

LOCAL VESSELS ADVISORY COMMITTEE

**Seeking members' endorsement on measures
to enhance the safety of local vessels and navigation**

Background

1. In April 2013 the Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012 (COI) published the report regarding the cause of the incident and recommendations to prevent a recurrence. In view of the large quantity of recommendations from COI, its expert witnesses and from Marine Department (MD), all these recommendations are grouped into short-term, medium-term and long-term improvement measures for implementation.

Improvement Measures to be Implemented during the First Phase

2. MD will, as a start, implement the following specific improvement measures in the first phase –

- (a) all passenger vessels carrying more than 100 passengers should have a muster list that specifies the duties of every member of the crew in the event of emergency. An emergency drill should be practiced by crew members at least once every two months. Such drills should be properly recorded for inspections by a Marine Department officer;
- (b) improving indications and directives relating to lifejackets on-board, such as requiring ship owners to print the vessel name or certificate of ownership number on each of the lifejackets, putting on sufficient signs to show the locations of lifejackets, making use of video or poster to demonstrate how lifejackets are to be obtained, donned and used;

- (c) requiring watertight doors below main deck be fitted with alarms in the wheelhouse, so as to indicate whether they are open or closed, and to send alerts when watertight doors are open. Such doors should also be marked “Doors must be kept closed when underway” on both sides of the watertight doors;
- (d) all vessels carrying more than 100 passengers should have a crewmember to assist look-out on the bridge in addition to the coxswain during the hours of darkness and in reduced visibility, and high speed craft⁽¹⁾ should have a crewmember to assist look-out in addition to the coxswain at all times. The crew required to assist look-out should meet the standards of eyesight test at intervals not exceeding five years ; and
- (e) apart from catering for general emergency situation, the manning required for specific emergency situations (including collision, grounding, fire and abandonment of ship) has to be taken into account in determining the minimum number of crew for a ferry or a launch and such number should be verified by a drill demonstrated by the crew on board during the final inspection carried out by a MD officer.

3. The above measures do not require legislative amendments and can be implemented by administrative actions through making amendments to the Code of Practice (“CoP”). The commencement of these measures will be:

- (a) for paragraph 2(a) and 2(c) – not later than six months;
- (b) for paragraph 2(b) – not later than the first annual survey after three months;
- (c) for paragraph 2(d) – not later than 12 months;
- (d) for paragraph 2(e) – not later than the first annual survey after 12 months;
following the publication of the relevant amendments to CoP.

⁽¹⁾ “High speed craft” means a craft capable of a maximum speed in metres per second equal to or exceeding $3.7\Delta^{0.1667}$, where Δ = displacement corresponding to the design waterline (m^3); and is constructed and operated in accordance with the requirements in Chapter XI of the Code of Practice.

Discussion in the Sub-committee

4. The above five improvement measures were discussed in the Sub-committee on Survey Work of Local Vessels on 17 July 2013 and 19 September 2013. Members of the Sub-committee had no objection on the principles of these improvement measures and the proposals shown above to make amendments to the CoP.

CoI Expert' Recommendation

5. CoI Expert recommended amending the CoP, Chapter 1, Section 7.2 and 8.2 to document the rationales of exclusion of requirements for vessels with features of novel design and acceptance of equivalence. MD accepted COI Expert's views in this regard (Section e of the Appendix refers).

Members' Endorsement Sought

6. Members are invited to comment and endorse the above improvement measures.

Marine Department
October 2013

Appendix

Proposed Amendment to Code of Practice – Safety Standards for Classes I, II and III Vessels (COP)

Followings are proposed amendments to the COP (with date of implementation in foot note) :

a. Chapter II - Survey/Inspection, Issuance of certificate and Plan Approval

1. In the table of section 5(A) (“Plans and Data required to be submitted”), to add:

- 13) a muster list specifying the duties of every member of crew in the event of emergency (applicable to ferries and launches carrying more than 100 passengers only).

2. In section 6 (“Plans to be retained onboard”), to add:

- 6.4 All ferries and launches carrying more than 100 passengers should have onboard the muster list as stated in item 13 of section 5(A).
- 6.5 An emergency drill should be practised by crewmembers at least once every two months. Records of emergency drills are to be kept onboard for inspections by a MD officer.

b. Chapter IIIA - Hull Construction, Machinery, Electrical Installations and Fittings – Category A Vessel

In section 2.6 (“Access openings fitted in watertight bulkheads should be equipped with effective watertight closing appliances”), to add:

The design of watertight doors should comply with the following requirements:

- (a) The dimension of the watertight doors to suit the design of the vessels;
- (b) The warning “Door must be kept closed when underway” should be marked on both sides of the watertight door;
- (c) For hinged type watertight doors they should be opened outward except those doors in high flooding risk spaces should be opened into the space);

and

- (d) Watertight doors to be fitted with visual and audio alarms in the wheelhouse to give alerts when watertight doors are open.

c. Chapter VII - Life-Saving Appliances and Arrangements

1. To add section 15:

15. Lifejackets of Class I vessels

15.1 The lifejackets of Class I vessels should comply with the following requirements:

- (i) The name of the vessel or the certificate of ownership number should be printed on each of the lifejackets on board;
- (ii) To display sufficient signs designating the locations of lifejackets onboard;
- (iii) Demonstration (by crew or through video or posters display onboard) of how lifejackets are donned; and
- (iv) In all piers used to embark and disembark passengers, broadcast via video, or put up posters, demonstrating the donning of lifejackets should be provided (applicable only to operators with designated piers to embark and disembark passengers).

2. Delete paragraph 1 of Annex U-5

d. Chapter XII - Vessel Safe Operation and Operator Requirements

1. To add section 10:

10 Minimum Safe Manning Requirements for Hong Kong Licensed Vessels operating in Hong Kong Waters and River Trade Limits

10.1 See Annex U-4

10.2 Minimum safe manning for ferries and launches

10.2.1 To ensure the provision of appropriate manning onboard, in particular in handling emergency situations, the following three aspects should be taken into account when determining the minimum safe manning for local ferries and launches -

- (i) the manning required for catering emergency situations including collision, grounding, fire and ship abandonment has to be taken into account in determining the minimum number of crew for a ferry or a launch;
- (ii) the minimum number of crew should be determined through a drill demonstrated by crew on board during the final inspection conducted by a MD officer; and
- (iii) for vessels carrying more than 100 passengers should have a crew to assist lookout in the wheelhouse in addition to the coxswain during the hours of darkness and in reduced visibility, and high speed craft⁽¹⁾ to have a crew to assist lookout in the wheelhouse at all times in addition to the coxswain.

10.2.2 Eyesight standards for lookouts – see Annex U-6.

2. To add the following eyesight standards in Annex U-6 of the COP:

e. Chapter I - General

1. To amend the last sentence of Section 7.2 as shown:

7.2 For any vessel which embodies features of a novel kind, if the application

⁽¹⁾ “High speed craft” means a craft capable of a maximum speed in metres per second equal to or exceeding $3.7\Delta^{0.1667}$, where Δ = displacement corresponding to the design waterline (m^3); and is constructed and operated in accordance with the requirements in Chapter XI of the Code of Practice.

of any requirements of this Code or regulation concerned might, seriously impede research into the development of such features and their incorporation in vessel plying in Hong Kong waters or River Trade limits, Marine Department may consider excluding such requirements. Nevertheless any such kind of vessel should comply with the requirements of which Marine Department considers as appropriate to ensure the overall safety of the vessel. The applications with justifications for such exclusions together with the approvals issued by the Marine Department should be properly recorded.

2. To amend the last part of Section 8.2 as shown:

8.2 Application for the use of equivalent fitting, material, appliance or apparatus, or type thereof, or other facilities specified in this Code should be made to Marine Department together with the survey and test reports for consideration, review and endorsement. Such application with justifications and endorsement given by the Marine Department should be properly recorded.

Eyesight Standards for Lookouts

1. The eyesight standards for lookouts are as follows :

		Age	
		Below 22 years	22 years and above
Distant Vision with or without visual aid	Better eye	6/6	6/9
	Other eye	6/9	6/12
Distant Vision without aid when visual aid necessary for above	Better eye	6/36	6/60
	Other eye	6/36	6/60
Near, Intermediate and colour vision, both eyes together, aided or unaided		Vision required for ship's navigation (e.g. chart and nautical publication reference, use of bridge instrumentation and equipment, identification of navigation aids)	
Visual fields		Normal visual fields	
Night Blindness		Vision required to perform all necessary functions in darkness without compromise	
Diplopia (double vision)		No significant condition evident	

2. Colour vision will be tested by Ishihara plates number 1, 11, 15, 22 and 23 of the 10th revised edition (1983) or equivalent.
3. A lookout is required to pass an eyesight test and have a certificate issued by a registered medical practitioner attesting that the eyesight standards have been attained.
4. Eyesight test will be required at intervals not exceeding five years.