For Discussion on 27 May 2013

Legislative Council Panel on Economic Development

Follow-up Actions Arising from the Report of the Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012

PURPOSE

The Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012 ("CoI") completed its report in April this year. This paper reports on the follow-up actions taken by the Government in the light of the CoI findings and recommendations.

BACKGROUND

- 2. Subsequent to the vessel collision incident, the Government appointed the independent CoI on 22 October last year, pursuant to the Commissions of Inquiry Ordinance to inquire into the facts and circumstances leading to and surrounding the collision, including to ascertain the causes of the incident and make appropriate findings thereof; consider and evaluate the general conditions of maritime safety concerning passenger vessels in Hong Kong and the adequacy or otherwise of the present system of control; and make recommendations on measures, if any, required for the prevention of the recurrence of similar incidents in future.
- 3. The CoI completed the 50-day public hearing on 12 March this year, and submitted its report to the Chief Executive on 19 April. As the two coxswains involved in the incident were subsequently charged with manslaughter, to safeguard their rights to a fair trial, the Government released a "redacted version" of the report on 30 April.

The Col Report

4. The CoI in its report gave its views on the causes of the incident, its analysis of reasons leading to the rapid sinking of the concerned vessels and the heavy casualties, and its assessment on the system of

control concerning passenger vessels and marine safety. It also recommended measures to prevent recurrence of similar incidents in future. In the report, the CoI also identified problems with the Marine Department ("MD") in regulating local passenger vessels, including loopholes and inadequacies in the processes of plan approval, ship inspection, law enforcement and regulation, in particular deficiencies in procedures and documentation. The CoI called for a systemic change in MD.

FOLLOW-UPACTIONS

5. The Government attaches great importance to marine safety and the conditions of local passenger vessels. Following the collision incident, the Transport and Housing Bureau ("THB") and MD had formulated and implemented improvement and remedial measures to ensure the safety of local passenger vessels.

<u>Comprehensive Re-inspection of Vessel Structure and Provision of Lifesaving Appliances</u>

- 6. MD has carried out comprehensive re-inspection of all ferries, launches and kaitos in Hong Kong, including their structure and provision of lifejackets on board. On vessel structure, MD had completed the reinspection of all the ferries and launches in Hong Kong since end 2012 by verifying their structure with the plans, as well as inspecting their All the vessels inspected complied with their watertight bulkheads. plans, with six vessels found to have minor defects regarding the watertight bulkheads (one ferry with rubber gasket on the frame of a watertight door damaged and five smaller launches with minor defects found in the watertight fittings of the pipe penetration through the watertight bulkheads). The relevant companies had followed up and rectified the issues, and all the cases had passed re-inspections by MD. MD will continue with the checking through regular annual surveys as well as during routine inspections.
- 7. On the provision of lifejackets, MD wrote to the operators and coxswains of all passenger vessels as well as the relevant trade associations in October 2012 and March this year, requiring them to comply strictly with marine safety requirements, and to ensure provision of suitable and sufficient lifesaving appliances on board. As at 20 May 2013, there were 296 ferries and launches and 68 kaitos (totalled 364 vessels) in Hong Kong. 361 of them were found to be in compliance

with the requirements on the quantity of on-board lifejackets, except for one launch which failed to do so. For that particular launch, MD has suspended its certificate of survey, ceasing its operation. MD will carry out re-inspection of the launch after its operator has provided the required numbers of lifejackets onboard. MD will terminate the suspension only when the requirements have been met. Furthermore, two launches currently are under maintenance. Before they resume operation, MD will have their lifesaving appliances inspected to ensure compliance with the requirements.

Other **Immediate Actions**

- 8. MD has strengthened its work on ship inspection, plan approval and spot checks on lifesaving appliances, e.g. strengthening the training of relevant staff and introducing internal audit and review procedures. Meanwhile, to enhance the safety of passenger vessels, MD has stepped up the inspection of the structural safety and the watertightness of the vessels, as well as their structural compliance with approved plans. Furthermore, MD has commissioned Lloyd's Register, an overseas expert, to carry out an independent review of the procedures that it has adopted for plan approval and ship inspections, as well as to conduct risk assessment and make improvement proposals. MD has also engaged a maritime consultancy firm to conduct a benchmark survey to compare the local passenger vessel safety requirements with those adopted in Singapore, Sydney of Australia and Southampton of the United Kingdom, and to make recommendations for enhancement. The study is scheduled for completion in May 2013.
- 9. During major maritime events, MD issues notices on and strictly enforces safety guidelines, which require spectator vessels to keep a list of the crew and passengers, and require children on board to don lifejackets at all times. Besides, the MD promotes maritime safety through education and publicity, including holding maritime safety talks for coxswains and crew as well as district seminars.

Medium- and Long-term Review

10. At a Motion Debate of the Legislative Council on 18 October 2012, the Secretary for Transport and Housing ("STH") announced that ten medium- and long-term measures were under discussion with the trade, with a view to enhancing the safety of local passenger vessels. The ten measures are :

- (a) Increase third party risks insurance coverage to accord better protection to passengers;
- (b) Explore the feasibility of introducing a Marine Accident Victims Assistance Fund, drawing reference from the Traffic Accidents Victims Assistance Scheme;
- (c) Implement measures currently adopted as guidelines by way of legislation and review existing laws with a view to strengthening marine traffic regulation to ensure navigational safety;
- (d) Enhance the training courses and system for examination for coxswains in order to raise their professionalism and awareness of navigational safety;
- (e) Study the feasibility of mandating the installation of closed circuit TVs in the wheelhouse of local passenger vessels to monitor the navigation performance of coxswains;
- (f) Study the feasibility of imposing restrictions on the working hours of coxswains and crew, and review their shift system;
- (g) Review the minimum manning requirement for local passenger vessels;
- (h) Study the feasibility of requiring local vessels to install an Automatic Identification System for real-time monitoring of vessel speed and location;
- (i) Undertake long-term publicity and educational efforts; and
- (j) Further enhance collaboration with the industry on marine safety.
- 11. Since November 2012, the working groups established between MD and the trade have had a number of meetings discussing the above measures. The progress in respect of the measures is at **Annex I**.

Follow-up on the Recommendations of CoI Expert Witnesses

12. The expert witnesses appointed by the CoI (Captain Nigel R Pryke and Dr Neville Anthony Armstrong) testified in relation to the

maritime safety condition of passenger vessels, gave opinions as to the adequacy of the system of control and made related recommendations. Their recommendations are summarized at **Annex II**. Except for one recommendation concerning whether the Marine Accident Investigation and Shipping Security Policy Branch should be removed from the organizational structure of the department¹, MD generally agreed with all their recommendations and will discuss with the trade to implement these recommendation as far as practicable.

Initial Response from the Trade

13. MD has been liaising with the trade on the above immediate follow-up actions and the medium- and long-term review measures. Proposals to enhance marine safety in Hong Kong were discussed. The trade in general recognises the need to improve the safety of passenger vessels. For some of the more controversial issues, such as the proposed installation of automatic identification system and stringent law enforcement, the trade is mainly concerned about implications on manpower, increase in operating cost, and potential pressure to their business environment, in particular for operators of medium and small passenger vessels. Both sides will continue discussions with a view to identifying practicable and feasible implementation proposals as early as possible.

Internal Investigation

14. With respect to the mentioning in the CoI report that there might be problems with MD officers in carrying out their duties in the past, including possible maladministration and neglect of duty, STH has directed the Director of Marine to immediately carry out a comprehensive internal investigation in accordance with established procedures. To ensure that the investigation is conducted in a thorough and fair manner, the Administration has arranged for the investigation to be led and carried out by officers who are more senior in rank than the officers being investigated, and are not involved in the subject matters under investigation. In the case that the investigation uncovers any violations of rules and regulations or issues relating to management responsibilities, the Administration will handle the cases impartially according to

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There is another recommendation concerning whether legislation should permit the Marine Police to randomly test for drug and alcohol consumption. Since it is not within MD's ambit, MD did not respond to this recommendation.

procedures and disciplinary action will be taken against the officers concerned, irrespective of their ranks. Cases that are found to involve possible criminal offence will be reported to the law enforcement agencies for follow-up. The Deputy Director of Marine is being in charge of the investigation. The investigation in the Department includes examining and identifying the details concerning the relevant officers in handling the cases in question. THB will consider the investigation report and depending on the outcome, consult the Civil Service Bureau on the next steps, including taking disciplinary action. We have asked MD to submit reports to and brief THB on the progress of investigation on a regular basis, so as to ensure the effective conduct of investigation work.

Systemic Review and Reform

- 15. The Administration attaches great importance to the findings of the CoI report which pointed out the need for a systemic change in MD. Taking into account the CoI's views and recommendations, STH has promptly set up the Steering Committee on Systemic Reform of the Marine Department ("Steering Committee") on 3 May. The Steering Committee is led by STH in person, and two lay members, Ms Alice TAI Yuen-ying, former Ombudsman of Hong Kong, and Mr Irving KOO Yee-yin, a former Member of the University Grants Committee were appointed for a term of two years. Both members have extensive administrative and management experience. The Steering Committee will steer and supervise the Director of Marine to undertake a comprehensive systemic review and reform of the Department.
- With reference to the recommendations made in the CoI report, 16. the Steering Committee will undertake a comprehensive review of the legislative compliance and administrative measures governing passenger safety and local vessel regulation and inspection matters, including areas of licensing, regulation, inspection and law enforcement. improvement proposals will be drawn up. The Steering Committee will also review and re-engineer the business processes, operational procedures and supervisory structure in the MD's management with a view to strengthening internal governance. It will map out a strategy to address the vacancy situation of the professional grades in the Department and to develop a manpower training programme. Committee will direct and oversee the Director of Marine in implementing the various improvement initiatives, and carrying out a comprehensive reform in the Department, so as to enhance the overall professional and governance capacities of MD. This will help ensure

the Department would be capable of discharging its duties and fulfilling its responsibilities effectively, and in turn help restore public confidence in local vessels safety. The Steering Committee held its first meeting on 21 May to draw up its main focus of work and relevant work-plan. The initial plan is for the Steering Committee to formulate and implement proposals on procedural matters within four to six months. After that, the Steering Committee will focus on issues relating to systemic and structural reform. MD will fully support the work of the Committee, so that the latter will be able to complete its review at the earliest opportunity, put forward improvement and enhancement proposals, and supervise their implementation to drive forward the reform in the Department.

17. Meanwhile, STH has also announced that a high-level Task Force would be set up within MD. An Administrative Officer Staff Grade B was assigned by the Civil Service Bureau to take up the new post of Deputy Director (Special Duties) in mid-May to lead the work of the departmental Task Force. She will be underpinned by two directorate officers including an officer at the rank of Assistant Director of Marine. All the staff of MD will work with the Steering Committee and the Task Force. In addition, international maritime experts will be appointed by MD as advisors to provide professional input.

ADVICE SOUGHT

18. Members are invited to give their views on the above follow-up actions.

Transport and Housing Bureau May 2013

Annex I

Specific progress of consultation with the trade regarding the ten medium- and long-term measures

| Improvement Measures | | |
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| Item | Description | Progress |
| 1. | risks insurance coverage to accord | Several meetings have been held with the trade. The trade is concerned about the possible increase in insurance premium if the present level of minimum liability cover is raised, which in turn may impact on their operation. MD and the trade will further study the matter, e.g. making reference to the premium levels under different options. |
| 2. | of introducing a Marine Accident Victims Assistance Fund, by drawing reference from | MD has engaged a consultant to study the technical details for setting up the Fund. The study commenced on 29 April 2013 and is scheduled for completion by the end of 2013. MD will collaborate with the trade to further study the matter. |
| 3. | currently adopted as | Several meetings have been held with the trade to discuss the following enhancement measures on marine traffic control and safety during firework displays and other major events — (a) children on board spectator vessels should don lifejackets at all times; and (b) a passenger list should be kept on board. The trade and MD will continue to work out the details, and draw up specific proposals. |

| Im | provement Measures | Duoguaga |
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| Item | Description | Progress |
| 4. | Enhance the training courses and system for examination for coxswains in order to raise their professionalism and awareness of navigational safety: | |
| | for Coxswain Grade 3 Certificate | MD is formulating the curriculum framework and recognition system with the course providers. It is expected that this recommendation can be implemented in 2014. |
| | passenger vessels are required to | MD is formulating the curriculum framework and recognition system with the course providers. It is expected that this recommendation can first be implemented in 2014 on a voluntary basis. |
| | for Coxswain Grade 1 Certificate | MD and the Vocational Training Council are exploring the feasibility of developing a simulation system for the practical operational assessment, and will consult the trade. |

| Improvement Measures | | n |
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| Item | Description | Progress |
| | speed passenger | MD is liaising with an international classification society to conduct a comprehensive risk assessment of FSVs in the Hong Kong waters and to give suggestions. |
| 5. | mandating the installation of closed circuit TVs (CCTV) in | Taking into account the diverse views expressed by the trade on the proposal, MD will explore alternative measures such as installation of voice recorders in the wheelhouses to record the conversations therein, and will consult the trade on the proposal(s). |
| 6. | imposing restrictions on the working hours | The trade indicated that the existing work pattern of "one-day-on and one-day-off" could be maintained. Since the trade is faced with manpower shortage and difficulties in actual operations, MD will continue to discuss with the trade to explore feasible proposal(s). |
| 7. | manning requirement | The trade is concerned that the minimum manning level for local ferries and launches may impact on manpower and operating costs. MD will continue to consult the trade on the proposal. |
| 8. | Study the feasibility of requiring local vessels to install an Automatic Identification System (AIS) for real-time monitoring of vessel speed and location | The trade requests to establish the usefulness and the feasibility of installing AIS on local vessels before discussing the matter further. |

| Improvement Measures | | Duagnaga |
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| Item | Description | Progress |
| 9. | Undertake long-term publicity and educational efforts | MD has formulated long-term publicity and educational strategies to promote maritime safety, including conducting respective safety seminars for the public and crew; and strengthening public education by, for instance, providing in advance electronic materials (such as CD-ROMs) conveying safety messages to children passengers who participate in outdoor recreational activities organized by schools, as well as distributing publications and pamphlets on maritime safety. |
| 10. | | MD will continue to enhance communication and collaboration between the department and the trade. |

Annex II

Summary of Recommendations by Expert Witnesses Captain Nigel R Pryke and Dr Neville Anthony Armstrong

Recommendations by Captain Nigel R Pryke

| Item | Recommendations |
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| | (Extract from the CoI Report) |
| 1. | Whether safety legislation for ferries and launches carrying more than 100 passengers is made common. |
| 2. | Whether operators of ferries carrying more than 100 passengers should be required to implement a safety management system. It would be appropriate for Marine Department to arrange or specify suitable training courses for owners and coxswains. |
| 3. | Whether all ferries or launches carrying more than 12 passengers should be fitted with VHF radio. All ferries or launches carrying more than 100 passengers should be fitted with AIS, collision avoidance radar and VHF radio. |
| 4. | Whether serious consideration is given to the provision of liferaft capacity for all passengers on longer voyages outside the harbour. It may be considered that this could be implemented over several years. |
| 5. | Whether sufficient child lifejackets are carried for every child on board, and whether the statutory requirement for child lifejackets should be one lifejacket for every child actually on board the vessel. |
| 6. | Whether all coxswains of vessels carrying more than 100 passengers should have a basic medical examination and eyesight test at intervals not exceeding five years, and whether all seamen required to keep a look-out should have an eyesight test. |
| 7. | Whether legislation should permit the harbour police to randomly test for drug and alcohol consumption. |

| Item | Recommendations (Extract from the CoI Report) |
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| 8. | Whether all vessels carrying more than 100 passengers should have a look-out on the bridge in addition to the coxswain during the hours of darkness and in reduced visibility, and whether high speed craft should have a look-out on the bridge at all times. |
| 9. | Whether all passenger vessels carrying more than 100 passengers should have a muster list so that every member of the crew is aware of his duties in the event of emergency. |
| 10. | Whether a small adjustment should be made to the VTS boundary between the Channel 67 area and Channel 14 area. |
| 11. | Whether a new speed limit should be introduced in the approaches to Lamma Island. As there is no specific port control for Lamma Island berths a speed limit would be an improvement to the local safety regime. This would have a negligible effect on the passage time of Lamma Island ferries. |
| 12. | Whether high speed craft built before 2007 should be required to have a route operating manual and a training manual, and whether the Marine Department should clarify the issue regarding carriage of a quick flashing amber light by high speed craft. Evidence has been given that the Sea Smooth was not required to display this light, however it would appear that there might be a general impression that having the light gives right of way over other vessels. |
| 13. | Given the frequency of collisions in this very busy harbour and the extreme hazard associated with high speed collisions, whether the Marine Department should consider the mandating of a high speed radar simulator course for all coxswains of high speed craft (built before and after 2007). |
| 14. | Whether consideration should be given to removing Marine Accident Investigation and Shipping Security Policy Branch ('MAISSPB') from the Marine Department organisation in accordance with the Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident (Casualty Investigation Code), IMO resolution MSC.255(84). |

Recommendations by Dr Neville Anthony Armstrong

| Item | Recommendations (Extract from the CoI Report) |
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| 1. | a high level statement of safety objectives be documented, as in Australia; |
| 2. | consideration be given to the question of whether the division of plan approval and survey by Marine Department might lead to errors; |
| 3. | the Certificate of Survey, the Certificate of Inspection and other like documents should record the vessel lightship particulars; |
| 4. | the Code of Practice be modified to include reference to the impact of modification on Damage Stability and watertight subdivision; |
| 5. | the annual Certificate of Survey catalogue a number of additional features, including watertight doors, location of battery supply and modifications; |
| 6. | the definition of the term "lifejacket" in the legislation be amended to incorporate a reference to International Organization for Standardization ('ISO') 12402-3:2006 (Personal Flotation Devices-Part 3: lifejackets, performance level 150-Safety Requirements) or equivalent; |
| 7. | the legislation be amended to require child lifejackets on all classes of vessels and consideration be given to the need for infant lifejackets; |
| 8. | the legislation be amended to require in addition to the 5% requirement in respect of the persons aboard the vessel a requirement that a child lifejacket be provided for each child actually on board; |
| 9. | the Code of Practice be amended to require a source of emergency electrical power separate from the main power supply, to be located outside the machinery space and above the waterline; |
| 10. | the Code of Practice, in particular Annex F, be re-written to cover adequately the issues of watertight subdivision and Damage Stability, stipulating the outcome to be achieved by watertight subdivision; |

| Item | Recommendations |
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| | (Extract from the CoI Report) |
| 11. | the Code of Practice to be amended to provide for an empirical value or standard against which the attachment of seats is to be judged and a Regulatory Impact Assessment to be made of the work and cost required to attach seats to decks constructed of GRP foam sandwich more robustly; |
| 12. | the Certificate of Survey and the Certificate of Inspection contain a statement, signed by the surveyor, that the vessel has been built in accordance with the approved plans; |
| 13. | rocket parachute f1ares be carried in the wheelhouse; |
| 14. | watertight doors be fitted with alarms to the wheelhouse indicating whether they are open or closed and that the doors be appropriately marked; |
| 15. | vessels certified before 1 January 2007 to carry more than 100 passengers be checked to identify the standard of watertight subdivision; |
| 16. | a Regulatory Impact Assessment to be carried out in respect of the feasibility and cost of fitting Voyage Data Recorders to all passenger craft. |