local vessels.

8. Looking ahead, MD will continue to take forward the reform and improvement measures relating to regulatory and operational issues of local vessels, business and working procedures of MD and manpower and training of MD. This will be an on-going process. With the support of the THB and dedicated staff in MD, MD will spare no effort to continue to ensure marine and navigational safety in the Hong Kong waters, and to enhance Hong Kong's competitiveness as an international maritime centre.

Chapter I - Background

Steering Committee on Systemic Reform of Marine Department

- 1.1. To respond to the call for a systemic change in the Marine Department ("MD") by the Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012 ("CoI"), the then Secretary for Transport and Housing set up the Steering Committee on Systemic Reform of Marine Department ("Steering Committee") on 3 May 2013 to advise and steer the Director of Marine ("DM") to undertake a comprehensive systemic review and reform of MD.
- 1.2. During the tenure of the Steering Committee from May 2013 to April 2016, MD had, under the steer of the Steering Committee, made significant progress in improving and enhancing its capabilities to fully and properly discharge its functions and responsibilities.
- 1.3. In taking forward the review and reform of MD, the Steering Committee noted that there was a need for MD to sustain the improvement measures implemented and to further tackle some issues on the regulatory regimes of local vessels, internal governance and manpower and training of the Marine Officer ("MO") and Surveyor of Ships ("SoS") grades in MD.
- 1.4. The progress made by MD and the broad directions and priorities for further systemic reforms in MD recommended by the Steering Committee were set out in the Final Report of the Steering Committee ("Final Report") published in April 2016¹.

Setting up of Task Force on Reform

1.5. The Task Force on Reform ("Task Force"), headed by an Administrative Officer Staff Grade B (D3) titled Deputy Director (Special Duties) ("DD(SD)"), was set up in MD in May 2013 to support the Steering Committee and to assist DM to follow up on the deliberations and

The Final Report of the Steering Committee can be found in MD's website at https://www.mardep.gov.hk/en/publication/pdf/steeringcom.pdf.

recommendations of the Steering Committee on three priority areas, namely (i) regulatory and operational issues of local vessels such as safety standards and work practices; (ii) manpower strategy and training; and (iii) organisational review on the business processes and work procedures of MD.

1.6. The original tenure of the Task Force was up to 31 May 2016. With the approval of the Finance Committee ("FC") of the Legislative Council ("LegCo") in May 2013, the tenure of the posts in the Task Force was extended for a further period of three years up to 31 May 2019. The Task Force will disband upon the expiry of the posts on 1 June 2019.

Disbandment of the Task Force

1.7. This report sets out the actions taken by the Task Force to take forward the broad directions and priorities for further systemic reforms in MD recommended by the Steering Committee since the publication of the Final Report of the Steering Committee in April 2016. As the Task Force will disband on 1 June 2019, this report also sets out the future work as well as the proposal to create two new directorate posts, i.e. an additional Deputy Director of Marine ("DDM") titled Deputy Director of Marine (2) and a new Assistant Director of Marine ("ADM") titled Assistant Director/Local Vessels, to lead a new Local Vessels Division ("LVD"), to strengthen the management and internal governance of MD and to strengthen the regulatory regime of local vessels.

Chapter II - Regulation on Passenger Safety and Local Vessels

- 2.1. In the Final Report of the Steering Committee published in April 2016, the Steering Committee appreciated that MD had introduced and implemented a series of improvement measures to enhance marine safety and restore public confidence in Hong Kong's marine safety regime, which included amending the relevant codes of practice, enhancing look-out by crew, requiring the provision of a muster list, reviewing the minimum safe manning scale, improving the signage and directives relating to lifejackets, and requiring fitting watertight-door alarms in wheelhouses of vessels.
- 2.2. The Steering Committee supported that MD should monitor and review the changes and reforms introduced on a regular basis, and continue to take forward fundamental changes to the regulatory regime and practices for local vessels. The progress of enhancing the regulatory regime for local vessels since the Final Report of the Steering Committee is set out in the ensuing paragraphs.
- 2.3. Taking into consideration the actions that need to be taken by the trade to comply with the enhanced safety measures, the severe operating environment arising from increasing costs as well as the serious manpower shortage in the trade, MD has adopted a gradual and pragmatic approach to implement the safety measures laid down in the Final Report of the Steering Committee.

Legislative Reforms

Installation and operation of navigational and communications equipment

2.4. Prior to 2016, only certain local vessels are required to be fitted with an Automatic Identification System ("AIS"), radar and Very High

Frequency radiotelephone ("VHF radio") ². In view of the recommendations of the CoI to enhance the requirement of navigational and communications equipment on ferries and launches (i.e. local passenger vessels), MD engaged a maritime consultancy firm to conduct a benchmark survey to review existing requirements, and considered the feasibility to extend such requirement to certain cargo vessels with higher risk.

Class I vessels

- 2.5. The Steering Committee supported MD's proposal that any Class I vessel (i.e. local passenger vessels) licensed to carry more than 12 passengers should be required to be fitted with a VHF radio. For any Class I vessel licensed to carry more than 100 passengers, it should be required to be fitted with, in addition to a VHF radio, an AIS and radar on board. These vessels should also be required to comply with certain related operational requirements (e.g. maintaining the AIS in operation and having a crew member on board who is qualified to use radar and VHF radio). Certain vessels which are stationary, or operate only in very close proximity to the shore or within restricted areas will be exempted from the above requirement, considering that navigational risks involved in their daily operation are relatively lower.
- 2.6. MD implemented the above requirements through legislative amendments in December 2016. The provisions for AIS and radar commenced operation in April and December 2017 respectively. The provisions relating to the VHF radio will come into operation at an appropriate time later, taking into account the manpower shortage currently faced by the trade.

!

High-speed ferries granted with an exemption from speed restriction, and certain oil carriers are required to be fitted with an AIS by means of a condition of their operating licences or permits. Ferry vessels or launches which operate a franchised service or a licensed service and which ply outside the Victoria Harbour are statutorily required to be fitted with a radar. Vessels of over 300 gross tonnage registered in the Mainland China or Macao and trading to or from Hong Kong, local vessels which participate in the Vessel Traffic Services and ferry vessels which ply outside the Victoria Harbour are required to carry a VHF radio.

³ Floating restaurants, stationary vessels, vessels which are restricted by conditions under any licence or permit to ply within typhoon shelters only, and vessels which operate a franchised or licensed ferry service plying within the Victoria Harbour and are not allowed to exceed the statutorily permitted speed will be exempted from the legislative requirement of navigation and communication equipment.

Class II vessels

- 2.7. Considering the size of the vessel and the dangerous nature of the goods carried, MD proposed that Class II vessels (i.e. local cargo vessels) fitted with any propulsion engine and of 300 gross tonnage or above; and Class II vessels used for carrying dangerous goods (whether fitted with or without any propulsion engine) should install AIS to enhance navigational safety.
- 2.8. MD implemented the requirement of navigational equipment for Class II vessels through legislative amendments in December 2016. The provisions commenced operation in April 2017.

Enhanced provision of lifejacket on local vessels

2.9. Under the existing legislation, local vessels are generally required to carry child lifejackets for 5% of the total number of persons on board and there is no requirement on infant lifejacket. In its report, the CoI recommended that sufficient child lifejackets should be carried for every child on board all classes of vessels. Consideration should also be given to the provision of infant lifejackets.

Common lifejacket

2.10. The Final Report of the Steering Committee supported the CoI's recommendation that sufficient child lifejackets should be carried for every child on board all classes of vessels, and that local passenger vessels should provide a number of infant lifejackets not less than 2.5% of the number of persons the vessel is licensed to carry. During the consultations, the trade expressed strong reservation about providing a large number of child lifejackets. The new requirement will not only cause extra financial burden to the trade, but will also present practical difficulties in implementation, including difficulties in forecasting the number of child passengers on board before each journey, insufficient space for storage of child lifejackets and the risk of an adult mistakenly wearing a child lifejacket during chaos of an emergency situation and vice versa.

- 2.11. To ensure the practicability of the CoI recommendations and to address the trade's concern, MD commissioned a subsidiary consultancy company of the Hong Kong Polytechnic University ("HKPU") to develop a lifejacket that is suitable for use by both adult and child ("Common Lifejacket") in March 2015. The development process was successfully completed with a prototype Common Lifejacket approved by relevant accrediting agencies in June 2016, intellectual property rights protection applied in December 2017, and manufacturing samples accredited in August 2018. The Common Lifejacket is now ready for production. With the Common Lifejacket soon be available in the market, MD consulted the trade again on the legislative proposal to implement the CoI recommendations in September 2018. agreed to adopt the Common Lifejacket which would address most of their previous concerns and agreed to the CoI recommendations to enhance the lifejacket requirement on board local vessels.
- 2.12. With the Common Lifejacket ready for production, the Transport and Housing Bureau ("THB") together with MD consulted the LegCo Panel on Economic Development ("ED Panel") on 19 December 2018 on the legislative proposal to enhance the provision of lifejackets on board Specifically, it is proposed that all local vessels⁴ should local vessels. carry on board lifejackets suitable for children and adult, the quantity of which should be equal to the total number of persons the vessel is licensed to carry; and all commercial passenger-carrying local vessels licensed to carry more than 12 passengers should provide on board a number of infant lifejackets, the quantity of which should be equal to at least 2.5% of the number of passengers that the vessel is licensed to carry. Members of the ED Panel supported the legislative proposal to strengthen the existing requirement for provision of lifejackets on board local vessels. The amendment regulation will be submitted to LegCo for scrutiny and, subject to LegCo's approval, will come into force shortly.

Depending on the actual mode of operation and working conditions, the life-saving requirement for certain vessels may be different. For example, as it may not be practicable for some small non-passenger-carrying vessels such as certain small power fishing sampans, non-mechanised fishing sampan and work boats to comply with the new requirement due to the lack of space to store lifejackets, it is proposed to require these vessels to provide either lifejackets or lifebuoys or a combination of both for the total number of persons on board (calculated on the basis each lifebuoy is for use by two persons). It is also proposed to allow vessels only plying within the Specified Sheltered Waters or typhoon shelters to provide either lifejackets for the carrying capacity or a combination of Common Lifejackets for at least 50% of the carrying capacity and the remaining balance in the form of lifebuoys. At present, similar alternative option is allowed for these vessels which operate in a relatively calm marine environment, i.e. the vessels can provide a mix of lifejackets and lifebuoys as an alternative to a full provision of lifejackets for all persons on board.

2.13. A two-year transitional arrangement will be introduced to allow sufficient time for the trade to purchase and to stock lifejackets on board their vessels during periodic surveys.

Subsidy scheme

- 2.14. During our consultations with the trade on the legislative proposal, apart from the practicability on implementation details, the trade indicated that the proposal would create a huge financial burden for them since they would have to replace the existing lifejackets on board with Common Lifejackets or child lifejackets to comply with the new legislative requirement. Since the trade had already replaced the lifejackets on board local vessels twice in 2013 and 2014 before the implementation of the present legislative proposal, without any subsidy, the trade considered that the proposed new requirement will impose further financial burden on them and they may need to take a longer time to replace the existing lifejackets with Common Lifejackets and child lifejackets.
- 2.15. To facilitate the trade's early compliance with the new legislative requirement and to relieve the trade of some of their financial burden, MD will introduce a subsidy scheme to reimburse the trade with part of the cost for purchasing Common Lifejackets and/or child lifejackets to comply with the new legislative requirement. The subsidy scheme will commence shortly, taking into account the commencement date of the new legislative requirement.

Code of Practice

- 2.16. Technical specification of a Common Lifejacket, details of international standards of lifejacket adopted by MD and the definition of suitability in regard to the size range of a lifejacket will be laid down in the Code of Practice.
- 2.17. MD will consult the Local Vessels Advisory Committee ("LVAC") on the revised Code of Practice. The new requirements will come into effect in due course.

Safety measures for major events at sea

- 2.18. Major events at sea such as firework displays attract a large number of spectator vessels to congregate in a small area of waters, thus posing a higher risk of marine accident. For every major event at sea, MD will issue a Marine Department Notice to designate specific water areas to be Restricted Areas at specific times on the day of the event. Since 2013, MD has implemented an administrative measure to carry out vigorous inspection of spectator vessels near the Restricted Areas to ensure that children on board wear lifejackets at all times and that a list of passengers and crew is kept by the coxswain of the vessel for emergency purposes.
- 2.19. THB and MD considered that the requirements of children to wear lifejackets at all times while on board and a passenger and crew list to be kept on board during major events at sea should be made statutory through legislative changes in the long run, so as to ensure the safety of the passengers more effectively. Before the enactment of legislation, MD had stepped up inspection of spectator vessels during New Year's Eve countdown celebrations, the Lunar New Year Fireworks Display and the National Day Fireworks Display to ensure that sufficient life-saving appliances were provided on board and the above requirements were complied with. In the past three years, no case of non-compliance was found.
- 2.20. THB and MD consulted the LegCo ED Panel on 19 December 2018 on the proposal to implement the safety measures during major event at sea through legislation. Members of the ED Panel supported the legislative proposal. The amendment regulation will be submitted to LegCo for scrutiny and, subject to LegCo's approval, will come into effect shortly.

Reform of the regulatory regime for local pleasure vessels

2.21. As observed by the benchmark survey and some UK maritime experts, the regulatory regime and practices for local pleasure vessels which are licensed to carry no more than 60 passengers are comparatively more relaxed than those for local passenger vessels. Besides, a vessel owner

is currently not required to register or seek prior approval from MD for letting a local pleasure vessel for hire or reward. The Steering Committee suggested that a review of the regulatory regime of local pleasure vessels should be conducted to enhance marine safety and tighten up the regulation of local pleasure vessels.

Legislative proposal

- 2.22. In view of the rising safety requirements for pleasure vessels imposed by other jurisdictions in recent years, the Task Force carried out a comprehensive review from the safety angle of the existing regulatory regime of local pleasure vessels (i.e. Class IV vessels). The review concluded that the regulatory regime and practices for local pleasure vessels are comparatively more relaxed than those for local passenger vessels. To enhance marine safety, the Task Force proposed to tighten the regulation of pleasure vessels, in particular those that are let for hire or reward.
- 2.23. THB and MD consulted the LegCo ED Panel on 23 April 2018 and 19 December 2019 on the proposals to reform the regulatory regime for pleasure vessels. The regulatory reform for pleasure vessels includes measures to (i) tighten the survey requirement; (ii) enhance the structural, life-saving, navigational and communications requirement; and (iii) requiring pleasure vessels to obtain MD's prior approval before being let for hire or reward. Members of the ED Panel supported the legislative proposal.
- 2.24. MD is preparing the amendment legislation to implement the new legislative requirement. It is expected that the new legislation will come into force in Q4 2019.

Code of Practice

2.25. Specific structural requirements relating to hull, machinery and electrical installations applicable to local pleasure vessels, etc. are stipulated in the Code of Practice.

2.26. Having obtained LVAC's endorsement in November 2018, MD will amend the relevant Code of Practice to specify the new structural requirements for pleasure vessels. The new requirements will come into effect on the same date when the new legislation comes into force.

Regulatory Reforms

Training, examination and medical examination of coxswains

- 2.27. Before 2016, applicants for Coxswain Grade 1 Certificate and Pleasure Vessel Operator Grade 1 Certificate were not required to perform any practical operation test. To better test applicants on their awareness of navigational safety, MD amended the applicable examination rules for the above certificates so that, with effect from January 2018, applicants are required to pass a navigation simulation assessment.
- 2.28. In addition, to ensure that coxswains are medically fit for operating a vessel, MD issued an administrative guideline in November 2016 to require the employers of coxswains operating Class I vessels permitted to carry more than 100 passengers to arrange medical examinations for their coxswains.

Authorisation and Management of Authorised Surveyors

- 2.29. Under section 7 of the Merchant Shipping (Local Vessels) Ordinance (Cap. 548), DM may authorise a person who is not a public officer as a surveyor to carry out survey or approve plans of local vessels for the purpose of Cap. 548 subject to such conditions as DM thinks fit and specified in the authorisation. Since 2007, MD has been appointing authorised surveyors ("ASs") to carry out plan approval and survey work for low risk local vessels, including low risk Class II vessels, Class III vessels and certain types of Class IV vessels.
- 2.30. The authorisation of surveyors and the performance management/discipline of ASs are governed by a set of internal procedures and guidelines to ensure quality professional services and safeguard public safety. With the support of LVAC in June 2017, MD

reviewed and revised the relevant procedures and guidelines for assessing the application of ASs and for managing their performance.

- 2.31. MD also found that there were often long delays in audit inspections on a significant proportion of selected vessels surveyed by ASs. Taking advantage of the comprehensive review on ASs, MD also reviewed the existing arrangements for audit survey of local vessels surveyed and plans approved by ASs, and revised relevant procedures for audit surveys to enhance the efficiency and effectiveness of the auditing work.
- 2.32. Having obtained LVAC's endorsement in June 2017, a suitable ratio of vessels in each class of vessels surveyed by each AS are selected randomly for audit. A short term Certificate of Survey ("CoS") lasting for three months is issued to the vessel concerned and a full term CoS will be provided upon completion of an audit survey. No more delay on audit survey is reported since the implementation of the new procedure in 2017.

Other Fundamental Reform Measures

Proposed legislation to regulate drink and drug boating

- 2.33. At present, there is no specific legislation regulating drink and drug boating in the Hong Kong waters, nor does the law empower enforcing authorities to conduct compulsory tests for alcohol or drug after a marine traffic accident. To address this issue, MD proposed that a specific legislation should be enacted to regulate against operation of vessels under the influence of alcohol or drug.
- 2.34. THB and MD consulted the LegCo ED Panel on 25 March 2019 on the proposed regulatory framework of the drink and drug boating legislation. Members of the Panel supported the proposal. MD will continue to work with THB and other relevant parties to develop the implementation details of the proposed legislation. The target is to submit a bill to LegCo for scrutiny in the 2020-21 legislative session.

Periodic revalidation requirement of coxswain certificates

- 2.35. At present, the coxswain certificates of local vessels are valid until the holder reaches 65 years of age. Maritime experts advised that a periodic revalidation requirement should be introduced to ensure that the coxswain remains medically fit for operating a vessel. Considering that the proposal will involve fundamental changes to the coxswain certification system and that the trade is suffering from serious manpower shortage, MD has been examining the proposals carefully with reference to overseas and local experience.
- 2.36. Having examined overseas and local practices, MD has formulated a proposed legislative regime on the revised coxswain certification system. A working group led by THB with members from the Transport Department, Labour Department, MD and Hospital Authority has been set up to deliberate on the proposed legislative regime. Taking into account expert advice of medical practitioners, MD will continue to work with THB to develop a practical legislative framework for revalidation of coxswain certificates for consultation with the trade.

Refresher course for coxswains of local passenger vessels

- 2.37. Various new requirements have been launched to enhance the training courses and system for examination of coxswains in order to raise their professionalism and awareness of navigational safety. These include (i) requiring the completion of maritime course and in-service training before taking the examination for the Coxswain Grade 3 Certificate by amending the examination rule; (ii) introducing a navigation simulation assessment by amending the examination rule; and (iii) requiring the coxswains of local passenger vessels to take a one-day refresher course once every three years in order to ensure the on-going awareness of marine safety and the updating of navigational knowledge.
- 2.38. At present, the refresher course is attended by the coxswain on a voluntary basis. MD is reviewing the effectiveness of the existing practice and the need to mandate the requirement through legislative amendments. The trade will be consulted in due course.

Safety management system

2.39. The Final Report of the Steering Committee recommended that operators of ferries and launches carrying more than 100 passengers should be required to implement a safety management system approved by MD. This recommendation involves fundamental changes to the modus operandi of the trade. MD is examining the implementation of the requirement in the local context and will take a gradual and pragmatic approach to implement this recommendation having regard to the manpower situation of the trade.

Progress Made and Way Forward

Progress made

- 2.40. In the past three years, MD has comprehensively reviewed the regulatory regime of local vessels and introduced a series of improvement measures to enhance the safety standards of local vessels, including various legislative proposals and a number of reforms on the regulatory regime and practices for local vessels. MD has made considerable progress in enhancing marine safety and restoring public confidence in Hong Kong's marine safety regime.
- 2.41. The advances in ship-building technologies and the changes in the modus operandi of the local vessel trade mean that there is a need to regularly review and refine established survey and safety requirements to ensure that they are up-to-date and continue to be practicable from the trade's perspective.
- 2.42. The refinement of the regulatory regime of local vessels is an evolving process that calls for an on-going review. Due to the unique nature of the marine environment of the Hong Kong waters, the manpower situation as well as the modus operandi of the local vessels trade, implementation of new requirements and practices has to be carefully planned with the local trade thoroughly consulted.

2.43. To ensure the effective delivery of the measures in relation to local vessels safety, there is a need to set up a LVD in MD to carry out the on-going duties of strengthening the regulatory regime of local vessels. Subject to the approval of the LegCo FC, a new ADM (D2) post will be created to lead LVD. Some of the major functions of LVD are set out in the following paragraphs.

Compliance and enforcement

2.44. While the Task Force has made significant progress in taking forward the reform measures on safety of local vessels, many reform recommendations and initiatives need to be followed through continuously to ensure that the enhanced measures hitherto implemented will be sustained and delivered on a long-term basis. LVD will maintain audit checks on safety of local vessels and conduct the necessary prosecution actions, including the measures to be implemented on local pleasure vessels, to ensure compliance of safety measures.

Regular review and update of Codes of Practice and relevant legislation

2.45. LVD will take up the role of reviewing and updating the Codes of Practice, and taking forward legislative proposals to improve the marine industrial safety and local vessels safety. Such proposals include the enhancement of safety standard of local vessels and the enhancement of statutory requirements on the provision of lifejackets on local vessels, etc. In doing so, LVD will make reference to international best practices, give professional advice on practicability of proposals having regard to local circumstances, as well as to consult and communicate with the trade, with a view to formulating the most suitable and practicable proposals for Hong Kong.

Training and promotion

- 2.46. Both MD's staff and the trade have to get familiarised with the many new safety measures. MD will put in more efforts to formulate and re-engineer its business processes, and to ensure that adequate training is provided to staff to equip them with the necessary knowledge and skills with a view to enhancing the performance, effectiveness and efficiency of MD as well as the quality of its service to the public.
- 2.47. MD will also enhance the promotion of navigational safety of local vessels and marine industrial safety including the issuance of safety guides and distribution of information to the trade.

Chapter III - Business Processes and Work Procedures of Marine Department

3.1. In the Final Report of the Steering Committee published in April 2016, the Steering Committee endorsed the organisational review to improve the regulatory functions and business procedures of MD, notably in respect of the regulatory work for local vessels. The Steering Committee also supported that MD should replicate the good practices introduced in the Local Vessel Safety Section and the Shipping Division to address similar deficiencies in the business processes and operational procedures in other divisions of MD, notably in the Government Fleet Division ("GFD") which takes up over 40% of both the manpower and resources of MD.

Reform Measures Introduced under the Organisational Review since the Issue of the Final Report of the Steering Committee

Enterprise Information Management System

3.2. The Enterprise Information Management ("EIM") Strategy Study completed by the then Efficiency Unit ("EU") in October 2014 recommended MD to develop an EIM System to improve the overall information management of the Department. Subsequently, the high-level plan of the EIM System was endorsed by the Marine Department Information Technology Steering Committee January 2015. The EIM System is composed of three main modules, namely the Collaborative Workspace, the Electronic Recordkeeping System ("ERKS") and the Knowledge Management Portal for content management, records management and knowledge management respectively. The then EU also recommended MD to develop an Information Management Foundation ("IMF"), which serves as a set of standards and guidelines for the EIM System.

3.3. The development of the IMF was completed and endorsed by MD's EIM Working Group in March 2018. The development of ERKS is near completion. Subject to satisfactory user acceptance test, the tentative roll-out date for Batch 1 users is Q3, 2019.

Organisational Review of GFD

- 3.4. The Task Force conducted thorough studies on the operation of GFD to identify the core issues of the Division and explore improvement opportunities. The Stage I Review on the Government New Construction Section ("GNCS") and the Maintenance Section ("MS") was conducted with the objective to enhance the efficiency and effectiveness of the two Sections. Following the completion of the Stage I Review, the Task Force embarked on the Stage II Review on the Support Services Section and the Supplies Services Unit to review the procedures of various Sections involved in the process of procurement of vessel spare parts (which starts from raising the procurement request to the issuance of vessel spare parts) with a view to enhancing the stock and store management of MD.
- 3.5. The review findings showed that there was room for improvement for the relevant Sections on different fronts, including the procedures on vessel procurement, financial control on maintenance expenditures, reporting and documentation of vessel maintenance activities, management of vessel maintenance contracts, stock and store management of spare parts of MD, etc. Details are set out in the ensuing paragraphs.

<u>Improvements on vessel procurement procedures</u>

Formulating vessel replacement mechanism

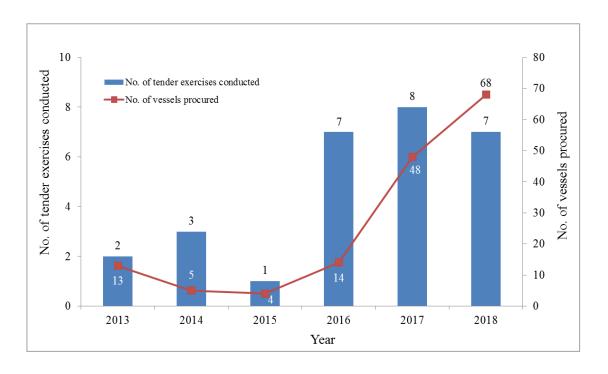
3.6. The review revealed that the expected useful life of vessels stipulated in the ship replacement guide issued by GFD in March 2004 had only taken into account the hull types of vessels in the Government fleet. Other important factors such as the operating modes, vessel types, and past maintenance records were not considered. Besides, there was a lack of a comprehensive vessel replacement mechanism to formulate the long term vessel replacement plan for each user department.

3.7. To address these problems, GFD has, with the assistance of the Task Force, formulated a new vessel replacement mechanism whereby key replacement factors including the hull materials, operating modes, condition assessment results and past maintenance records of each vessel will be taken into account. This new vessel replacement mechanism is stipulated in a new GFD Circular on the procurement of government vessels for GNCS and MS colleagues to follow. Under the new mechanism, GNCS will prepare a 10-year procurement plan for new/replacement of government vessels for each user department, and liaise with individual user department on an annual basis to review the overall condition of their fleet with a view to addressing their latest vessel procurement requirements and priorities.

Expediting vessel procurement

- 3.8. Prior to end 2015, vessel procurement progress was very slow with only two to three tenders involving about seven vessels issued by GNCS each year; a considerable number of procurement backlogs was thus accumulated. The slow progress stemmed mainly from the time spent to review the marking scheme for vessel procurement, manpower shortage of MD's professional grades staff and the lack of staff with extensive procurement experience to support the procurement process. The delay of vessel procurement led to the ageing of vessels in the Government fleet as well as the rising maintenance costs for the fleet.
- 3.9. Since late 2015, a range of improvement measures has been implemented to expedite the procurement of vessels with a view to lowering the average age of the Government fleet. Measures rolled out include strengthening the management oversight of GFD; strengthening the manpower of the Surveyors of Ships grade in GNCS with the policy and funding support of THB; secondment of Supplies Officer grade staff from the Government Logistics Department to provide professional procurement support; and proactively outsourcing vessel design work to external consultants. With additional funding support from THB, MD has also engaged consultants to manage vessel procurement projects to relieve the manpower shortage of GNCS. It is encouraging to note that vessel procurement in recent years is forging ahead, with an average of seven tenders involving about 43 vessels issued each year. The chart

below illustrates the rising number of tender exercises conducted and vessels procured in recent years.



No. of tender exercises conducted and no. of vessels procured (excluding re-tender exercises)

3.10. To further streamline the procurement process, GNCS has, with the assistance of the Task Force, adopted the use of term contracts to bundle the procurement of lower value and standardised vessels for the Leisure and Cultural Services Department. The use of term contracts not only reduces administrative work and obviates the need for repeated purchases, but also provides room for lowering the unit price and shortening delivery time through bulk purchase. So far, three term contracts have been awarded involving 95 canoes, 83 surfboards and 44 rigid-hull inflatable boats.

Financial control on maintenance expenditure

3.11. The review revealed that there was insufficient management control on vessel maintenance term contracts and monitoring of the vessel maintenance votes. Work orders were sometimes issued against term contracts despite the fact that their contract sum ceilings had been reached. Delayed invoice payment cases were found, which reflected

that management and monitoring on outstanding payments were lacking. To address these problems, the Task Force assisted GFD to introduce quick fixes to the Government Fleet Information System ("GFIS") in April 2016 so that relevant parties were notified of the spending level of each term contract to prevent over-commitment. A control mechanism was also introduced to provide management information on the outstanding payments to ensure timely settlement of invoices. These measures had put the financial management of term contracts back on track.

3.12 The Task Force also assisted GFD to put in place further enhancement of GFIS in April 2018 for preventing allocation of funds exceeding the available amount to inspectors. This was to ensure that spending on vessel maintenance would not exceed the budget, and hence compliance with the limit stipulated in the Financial and Accounting Regulations on over-commitment of funds.

Reporting and documentation of vessel maintenance activities

3.13. The review identified that there was a need to improve the documentation, transparency, and the workflow of vessel maintenance works. A new Servicing Requisition and Completion Form ("SRC Form") was introduced in December 2018 to replace the Arrival and Completion Form to record the arrival time of vessels, the completion time of the repair work and the collection of the repaired vessel with Work Completion Summary Report by user departments, etc. The e-submission of the SRC Form is currently being developed and is targeted for completion in end 2019.

Enhance competition for term contractors

3.14. The review showed that vessel maintenance jobs were mostly conducted by a small group of contractors. The Competition Commission ("CC") was invited to identify ways to enhance competition among contractors and the review was completed in July 2018. To follow up on CC's recommendations, GFD had revised the criteria for application for being listed as maintenance service providers of the Government Dockyard ("GD") in August 2018. Unnecessary requirements such as minimum

years of experience, number of workers, etc. were removed. It is expected that the new measures could attract more companies to become GD's listed service providers, enabling new entrants to accumulate experience and know-how, and thus enhancing competition.

Stock management of spare parts

Implementation of "Just-in-Time" stock management strategy

- 3.15. The review revealed that despite the high stock value of spare items which increased from \$249M in 2015-16 to \$289M in 2017-18, spare items required for vessel maintenance were sometimes not readily available, resulting in an increase in the downtime of vessels. The review also found that it was quite difficult to forecast consumption and replenishment of items accurately because for about 80% of the items, demand was very low (or even zero) most of the time, but were subject to drastic and sudden surges.
- 3.16. To address these issues, the "Just-in-Time" stock management strategy is introduced whereby spare items will be ordered and provided just when they are needed, which helps minimise downtime of vessels and enhance the efficiency of maintenance service. Enhancement to GFIS in order to adopt the "Just-in-Time" stock management is now underway and is expected to complete by mid-2019.

Transfer of spare parts to fixed asset

3.17. As at September 2018, there were around 200 types of spare parts, amounting to a total stock value of \$90.4 million. At present, these spare parts are valued at historical cost throughout their economic lives without taking into account their wear and tear. As a result, the stock value of spare parts in GD is over-estimated and cannot provide a true picture on the financial position of GD. In order to reflect the fair value of spare parts, the Finance Section has proposed that spare parts each costing \$100,000 and above should be capitalised as Fixed Assets and depreciated in accordance with the Accrual Accounting Policies and Guidelines on Fixed Assets issued by the Treasury. As such, 120 types or 215 items of spare parts costing \$70.6 million in total are to be

capitalised as Fixed Assets. With the expected implementation of the new accounting arrangement on spare parts in December 2019, the quantity of items and the value of the inventory of GD will be greatly reduced from 200 types or 350 items to 80 types or 135 items, and from \$90.4M to \$19.8M respectively.

Store management

Comprehensive stock-taking

- 3.18. There are over 530 000 items of about 17 400 types of spare items, with a total value of about \$308M, kept in nine spare parts stores in GD. A comprehensive stock-take exercise was conducted in two phases from December 2016 to November 2017 to minimise the disturbance to the normal operation of the storehouses. The results of the comprehensive stock-take were satisfactory, with misplacement of items largely rectified and the stock records updated. Deficient items were verified and written-off according to the established accounting procedures. As at March 2019, 77 items amounting to only 0.1% of the total value of the GD stores were written off.
- 3.19. During the comprehensive stock-take, a review of over 8 400 slow-moving stock items (i.e. items without movement for five years) in July 2018 was also completed. Disposal of obsolete/dormant items by means of auction or dumping is underway and the whole exercise is scheduled to be completed by mid-2019.

Re-engineering of storehouse workflow

3.20. To harness the full potential of bar-coding facilities, hand-held QR code scanners will be used during stock receipt, stock issue and stock-take to ensure accuracy and enhance efficiency. The workflows for stock receipt, stock issue and stock-take have also been re-engineered. The bar-coding system is expected to be launched by mid-2019.

Modernisation of Government Dockyard

- 3.21. GD has been operating at the Stonecutters Island for over 24 years since its relocation to the present site in April 1995. As the equipment and facilities there age, the efficiency and effectiveness of GD's operation will be affected. To ensure that GD can carry on its effective and efficient operation in the present location for the next 20 to 30 years, there is a need to critically examine GD's facilities and work arrangements, taking into account the changing requirements and needs, notably in the areas of industrial safety and environmental standards.
- 3.22. A full scale feasibility study will be conducted with an aim to provide a useful basis for the MD management to decide on how to modernise GD to maintain its operation for the next 20 to 30 years. It is expected that the study will commence in Q4 2019 for 15 months, i.e. completing by Q1 2021.

Crew management

3.23. A scoping study on the Fleet Operations Section ("FOS") of GFD was completed in 2018 to identify issues related to fleet operations and crew management, and to set priority in handling the issues.

New IT system to enhance crew management

3.24. The new Crew Members Management System has been developed to replace the existing Government Fleet Operation Management Information System. The new system can better support the operation of FOS, and is expected to be implemented in July 2019.

Measures to enhance seaside security in GD

3.25. The safe custody of vessels berthing overnight at the GD counts on the security services provided on land at regular intervals which is considered insufficient. With the introduction of the new closed circuit television ("CCTV") system which provides a wider coverage of cameras over the GD compound in early 2019, the real time monitoring of security within the GD basin and the entrance at sea has been

strengthened. The new CCTV monitoring system can prevent any unauthorised removal of vessels, and allow prompt response to emergency situations such as vessel sinking.

Sufficiency of rest hours while undertaking outside work

3.26. To ensure the safe operation of the Government fleet, control over the undertaking of outside work with considerations on sufficiency of rests hours of crew members will be strengthened. With reference to the practices of other transport related Government departments and private traffic operators, new guidelines on approval of outside work are being drawn up.

Progress Made and Way Forward

Progress made

- 3.27. The improvement measures hitherto rolled out in GD are expected to achieve the following benefits
 - (a) speeding up vessel procurement and clearing the backlogs;
 - (b) better planning for vessel replacement and enhanced communication with user departments on procurement plans;
 - (c) robust expenditure monitoring and budget control for vessel maintenance;
 - (d) systematic keeping of vessel maintenance records and availability of maintenance results for user departments;
 - (e) facilitating the reduction of slow-moving and obsolete spare part items with the provision of updated storage information;
 - (f) improving accuracy in forecasting the demand of spare parts for maintenance service and reducing the downtime of vessel maintenance and stock size with the implementation of the "Just-in-Time" stock management strategy;

- (g) more accurate calculation of stock value by taking into account depreciation;
- (h) automating and streamlining procedures for stock receipt, issue and monitoring; and
- (i) building a modern and safe workplace for GD operations.

Compliance monitoring

3.28. The Steering Committee advised that a more elaborate internal audit and compliance mechanism should be set up to ensure that the good practices introduced in previous reviews could be sustained and fully followed. Upon the disbandment of the Task Force in June 2019, recurrent resources have been obtained to establish a Management Services Unit ("MSU") under the Administration Branch in June 2019. MSU will review and monitor the improvement measures hitherto implemented through regular and ad hoc checks to ensure that they are properly implemented and sustained. Further measures for refinement and enhancement, if identified, would also be recommended.

New review projects

3.29. In addition to compliance monitoring, MSU will continue to identify improvement on the business processes and work procedures in other Sections/Divisions of MD. In the meantime, new initiatives on hand include the issuance of term contracts for both material and labour services for maintenance of vessel engines by MS; the review on procedures for handling marine emergencies; and the system support for the setting up of the Regional Desks of Hong Kong Shipping Registry. MD will follow the advice of the Steering Committee to explore further opportunities to replicate the good practices introduced in previous reviews to other Sections/Divisions as appropriate, and will institutionalise the reform work of MD in the long run.

Chapter IV - Manpower Strategy and Training for Professional Grades in the Marine Department

- 4.1. In the Final Report of the Steering Committee issued in April 2016, the Steering Committee noted that the manpower shortage problem of the MO and SoS grades in MD had remained severe over the years, and anticipated that MD will face very serious succession problem in a few years' time.
- 4.2. The Steering Committee considered that MD should continue to implement the stop-gap measures that had already been rolled out. Such measures include the granting of incremental credit for working experience to attract experienced maritime professionals; relaxation of entry requirement on working experience through arrangement of sub-entry pay point; and enhancing the publicity of the recruitment exercises.
- 4.3. Furthermore, the Steering Committee considered that MD should identify further practicable stop-gap measures for recruiting suitable candidates. The Steering Committee specifically mentioned the option of recruiting experienced professionals to the senior rank(s) as an interim and stop-gap measure.
- 4.4. For more fundamental and long-term measures, the Steering Committee called for the collaboration of the management and grade members to explore all possible means to tackle the issues in a bold and innovative manner. In particular, the Steering Committee strongly supported the creation of a new training or assistant ranks through embarking on a Grade Structure Review ("GSR") for the MO and SoS grades.

Grade Structure Review for the Marine Officer and Surveyor of Ships Grades

MO and SoS grades

- 4.5. Both the MO and SoS grades comprise three ranks, i.e. the two non-directorate ranks of MO/SoS and Senior Marine Officer ("SMO")/Senior Surveyor of Ships ("SSoS"); and the directorate rank of Principal Marine Officer ("PMO")/Principal Surveyor of Ships ("PSoS") (D1). The MO and SoS grades are also the two feeder grades for the senior directorate ranks in MD, i.e. ADM (D2), DDM (D3) and DM (D6).
- 4.6. The two grades have been facing acute manpower shortage problems. Recruitment exercises for the MO and SoS ranks conducted since the lifting of civil service recruitment freeze in 2007 could not identify sufficient candidates to meet the recruitment targets. The vacancy rates for both grades were some 20% in mid-2016, and have increased to around 30% in mid-2018. The position as at 31 March 2017 is shown below.

Table 1 – Establishment and strength of the two professional grades at non-directorate level (as at 31 March 2017)

MO Grade

Rank	Establishment	Strength	Vacancy (%)
MO	36	20	16 (44%)
SMO	19	14	5 (26%)
Overall (non-directorate ranks)	55	34	21 (38%)

SoS Grade

Rank	Establishment	Strength	Vacancy (%)
SoS	35	24	11 (31%)
SSoS	18	15	3 (17%)
Overall (non-directorate ranks)	53	39	14 (26%)

4.7. The average age of members of the two grades was high, indicating the serious succession problem in MD. As at 31 March 2017, the average age of directorate professional officers in MD was above 55 and quite a number of them would retire in the next few years.

Table 2 – Succession situation of the directorate and senior officers of the two professional grades in MD (as at 31 March 2017)

Rank	Strength	Average Age	Retire in 3 Years	Retire in 4 or 5 Years
DDM/ ADM	5	57.8	4	1
PMO	5	56.6	3	1
PSoS	7	57.4	5	2
Overall (directorate ranks)	17		12	4
SMO	14	55.9	9	2
SSoS	15	54.0	4	4
Overall (senior ranks)	29	-	13	6

Grade Structure Review

- 4.8. To tackle the manpower shortage problem of the MO and SoS grades and in line with the recommendation of the Steering Committee, the Task Force helped map out the preliminary proposal for consideration by the MD management. In May 2016, MD submitted the preliminary proposal to THB and the Civil Service Bureau ("CSB") to seek their policy support for conducting a GSR for the MO and SoS grades.
- 4.9. In December 2016, CSB invited the Standing Commission on Civil Service Salaries and Conditions of Service ("Standing Commission") to conduct a GSR for the MO and SoS grades in MD. In February 2017, the Standing Commission informed MD that it had accepted the invitation of CSB to conduct a GSR for the MO and SoS grades and invited submissions from MD. MD submitted its proposal to the Standing Commission in end February 2017.

- 4.10. The Standing Commission established a dedicated Working Group to conduct the GSR. With the assistance of Task Force, the Working Group met with the Steering Committee, the management of MD, representatives of the staff associations of the two grades, i.e. the Marine Officers Association ("MOA") and the Hong Kong Marine Department Local Professional Officers' Association ("LPOA"); and visited a number of facilities in MD between March and May 2017.
- 4.11. In October 2017, the Standing Commission published its recommendations to the Government vide its Report No. 57 on "Grade Structure Review for Marine Officer and Surveyor of Ships Grades"⁵. One of the major recommendations is to create a new assistant rank each for the MO and SoS grades, i.e. Assistant Marine Officer ("AMO") and Assistant Surveyor of Ships ("ASoS").
- 4.12. The LegCo Panel on Public Service ⁶ was briefed on the recommendations and findings of the Standing Commission in December 2017, and supported the GSR recommendations in principle.
- 4.13. At its meeting held on 13 February 2018, the Chief Executive-in-Council accepted in full the recommendations in Report No. 57.
- 4.14. With the support of the LegCo Panel on Public Service⁷ and the LegCo Establishment Subcommittee on 13 April 2018 and 29 May 2018 respectively, the GSR recommendations were approved by the LegCo FC on 15 June 2018. With the approval of FC, the recommendations took effect on 1 August 2018.
- 4.15. Upon implementation of the recommendation to create the assistant ranks, i.e. the AMO and ASoS ranks respectively for the MO and SoS

The Report No. 57 could be found on the webpage of the Standing Commission at https://www.jsscs.gov.hk/reports/en/57/57.pdf.

Members of the LegCo ED Panel were also invited to attend the meeting of the LegCo Panel on Public Service on 22 December 2017.

Members of the LegCo ED Panel were also invited to attend the meeting of the LegCo Panel on Public Service on 13 April 2018.

- grades in August 2018, MD could conduct recruitment exercises for the AMO/ASoS ranks as well as the MO/SoS ranks.
- 4.16. Recruitment exercises for AMO/ASoS and MO/SoS were launched in August and September 2018 respectively. The first batch of the new AMO and ASoS recruits started to join MD in February 2019.

Communication with staff side

- 4.17. The MD management proceeded with the GSR in an open and transparent manner. Effective communication with the two staff associations concerned, i.e. MOA and LPOA, was also maintained throughout the process. Right from the beginning when MD started to explore the conduct of a GSR for the MO and SoS grades, the MD management wrote to the two staff associations in March 2016 to share its thinking.
- 4.18. After MD sought the support of THB and CSB for the conduct of a GSR in May 2016, the MD management informed MOA and LPOA as well as all staff members of the MO and SoS grades in writing of the decision of the Department in taking forward the GSR.
- 4.19. Upon receipt of the advice of the Standing Commission in February 2017 that it had accepted the invitation of CSB to conduct a GSR for the MO and SoS grades, MD informed MOA, LPOA and all staff members of the two grades. The two staff associations and grade members were advised that they were welcome to present their views to the Standing Commission directly or through the Department.
- 4.20. After submitting its proposal on the GSR to the Standing Commission, MD informed the two staff associations immediately and provided a gist of the proposal for their reference. The Task Force also conducted briefings for all members of the MO and SoS grades in March 2017.
- 4.21. Although there were diverse views among members of the MO and SoS grades on the GSR proposal at the beginning, the MD management and the two staff associations gradually resolved the differences through exchanges of views in an open and frank manner. After meeting with

the Working Group of the Standing Commission in May 2017, MOA and LPOA wrote to the Standing Commission in May and June 2017 respectively indicating their full support for the GSR.

<u>Designated Training Programmes for the new assistant ranks of the MO and SoS grades</u>

- 4.22. To equip AMOs and ASoSs with the necessary knowledge and skills in the relevant profession and for them to carry out the duties of the respective grade, they will be arranged to undergo a designated training programme.
- 4.23. With the joint efforts of professional grade officers and the Task Force, MD had devised designated training programmes for AMO and ASoS recruits. The designated training programmes, which will last for about four years, are tailor-made for the respective grade and have been approved/accredited by the Hong Kong Institution of Engineers ("HKIE") and the Institute of Marine Engineering, Science and Technology ("IMarEST"). Apart from academic training and on-the-job training in MD, there may also be industry attachment opportunities for AMOs and ASoSs.
- 4.24. AMOs/ASoSs who successfully complete the designated training programmes and obtain the relevant professional qualification to be awarded by HKIE or IMarEST, will be considered for advancement to the MO/SoS ranks provided that they are considered suitable in all aspects as decided by the appointment authority in MD.

Programme to be undertaken by ASoSs in the Ship stream and the Engineer & Ship stream

4.25. ASoSs in the Engineer & Ship ("E&S") stream and the Ship ("S") stream are required to undergo the designated training programmes approved by HKIE, which comprises on-the-job training, Scheme "A" Graduate Training of HKIE and work-based projects for accumulating responsible experiences.

- 4.26. Through learning in actual work situations while serving in various postings in different sections of MD, attending courses for general and professional knowledge and taking up work-based projects, ASoSs(E&S)/ASoSs(S) are trained to acquire the knowledge and skills for effective discharge of duties of the SoS grade in MD and to achieve the competency level in the profession, meeting the standard required by HKIE.
- 4.27. Upon successful completion of the designated training programmes, passing the assessment of MD and that conducted by HKIE, ASoSs(E&S)/ASoSs(S) will be awarded with Corporate Membership by HKIE and can be considered for advancement to the SoS rank.

Programme to be undertaken by AMOs and ASoSs in Nautical stream

- 4.28. AMOs and ASoSs in the Nautical ("N") stream are required to undergo the designated training programmes accredited by IMarEST, which comprise on-the-job training, academic training and work-based projects.
- 4.29. Through learning in actual work situations while serving in various postings in different sections of MD, undergoing the modules for Post-graduate Diploma Programme through distance learning, attending courses for general and professional knowledge and taking up work-based projects, AMOs/ASoSs(N) are trained to acquire knowledge and skills for effective discharge of the respective duties of the MO and SoS grades in MD and to achieve the competency level in the profession, meeting the standard required by IMarEST.
- 4.30. Upon successful completion of the designated training programme, obtaining the Post-graduate Diploma to be awarded by the Plymouth University, passing the assessment of MD and that carried out by IMarEST, AMOs/ASoSs(N) will be awarded with Chartered Marine Technologist ("CMarTech") by IMarEST and can be considered for advancement to the MO/SoS rank.

Industry Attachment

- 4.31. Aiming at widening the knowledge base of the assistant rank officers in the maritime and related field, MD will arrange industry attachment opportunities in organisations/companies in the relevant field for AMOs and ASoSs who have gone through on-the-job training in MD and attained a certain level of competency in the rank.
- 4.32. MD had liaised with the Hong Kong Shipowners Association ("HKSOA") and a number of classification societies, briefed them on the designated training programmes and the proposed industry attachment as well as solicited their support and assistance to explore possible industry attachment opportunities.
- 4.33. As a next step, MD would further work out the detailed arrangements of the industry attachment programmes with HKSOA, shipping companies and/or classification societies where placement opportunities are identified.

Stepping up publicity and enhancing the Government Internship Scheme Programme

Reaching out potential candidates for the AMO and ASoS ranks

- 4.34. To update relevant institutions running maritime related programmes with knowledge about the latest development of the maritime related grades and the possible new job opportunities in MD, the Task Force had taken the initiative to reach out potential candidates while pursuing the GSR.
- 4.35. In September 2017, the Task Force met with the teaching staff of the HKPU and the Vocational Training Council ("VTC"), briefed them on the GSR proposal and the proposed new assistant ranks. The proposal was positively received. The meeting also explored the scope for promoting the new career opportunities in MD, if the assistant ranks of the two grades were created.

- 4.36. Upon completion of the GSR by the Standing Commission, MD conducted a number of career talks at relevant universities and institutions, including the Department of Logistics and Maritime Studies of HKPU, and the Maritime Services Training Institute of VTC. Information about the two grades and the latest development, including the recommendations of the GSR, were introduced to the students studying maritime related programmes.
- 4.37. Initiatives to reach out potential candidates for the AMO and ASoS ranks will continue to be arranged on a regular basis.

Enhancing the Government Internship Scheme Programme

- 4.38. The aim of the GSR is to attract young people to join MD at an early stage. To enable students of the maritime related programmes to gain a better understanding of the work in MD and the maritime career, MD have enhanced the Government Internship Scheme Programme ("Programme") starting from 2018.
- 4.39. The Programme is specifically designed with focus put on the major functions and professional work of MD. Students who participate in the Programme will have the opportunities to expose to the work environment in different sections of MD and assist the professional officers in their work.
- 4.40. The Programme conducted in the summer of 2018 targeted at students of relevant full-time programmes of post-secondary institutions for job-tasting of the MO and SoS grades with a view to providing them with an early opportunity to gain hands-on experience in MD. 14 interns from various institutions were appointed and their feedback was very positive.
- 4.41. Interns of the Programme who had provided their contact details would be updated with information about the recruitment exercises to be launched by MD.

Enriching the career information on MD's website

4.42. To provide the public and the potential candidates with a better understanding of the job opportunities in MD, relevant information such as the entry requirements, areas of responsibilities, promotion prospects and selection process (including sample questions) of the recruitment exercises of the MO and SoS grades have been uploaded to the MD's webpage for reference by the public.

Review of appraisal forms for the MO and SoS grades

- 4.43. Performance appraisal is a key element of performance management in the civil service. To dovetail the creation of the assistant ranks for the MO and SoS grades, the Task Force had devised a performance appraisal form for use by the assistant rank officers of the MO and SoS grades. Following consultation with the two staff associations, the draft appraisal form was approved by the CSB in October 2018 for adoption.
- 4.44. In order to ensure an incremental approach was adopted in the descriptions of the core competencies in the performance appraisal forms for all ranks of the MO and SoS grades, the Task Force had reviewed the full set of performance appraisal forms for the basic professional ranks, senior professional ranks and directorate ranks. Following consultation with the two staff associations, the performance appraisal forms were approved by CSB in March 2019, and would be put into use starting from the 2019-2020 reporting cycle.

Interim and Stop-gap Measures

- 4.45. Before the manpower shortage problem of the two professional grades can be fundamentally resolved, stop-gap measures are required in the interim to meet operational needs of MD .
- 4.46. The measures adopted include the employment of retired officers under the Post-retirement Service Contract ("PRSC") Scheme, engagement of

staff through non-civil service contracts and further employment of civil service staff beyond their retirement age.

4.47. Among others, the Steering Committee remarked in its Final Report that MD should seriously consider the option of recruiting experienced professionals to the senior rank(s).

Direct recruitment for the senior ranks of the MO and SoS grades

SSoS recruitment exercise in 2017

- 4.48. After the promotion exercise for the SSoS rank in 2016, a number of vacancies were anticipated to remain in the rank. MD therefore explored to fill the anticipated SSoS vacant posts through direct recruitment.
- 4.49. Having gone through protracted consultations with the relevant staff association, i.e. LPOA, MD proceeded to seek endorsement from the relevant authorities. Subsequently, CSB approved the proposed entry requirements for appointment to the SSoS rank and the Public Service Commission ("PSC") supported MD to mount a recruitment exercise to recruit a maximum of three SSoS.
- 4.50. A recruitment exercise for appointment to the SSoS rank was launched in February 2017. The exercise had successfully appointed three candidates to the SSoS rank to address acute operational needs. The three candidates joined MD from October 2017 onwards.

SMO and SSoS recruitment exercises in 2019

- 4.51. After the promotion exercises for the SMO and SSoS ranks in 2018, a number of vacancies were anticipated to remain in the SMO and SSoS ranks. MD therefore explored to fill the anticipated SMO and SSoS vacant posts through another round of direct recruitment.
- 4.52. Having gone through another round of protracted consultations with the respective staff associations, i.e. MOA and LPOA, MD proceeded to seek endorsement from the relevant authorities. Subsequently, CSB

approved the respective proposed entry requirements for appointment to the SMO and SSoS ranks and PSC supported MD to mount recruitment exercises to recruit a maximum of two SMOs and three SSoSs.

4.53. Recruitment exercises for appointment to the SMO and SSoS ranks were launched in March 2019.

Progress Made and Way Forward

Progress made

- 4.54. Thanks to the full support of THB, CSB, Standing Commission and the two staff associations, the whole GSR process for the MO and SoS grades was conducted smoothly and its recommendations took effect on 1 August 2018, just some 19 months from commencement to the end. The implementation of the GSR recommendations is a big step forward in resolving the severe manpower shortage and succession problems of the two grades fundamentally.
- 4.55. Designated training programmes for the assistant ranks were successfully drawn up and approved/accredited by the relevant professional institutions before the GSR recommendations were implemented on 1 August 2018. In March 2019, MD was awarded with the "Outstanding Contribution Award Professional Development" by IMarEST, an award to recognise outstanding commitment to learning and professional development initiatives.
- 4.56. With the designated training programmes available for training the assistant rank officers to the necessary competency level, MD launched recruitment exercises for the AMO and ASoS ranks immediately upon creation of the two ranks in August 2018.
- 4.57. After implementation of the GSR recommendations and creation of new assistant ranks for the two grades, a dual-track recruitment exercises could be conducted for both the assistant ranks (i.e. AMO and ASoS ranks) as well as the basic professional ranks (i.e. MO and SoS ranks) to address recruitment difficulties in the past. Coupled with the enhanced

internship programme and promotional efforts, the dual-track recruitment helps expand the pool of potential candidates for joining the two grades in MD in future.

4.58. The recruitment exercises for the AMO and ASoS ranks launched in August 2018 and those for the MO and SoS ranks launched in September 2018 have successfully identified a good number of suitable candidates for appointment. These young cadres help revitalise and rejuvenate the ageing profile of the two professional grades to address the long term succession problem.

Way Forward

- 4.59. Upon implementation of the GSR recommendations, the manpower shortage problem of the MO and SoS grades is expected to be alleviated gradually. In the interim, stop-gap measures, including further employment of civil service staff beyond their retirement age, employment under the PRSC Scheme and engagement of non-civil service contract staff are still required. MD will closely monitor the situation, regularly review the manpower and operational needs and take appropriate actions whenever necessary.
- 4.60. In the long run, MD envisages that the MO and SoS grades will be staffed with a mix of officers who are either officers trained up in MD awarded with CMarTech by IMarEST or Corporate Membership by HKIE; or holders of Certificate of Competency Class 1 and/or with experience in the private sector of the maritime related field. It is expected that the training and experience of this combination of staff will be complementary to each other for the effective operation of the Department as well as delivery of public service.
- 4.61. Nurturing talents is a long term commitment. Looking ahead, MD will further step up efforts on training and career development of the MO and SoS grades officers. To this end, MD has already secured resources to set up a dedicated team to assist the respective Grade Manager to take charge of the training and career related matters of the two grades. Its responsibilities include reviewing the training arrangement for the two grades, monitoring the training progress of the

grade members, overseeing and making proactive arrangement on the development of individual staff taking into account their career development needs and the succession need of the Department, etc. It is expected that the designated team will be able to look after the training and career development needs of the MO and SoS grades officers in a more focused manner, and this will be conducive to the long term development of the two grades.

4.62. MO and SoS grades are the two feeder grades for the senior directorate ranks in MD. Healthy succession for the two grades is therefore of paramount importance to sustain the effective operation of the Department. With more intakes of new blood upon implementation of the GSR recommendations, it is hoped that the age profile of staff of the MO and SoS grades will become healthy gradually. With a younger team of MO and SoS grades staff, MD should then be able to better plan its succession to sustain the effective operation and delivery of service of the Department in the future.

Chapter V Way Forward

- 5.1. Since the establishment of the Task Force in May 2013, MD had made considerable progress in taking forward reform measures on the three priority areas as recommended by the Steering Committee in its Final Report published in April 2016.
- 5.2. On local vessels, MD has amended the Codes of Practice on safety standards for local vessels to put in place new measures to enhance local vessel safety, and has taken forward a number of legislative proposals with a view to enhancing the regulatory regime of local vessels. MD also saw to the completion of the GSR for the MO and SoS grades and the implementation of the GSR recommendations, which is instrumental in addressing the succession and manpower shortage problems in the two grades, and is conducive to the long-term development of the Department. In addition, MD has undertaken an organisational review of the GFD and made significant progress in expediting vessel procurement projects and tightening budget control for vessel maintenance.
- 5.3. With a view to strengthening management and internal governance of MD, the Administration Branch of MD has, under the supervision of DD(SD), undergone reorganisation and implemented improvement measures on various aspects, including centralisation of the administration, finance and supplies management functions; review and refinement of administrative procedures and guidelines, including a comprehensive review of all advisory and statutory bodies under MD's purview; setting up of posting boards for professional grades and other departmental grades; strengthening training and development of staff; and enhancing records management. Details of the reform measures implemented are at **Annex A**.
- 5.4. Notwithstanding the progress made by MD in taking forward the reform measures, the experience of the reform process since 2013 has clearly shown that there is a need to revamp fundamentally the organisation structure of MD to rationalise responsibilities at the DDM level as well as among divisions and sections; strengthen management and internal governance to sustain the momentum of change and improvement; and

strengthen the regulatory regime of local vessels to enhance navigation and marine safety.

- 5.5. take this forward, one additional DDM post pitched at Administrative Officer Staff Grade B (D3) and one ADM (D2) post are proposed to be created on a permanent basis to ensure continual dedicated directorate steer and policy input for the satisfactory and on-going delivery of the enhanced measures and initiatives hitherto implemented. The new ADM (D2) post will also head the new LVD to strengthen the directorate oversight on the responsibilities relating to local vessels, and to continue to carry out reforms to enhance the regulatory regime of local vessels. Furthermore, MD will set up a dedicated MSU under the Administration Branch on a permanent basis to review and monitor the improvement measures regularly to ensure that they are properly implemented and sustained, and to continue to strive for continuous enhancement of MD's operational efficiency and effectiveness.
- 5.6. With the full support of THB, MD has succeeded in obtaining resources for implementing a revamped organisational structure with enhanced manpower as outlined in paragraphs 5.4 and 5.5 above from 2019-20 onwards. Subject to the funding approval of the FC, a new organisation chart on the revamped structure upon the disbandment of the Task Force is at **Annex B**. THB will continue to provide the necessary steer for MD's work.

Annex A

Other Measures Implemented to Strengthen Management and Internal Governance

Item	Progress/Remarks	
Centralisation of the administration, finance and supplies management	To rationalise staffing support and to achieve consistency of the administration, finance and supplies management functions scattered in different Divisions of MD in the past, the administration, finance and supplies management were centralised in MD Headquarters under the direction of the DD(SD) in phases between July 2016 and February 2017.	
2. Review and refinement of administrative procedures and guidelines	 MD had conducted reviews on the existing guidelines and procedures on various issues. Listed below are some of the examples – The appointment mechanism/composition of all advisory and statutory bodies under the purview of MD was reviewed in 2017 with a view to better balancing interests of different sub-sectors while achieving the objective of gauging comprehensive views from the trade. The new arrangements had already been implemented. To provide a broader perspective in the conduct of promotion and recruitment boards, starting from 2017, the ranks of Chairmen of such promotion/selection boards were escalated to facilitate the deliberation of the boards. To achieve consistency in the recruitment of professional grades and staff of Non-Civil 	

Item	Progress/Remarks		
	Service Contract and Post-Retirement Service Contract, the assessment forms had been reviewed and standardised. • As regards the undertaking of duty visits by professional and other departmental grades staff, MD had reviewed the arrangements with a view to rationalising the approving authorities and streamlining the application procedures. The relevant departmental circular was promulgated in January 2018. • To tighten the control and administration of overtime work, annual review would be conducted and supplementary guidelines for professional grades were issued in August 2017.		
3. Setting up of posting boards for professional grades and other departmental grades	To enhance operational efficiency as well as career development of officers through exposure to different postings in a more structured manner, the posting arrangement for MO and SoS grades officers in MD was formalised by setting up two posting boards respectively in September 2017. The boards are chaired by DD(SD) with the Deputy Director of Marine ("DD") and Assistant Directors as members. Other departmental grades have also lined up posting boards as appropriate.		
4. Strengthening training and development of staff	A departmental Training Committee was set up in March 2017 to review the training and development policy and strategy for staff regularly. The committee is chaired by DD(SD) with DD and grade managers at ADM level as members.		
5. Enhancing records management	An integrated Enterprise Information Management System is being implemented		

Item	Progress/Remarks			
	 in MD, which comprises, amongst others, the setting up of ERKS to manage paper and electronic records in an integrated and consistent manner. Phase I of the ERKS is expected to be launched in Q3, 2019. Regular departmental file audit exercises have been conducted since 2017 to promote good records management practices in MD. 			

Proposed New Organisation Chart of the Marine Department

