

**Bills Committee on
Merchant Shipping (Seafarers) (Amendment) Bill 2013
Supplementary information requested by Members
at the meeting on 15 May 2013**

(I) Implementation of the Maritime Labour Convention, 2006 (MLC)

To implement the MLC, apart from updating relevant provisions under the Merchant Shipping (Seafarers) Ordinance (Chapter 478) (the Ordinance) through the Bill, we plan to amend the subsidiary legislations under the Ordinance after the Bill has been passed, and enact a new piece of subsidiary legislation, tentatively named the Merchant Shipping (Seafarers) (Maritime Labour Convention) Regulation (the new Regulation), to incorporate the detailed MLC requirements as follows:

Enacting the new Regulation

2. The proposed new Regulation will, in line with the requirements under MLC, establish a certification, inspection and enforcement mechanism to ensure that the working and living conditions of seafarers on ships registered in Hong Kong¹ and engaged in international voyages² as well as those on foreign ships entering Hong Kong waters comply with the MLC requirements in 14 areas. The relevant requirements proposed to be incorporated into the new Regulation are set out in **Annex I**. (The relevant requirements are for reference only. Formal provisions will be submitted to the Legislative Council for consideration after completion of law drafting).

Amending existing subsidiary legislations under the Ordinance

3. As all the requirements under two existing subsidiary legislations, namely, the Merchant Shipping (Seafarers) (Provisions and Water) Regulation (Chapter 478E) and Merchant Shipping (Seafarers) (Ships' Doctors) Regulation (Chapter 478H) will be incorporated into the new Regulation, the said subsidiary legislations should be repealed.

¹ MLC requires that ships of 500 gross tonnage or over and engaged in international voyages to maintain a maritime labour certificate certifying that the working and living conditions of seafarers on the ship comply with the MLC requirements in 14 areas.

² Under the MLC, the following five types of ships are exempted:

- (i) ships engaged in fishing or similar pursuits;
- (ii) ships of traditional build, including wooden ships, such as dhows and junks;
- (iii) ships owned or operated by the Government or a State and engaged only in governmental non-commercial services;
- (iv) warships or naval auxiliaries; and
- (v) pleasure vessels not engaged in trade.

4. Moreover, the new Regulation will cover the requirements under some existing subsidiary legislations, and as such the latter will be updated in the light of the requirements under MLC and the enactment of the new Regulation. We propose to amend the following ten pieces of subsidiary legislation under the Ordinance:

Subsidiary Legislation	Major amendment
Chapter 478A, Merchant Shipping (Seafarers) (Allotments) Regulation	These regulations are applicable to all Hong Kong ships ³ . As some of the existing provisions will be set out under the new Regulation, it is necessary to provide that such existing provisions will not be applicable to ships governed by the new Regulation.
Chapter 478C, Merchant Shipping (Seafarers) (Health and Safety: General Duties) Regulation	
Chapter 478D, Merchant Shipping (Seafarers) (Hours of Work) Regulation	
Chapter 478I, Merchant Shipping (Seafarers) (Crew Accommodation) Regulation	To include the definition of “new ship” under the MLC and to set out the requirements with which the new ships are required to comply.
Chapter 478L, Merchant Shipping (Seafarers) (Crew Agreements, Lists of Crew and Discharge of Seafarers) Regulation	This regulation is applicable to all Hong Kong ships. As some of the existing provisions will be set out under the new Regulation, it is necessary to provide that such existing provisions will not be applicable to ships governed by the new Regulation.
Chapter 478O, Merchant Shipping (Seafarers) (Medical Examination) Regulation	To stipulate in detail the standards and requirements for the issuance of medical certificates under the MLC; and as some of the existing provisions will be set out under the new Regulation, such provisions should be deleted.
Chapter 478Q, Merchant Shipping (Seafarers) (Repatriation) Regulation	To set out the conditions and relevant requirements for repatriation of seafarers under the MLC.

³ Including ships engaged in international voyages and cross-boundary high speed passenger ships.

Subsidiary Legislation	Major amendment
Chapter 478R, Merchant Shipping (Seafarers) (Safety Officials and Reporting of Accidents and Dangerous Occurrences) Regulation	To include the definition of “sickness” and relevant requirements under the MLC.
Chapter 478X, Merchant Shipping (Seafarers) (Medical Stores) Regulation	To update the grades of medicine to be stocked under different conditions, as the MLC requires that necessary medicines should be stocked on board.
Chapter 478AB, Merchant Shipping (Seafarers) (Fees) Regulation	To set out the fees required for inspection of ships by the Marine Department under the new Regulation.

5. The MLC forms part of the international requirements and sets out requirements that should be implemented by local legislation. As such, we have consulted the Department of Justice and representatives of shipowners and of seafarers when drafting legislative proposals to ascertain that the legislative proposals have included all requirements that should be implemented by local legislation.

6. Besides, the MLC allows the signatories to enforce the MLC by the most suitable means in the light of local laws and practices so as to ensure its compliance by shipowners and ship managers. As such, we have convened tripartite working meetings attended by the Government, representative of seafarers and of shipowners on drafting local legislative proposals for the implementation of the MLC.

(II) Justifications for and circumstances under which “direct reference approach” should be adopted to implement provisions under international agreements

7. The adoption of the “direct reference approach” means the direct reference to provisions under international agreements in local laws so as to apply such provisions locally. However, the “direct reference approach” is not applicable for implementing all requirements under international agreements. When adopting this approach, various factors must be taken into account, including:

- (i) whether the requirements in provisions of the agreement are clear and specific enough to be capable of being given direct effect (if relevant provisions only set out principles and require a state party to legislate to implement the principles, it is not suitable to adopt “direct reference approach” for implementing these provisions);

- (ii) whether the international agreement provisions are easily accessible and read to facilitate understanding of relevant requirements by those required to comply with these provisions;
- (iii) whether the international agreement topics mainly concern a specific group of people, and whether such group of people are familiar with the requirements of the international agreement concerned;
- (iv) whether relevant requirements are applicable to all party states to the agreement and whether adoption of the “direct reference approach” is conducive to achieving uniformity in implementation of relevant requirements; and
- (v) whether the terminology of the international agreement provisions is compatible with local legislation.

8. The International Maritime Organisation and the International Labour Organisation have stipulated requirements in a number of areas, and many technical requirements are involved such as the quantities and specifications of equipment on board, and qualifications of seafarers and the relevant requirements for examinations, etc. Such technical requirements are detailed and specific (for instance, the requirements at **Annex II**), and are applicable to ports and vessels of all state parties. If Hong Kong registered ships cannot meet the relevant international requirements, they may be detained by other port authorities. Since such requirements would be updated from time to time, adoption of the “direct reference approach” would facilitate timely implementation of international standards by Hong Kong.

9. Separately, vessels must simultaneously comply with requirements under different international maritime agreements, of which the texts must be available for reference on board. Both shipowners (and their representatives) and seafarers can have easy access to contents of relevant agreements. Moreover, local and overseas industry players and port authorities are familiar with the requirements under international maritime agreements. Legislation of technical requirements by adopting the “direct reference approach” will save the efforts of comparing the differences between requirements under local laws and international maritime agreements, including differences in wording and ways of expression, thus facilitating their access to and implementation of the requirements.

10. To date, a number of marine-related legislations, including Merchant Shipping (Safety) Ordinance (Chapter 369) and Merchant Shipping (Prevention and Control of Pollution) Ordinance (Chapter 413), have been enacted by adopting the “direct reference approach”. Examples of “direct reference approach” are at **Annex III** for Members’ reference. Australia, Canada and New Zealand have also adopted the “direct reference approach” to implement requirements under international agreements, as shown in the examples at **Annex IV**.

11. As the Ordinance and its subsidiary legislation implement technical requirements under international agreements from time to time, we propose in the Bill to add the following provision to Section 134 of the Ordinance:

“Any regulations made under this Ordinance for giving effect (whether in whole or in part) to a provision of an international agreement that is applicable to Hong Kong and amended from time to time may -

- (a) set out (whether in a schedule or otherwise) or refer directly to the provision; and*
- (b) specify (whether in a schedule or otherwise) amendments, modifications or adaptations subject to which the provision is to have effect.”*

Our initial plan is to refer to those provisions concerning specifications of crew accommodation under the MLC (relevant MLC requirements are at **Annex V**) in the new Regulation using the “direct reference approach”. Contents of relevant requirements are clear and specific, and the text of the provisions is easily accessible for shipowners and seafarers. We will examine the requirements meticulously when drafting the new Regulation and ensure their suitability for the “direct reference approach” before making the proposals.

12. Any legislative proposals which seek to adopt the “direct reference approach” in the making of subsidiary legislations for the implementation of international agreements must be submitted to the Legislative Council for scrutiny. If Members have any comments on the adoption of “direct reference approach” in the draft provisions of a legislative proposal, they may raise their comments during the vetting stage. We will also keep track of the latest requirements of international agreements, and inform the industry of any update to facilitate their compliance.

**Transport and Housing Bureau
Marine Department
June 2013**

Requirements under Maritime Labour Convention, 2006 proposed to be introduced to the new Regulation under Merchant Shipping (Seafarers) Ordinance (Cap. 478)

1. Minimum age (Regulation 1.1)

1.1 The age of a seafarer working on board a Hong Kong ship shall not be less than 17 years.

1.2 Seafarers under the age of 18 shall not engage in night work except in the following limited circumstances :

(a) the effective training of the seafarers concerned, in accordance with established programmes and schedules, would be impaired; or

(b) the specific nature of the duty or a recognized training programme requires that the seafarers covered by the exception perform duties at night and that the work will not be detrimental to their health or well-being.

Night shall cover a period of at least nine hours, starting no later than midnight and ending no earlier than 5 am.

1.3 The employment, engagement or work of seafarers under the age of 18 on board a Hong Kong ship shall be prohibited where the work involved in the handling of materials which are likely to jeopardize their health or safety.

1.4 Seafarers under the age of 18 shall not be allowed to carry out any type of work prescribed in below unless they are trained, and provided with appropriate supervision and instruction. These types of work are :

(a) the lifting, moving or carrying of heavy loads or objects;

(b) entry into boilers, tanks and cofferdams;

(c) exposure to harmful noise and vibration levels;

(d) operating hoisting and other power machinery and tools, or acting as signalers to operators of such equipment;

(e) handling mooring or tow lines or anchoring equipment;

(f) rigging;

- (g) work aloft or on deck in heavy weather;
- (h) nightwatch duties;
- (i) servicing of electrical equipment;
- (j) exposure to potentially harmful materials, or harmful physical agents such as dangerous or toxic substances and ionizing radiations;
- (k) the cleaning of catering machinery; and
- (l) the handling or taking charge of ships' boats.

1.5 Seafarers under the age of 18 shall not work in the following hazardous areas:

- working in high-pressure atmospheres, i.e. the risks from pressure and decompression such as diving;
- working in ships' hospital or taking care of patients on board;
- working involving high electrical voltage (over 1,000 voltage);
- exposure to shocks, low frequency vibration, for example, working in fast rescue craft, may be associated with back pain and other spinal disorders.

2. Medical certification (Regulation 1.2)

2.1 Every seafarer employed on board Hong Kong ships shall be in possession of a valid medical fitness certificate attesting that s/he is medically fit to perform the duties s/he is to carry out.

2.2 The medical examination and certificate shall comply with the Schedule in Cap. 478O.

2.3 The medical fitness certificate shall be issued by a qualified medical practitioner or, in the case of a certificate solely concerning eyesight, by a qualified medical practitioner or in the case of a certificate solely concerning eyesight or a qualified optometrist. A qualified medical practitioner for the issue of a medical certificate means a medical practitioner registered under Cap.161 and who is also listed in the Gazette published by the Director as an approved medical practitioner under section 18 of Cap.478O, whilst a qualified medical practitioner for the issue of a certificate solely concerning eyesight means a medical practitioner registered under Cap.161. A qualified

optometrist means the one registered under Cap.359. The Director also accepts medical fitness certificates issued by medical practitioners under STCW Convention 1978, as amended from time to time, or certificates concerning eyesight by optometrists, of a country mutually recognized with Hong Kong under the STCW Convention, or by another State Party to ILO Convention concerning the Medical Examination of Seafarers, attesting to the holder's medical fitness for duty. Medical practitioners and optometrists must enjoy full professional independence in exercising their professional judgement. Medical fitness certificate referred herein can also be the one issued by the medical review panel under regulation 11(5)(a) and (b) of Cap.478O.

- 2.4 Seafarers that have been refused a certificate or have had a limitation imposed on their ability to work, in particular with respect to time, field of work or trading area, shall be given the opportunity to have a further examination by another independent medical practitioner, or optometrist if concerning eyesight only. A seafarer that has been refused a certificate may also apply to the Superintendent for a medical review according to Cap.478O s.11.
- 2.5 Each medical fitness certificate shall state in particular that :
- (a) the hearing and sight of the seafarer concerned, and the colour vision in the case of a seafarer to be employed in capacities where fitness for the work to be performed is liable to be affected by defective colour vision, are all satisfactory; and
 - (b) the seafarer concerned is not suffering from any medical condition likely to be aggravated by service at sea or to render the seafarer unfit for such service or to endanger the health of other persons on board.
- 2.6 A medical fitness certificate issued shall specify the period, commencing with the date of the medical examination, for which the certificate shall remain valid, subject to the following maximum periods :
- (a) in respect of a seafarer under 18 years of age, 1 year;
 - (b) in respect of a seafarer 18 years of age and under 55 years of age, 2 years;
 - (c) in respect of a seafarer 55 years of age and over, 1 year;

- (d) in respect of a seafarer serving or intending to serve on bulk chemical carriers, 1 year.
 - (e) colour vision test is valid for no more than 6 years.
- 2.7 Shipowners shall apply to the Director in urgent cases to allow a seafarer to work without a valid medical fitness certificate until the next port of call where the seafarer can obtain a medical fitness certificate from a qualified medical practitioner, provided that the period of permission granted does not exceed 3 months and the seafarer concerned is in possession of an expired medical fitness certificate of recent date.
- 2.8 If the period of validity of a medical fitness certificate expires in the course of a voyage, the certificate shall continue in force until the next port of call where the seafarer can obtain a medical fitness certificate from a qualified medical practitioner, provided that the period shall not exceeding 3 months from the date of expiry of such certificate.
- 2.9 Medical fitness certificates for seafarers shall as a minimum be provided in English for Hong Kong ships.

3. Qualifications of Seafarers (Regulation 1.3)

- 3.1 Seafarers shall not work on a Hong Kong ship unless they are certified as competent to perform their duties.
- 3.2 Seafarers shall not be permitted to work on a Hong Kong ship unless they have successfully completed the trainings required by Cap. 478 and its subsidiary legislation.
- 3.3 All officers and ratings on board Hong Kong ships shall comply with the provisions of Cap. 478 and its subsidiary legislation. .

4. Seafarers' crew agreements (Regulation 2.1)

- 4.1 The terms and conditions for employment of a seafarer shall be set out or referred to in a clear written legally enforceable crew agreement and shall be consistent with the requirements stated in this item.
- 4.2 All seafarers employed for working on board Hong Kong ships shall

have a crew agreement signed by both the seafarer and the shipowner or a representative of the shipowner providing them with decent working and living conditions on board the ship as required by this Schedule.

- 4.3 Shipowners shall provide seafarers signing a crew agreement an opportunity to examine and seek advice on the agreement before signing, as well as such other facilities as are necessary to ensure that they have freely entered into an agreement with a sufficient understanding of their rights and responsibilities.
- 4.4 The shipowner and seafarer concerned with the agreement shall each have a signed original of the crew agreement.
- 4.5 Shipowners shall provide seafarers, including the ship's master, clear information to the conditions of seafarers' employment, and such information, including a copy of the crew agreement shall be provided or available for authorized officers for review, including those authorities in ports to be visited.
- 4.6 Shipowners shall provide each seafarer a document containing a record of their employment on board ship. The document shall contain sufficient information, with a translation in English, to facilitate the acquisition of further work or to satisfy the sea-service requirements for upgrading or promotion.
- 4.7 The document of record of employment shall not contain any statement as to the quality of the seafarers' work or as to their wages. An Employment Registration Book issued to a Hong Kong registered seafarer in accordance with Cap.478U or a seafarers' discharge book for seafarers other than Hong Kong registered seafarers working on board Hong Kong ships shall satisfy this requirement.
- 4.8 The crew agreement shall at least contain the following particulars:
- (a) the seafarer's full name, date of birth or age, and birthplace;
 - (b) the shipowner's name and address;
 - (c) the place where and date when the crew agreement is entered into;
 - (d) the capacity in which the seafarer is to be employed;
 - (e) the amount of the seafarer's wages or, where applicable, the formula used for calculating them;

- (f) the amount of paid annual leave or, where applicable, the formula used for calculating it;
- (g) the termination of the agreement and the conditions thereof, including:
 - (i) if the agreement has been made for an indefinite period, the conditions entitling either party to terminate it, as well as the required notice period, which shall not be less for the shipowner than for the seafarer;
 - (ii) if the agreement has been made for a definite period, the date fixed for its expiry; and
 - (iii) if the agreement has been made for a voyage, the port of destination and the time which has to expire after arrival before the seafarer should be discharged;
- (h) the health and social security protection benefits to be provided to the seafarer by the shipowner;
- (i) the seafarer's entitlement to repatriation;

4.9 The minimum notice period to be given by the seafarers and shipowners for the early termination of a crew agreement shall not be shorter than seven days.

4.10 Shipowners shall allow seafarers to terminate the crew agreement at shorter notice or without notice without penalty for compassionate or other urgent reason.

4.11 Where the language of the crew agreement and any applicable agreement is not in English, the following shall also be available in English:

- (a) a copy of a standard form of the agreement; and
- (b) the portions of any applicable agreement that are subject to a port State inspection.

The requirement for an English copy shall not apply to Hong Kong ships not engaging in international voyage.

4.12 The following provisions stipulating "Shipowners' liabilities" shall be included in the crew agreement:

- (a) shipowners shall bear the costs for seafarers working on Hong Kong ships in respect of sickness and injury of the seafarers occurring between the date of commencing duty and the date

upon which they are deemed duly repatriated, or arising from their employment between those dates;

- (b) shipowners shall provide financial security to assure compensation in the event of the death or long-term disability of seafarers due to an occupational injury, illness or hazard, as set out in the seafarers' crew agreement;
- (c) shipowners shall defray the expense of medical care, including medical treatment and the supply of the necessary medicines and therapeutic appliances, and board and lodging away from home until the sick or injured seafarer has recovered, or until the sickness or incapacity has been declared of a permanent character;
- (d) shipowners shall pay the cost of burial expenses in the case of death occurring on board or ashore during the period of engagement; and
- (e) shipowners shall take measures for safeguarding property left on board by sick, injured or deceased seafarers and for returning it to them or to their next of kin.

4.13 The following provisions for "Entitlement to leave" shall be included in the crew agreement as :

- (a) Seafarers shall be granted shore leave to benefit their health and well-being and with the operational requirements of their positions.
- (b) The annual leave with pay entitlement shall be calculated on the basis of a minimum of 2.5 calendar days per month of employment. The length of service includes the period of traveling to join the ship and the period of his repatriation from abroad to his proper return port. Justified absences from work shall not be considered as annual leave.
- (c) Any agreement to forgo the minimum annual leave with pay shall not be allowed.

5. Use of any licensed or certified or regulated private recruitment and placement service (Regulation 1.4)

5.1 Shipowners who employ Hong Kong registered seafarers to work on board Hong Kong ships shall comply with the requirements of Part VI and Part VII of Cap.478.

5.2 Shipowners who use seafarer recruitment and placement services that are based in countries or territories in which the Convention does not apply for the employment of seafarers to work on board Hong Kong ships shall use the recruitment and placement services which conform to the following requirements :

- (a) not using means, mechanisms or lists intended to prevent or deter seafarers from gaining employment for which they are qualified;
- (b) no fees or other charges for seafarer recruitment or placement or for providing employment to seafarers are borne directly or indirectly, in whole or in part, by seafarers, other than the cost of the seafarer obtaining a national statutory medical certificate, the national seafarer's book and a passport or other similar personal travel documents, not including, however, the cost of visas, which shall be borne by the shipowner;
- (c) the recruitment and placement services maintain an up-to-date register of all seafarers recruited or placed through them;
- (d) the recruitment and placement services inform the seafarers of their rights and duties under their employment agreements prior to or in the process of engagement and that proper arrangements are made for seafarers to examine their employment agreements before and after they are signed and for them to receive a copy of the agreements;
- (e) the recruitment and placement services have verified that seafarers recruited or placed by them are qualified and hold the documents necessary for the job concerned, and that the seafarers' employment agreements are in accordance with Hong Kong's requirements in item 4 of this Schedule;
- (f) the recruitment and placement services have made sure, as far as practicable, that the shipowner has the means to protect seafarers from being stranded in a foreign port;
- (g) the recruitment and placement services have examined and

responded to any complaint concerning their activities and advise the Authority of Hong Kong of any unresolved complaint; and

- (h) the recruitment and placement services have established a system of protection, by way of insurance or an equivalent appropriate measure, to compensate seafarers for monetary loss that they may incur as a result of the failure of a recruitment and placement service or the relevant shipowner under the seafarers' employment agreement to meet its obligation to them.

6. Hours of rest (Regulation 2.3)

6.1 Shipowners shall implement the normal working hours' standard for seafarers on the basis of an eight-hour day with one day of rest per week and rest on public holidays.

6.2 Shipowners shall provide every position of seafarers on board Hong Kong ships with the minimum number of hours of rest which shall not be less than :

- (i) ten hours in any 24-hour period; and
- (ii) 77 hours in any seven-day period.

This minimum number of hours of rest applies to all seafarers on board.

Hours of rest – means time outside hours of works; this term does not include short breaks.

6.3 Shipowner may divide the hours of rest into no more than two periods, one of which shall be at least six hours in length, and the interval between consecutive periods of rest shall not exceed 14 hours.

6.4 Shipowner shall arrange emergency drills in a manner that minimizes the disturbance of rest periods and does not induce fatigue. Seafarers shall have adequate compensatory rest period if normal period of rest is disturbed by call-outs to work. Seafarers concerned shall have sufficient rest.

6.5 A table for the shipboard working arrangement shall be posted on board a Hong Kong ship. The table shall cover every position and shall contain at least:

- (a) the schedule of service at sea and service in port; and
- (b) the minimum hours of rest.

This table, in the working language of the ship and in English, shall be placed in an easily accessible place. The Director may specify any form of the table if deemed appropriate.

- 6.6 Records of seafarers' daily hours of rest, in the working language of the ship and in English shall be maintained to allow monitoring of compliance with provisions under the above paragraph 6.2 to 6.5. The seafarers shall be given a copy of the records pertaining to them which shall be endorsed by the master, or a person authorized by the master, and by the seafarers.
- 6.7 The master of a Hong Kong ship shall have the right to require a seafarer to perform any hours of work necessary for the immediate safety of the ship, person on board or cargo, or for the purpose of giving assistance to other ships or persons in distress at sea. Accordingly, the master may suspend the schedule of hours of rest and require a seafarer to perform any hours of work necessary until the normal situation has been restored. As soon as practicable after the normal situation has been restored, any seafarers who have performed work in a scheduled rest period shall be provided with an adequate period of rest by the master.
- 6.8 Shipowners and master of a Hong Kong ship shall comply with the following provisions for all young seafarers under the age of 18 :
 - (a) at sea and in port -
 - (i) working hours shall not exceed eight hours per day and 40 hours per week and overtime shall be worked only where unavoidable for safety reasons;
 - (ii) sufficient time shall be allowed for all meals, and a break of at least one hour for the main meal of the day shall be assured; and
 - (iii) a 15-minute rest period as soon as possible following each two hours of continuous work shall be allowed.
 - (b) Exceptionally, the provisions of sub-paragraph (a) above need not be applied if :
 - (i) they are impracticable for young seafarers in the deck,

engine room and catering departments assigned to watchkeeping duties or working on a rostered shiftwork system; or

- (ii) the effective training of young seafarers in accordance with established programmes and schedules would be impaired.
- (c) Such exceptional situations shall be recorded, with reasons, and signed by the master.
- (d) Sub-paragraph (a) above does not exempt young seafarers from the general obligation on all seafarers to work during any emergency as provided for in paragraph 6.7 of this item.

6.9 Those watchkeeping seafarers and those whose duties involve designated safety, prevention of pollution and security duties shall be provided by the shipowners with a rest period of not less than:

- (a) a minimum of 10 hours of rest in any 24-hour period; and
- (b) 77 hours in any 7-day period.

The hours of rest may be divided into no more than two periods, one of which shall be at least 6 hours in length, and the intervals between consecutive periods of rest shall not exceed 14 hours.

In order to ensure a continued safe operation of Hong Kong ships in exceptional conditions, certain exceptions from the above requirements for the rest periods are allowed provided that the rest period is not less than 70 hours in any 7-day period. These exceptions are :

- (i) Exceptions from the weekly rest period provided for in item 6.9(b) above shall not be allowed for more than two consecutive weeks. The intervals between two periods of exceptions on board shall not be less than twice the duration of the exception.
- (ii) The hours of rest provided for in item 6.9(a) may be divided into no more than three periods, one of which shall be at least 6 hours in length and neither of the other two periods shall be less than one hour in length. The intervals between consecutive periods of rest shall not exceed 14 hours. Exceptions shall not extend beyond two 24-hour periods in any 7-day period.

7. Manning levels for Hong Kong ships (Regulation 2.7)

- 7.1 Without prejudice to section 13 of Cap.478J, shipowners shall place a sufficient number of seafarers on board a Hong Kong ship to ensure that the ship is operated safely, efficiently and with due regard to security under all conditions. The ship shall be manned by seafarers that is adequate, in terms of size and qualifications, to ensure the safety and security of the ship and its personnel, under all operating conditions, in accordance with the minimum safe manning certificate (MSM Certificate) issued by the Marine Department.

8. Accommodation (Regulation 3.1)

- 8.1 A Hong Kong ship constructed on or after the date when the Convention comes into effect in Hong Kong shall comply with the following minimum requirements for on-board accommodation and recreational facilities:

8.1.1 Requirements on accommodation -

- (a) there shall be adequate headroom in all seafarer accommodation; the minimum permitted headroom in all seafarer accommodation where full and free movement is necessary shall be not less than 203 centimetres; The Authority may permit some limited reduction in headroom in any space, or part of any space, in such accommodation where it is satisfied that such reduction:
 - (i) is reasonable; and
 - (ii) will not result in discomfort to the seafarers;
- (b) the accommodation shall be adequately insulated as :
 - (i) external bulkheads of sleeping rooms and mess rooms shall be adequately insulated. All machinery casings and all boundary bulkheads of galleys and other spaces in which heat is produced shall be adequately insulated where there is a possibility of resulting heat effects in adjoining accommodation or passageways. Measures shall also be taken to provide protection from heat effects of steam or hot-water service pipes or both.
 - (ii) sleeping rooms, mess rooms, recreation rooms and alleyways

in the accommodation space shall be adequately insulated to prevent condensation or overheating.

- (iii) the bulkhead surfaces and deckheads shall be of material with a surface easily kept clean. No form of construction likely to harbour vermin shall be used.
 - (iv) the bulkhead surfaces and deckheads in sleeping rooms and mess rooms shall be capable of being easily kept clean and light in colour with a durable, nontoxic finish.
 - (v) the decks in all seafarer accommodation shall be of approved material and construction and shall provide a non-slip surface impervious to damp and easily kept clean.
 - (vi) where the floorings are made of composite materials, the joints with the sides shall be profiled to avoid crevices.
- (c) in ships other than passenger ships, as defined in Regulation 2(e) and (f) of the International Convention for the Safety of Life at Sea, 1974, as amended (the “SOLAS Convention”), sleeping rooms shall be situated above the load line amidships or aft, except that in exceptional cases, where the size, type or intended service of the ship renders any other location impracticable, sleeping rooms may be located in the fore part of the ship, but in no case forward of the collision bulkhead;
- (d) in passenger ships, and in special ships constructed in compliance with the *IMO Code of Safety for Special Purpose Ships, 1983*, as amended (hereinafter called “special purpose ships”), the Authority may, on condition that satisfactory arrangements are made for lighting and ventilation, permit the location of sleeping rooms below the load line, but in no case shall they be located immediately beneath working alleyways;
- (e) there shall be no direct openings into sleeping rooms from cargo and machinery spaces or from galleys, storerooms, drying rooms or communal sanitary areas; that part of a bulkhead separating such places from sleeping rooms and external bulkheads shall be efficiently constructed of steel or other approved substance and be watertight and gas-tight;
- (f) the materials used to construct internal bulkheads, panelling and sheeting, floors and joinings shall be suitable for the purpose and

conducive to ensuring a healthy environment;

- (g) proper lighting and sufficient drainage shall be provided; and
- (h) accommodation and recreational and catering facilities shall meet the requirements of item 11 of this Schedule, on health and safety protection and accident prevention, with respect to preventing the risk of exposure to hazardous levels of noise and vibration and other ambient factors and chemicals on board ships, and to provide an acceptable occupational and onboard living environment for seafarers.

8.1.2 With respect to requirements for ventilation and heating:

- (a) sleeping rooms and mess rooms shall be adequately ventilated. The system of ventilation for sleeping rooms and mess rooms shall be controlled so as to maintain the air in a satisfactory condition and to ensure a sufficiency of air movement in all conditions of weather and climate with respect to the standards as stated in sections 16(2), 16(3), 16(4) and 16(7) of Cap.478I. Air-conditioning systems, whether of a centralized or individual unit type, shall be designed to: (a1) maintain the air at a satisfactory temperature and relative humidity as compared to outside air conditions, ensure a sufficiency of air changes in all air-conditioned spaces, take account of the particular characteristics of operations at sea and not produce excessive noises or vibrations; and (a2) facilitate easy cleaning and disinfection to prevent or control the spread of disease. Power for the operation of the air conditioning and other aids to ventilation shall be available at all times when seafarers are living or working on board and conditions so require. However, this power need not be provided from an emergency source.
- (b) ships, except those regularly engaged in trade of temperate climatic conditions, shall be equipped with air conditioning for seafarer accommodation, for any separate radio room and for any centralized machinery control room;
- (c) all sanitary spaces shall have ventilation to the open air, independently of any other part of the accommodation; and
- (d) adequate heat through an appropriate heating system shall be provided, except in ships exclusively on voyages in tropical

climates. The system of heating the seafarer accommodation shall be in operation at all times when seafarers are living or working on board and conditions require its use. In all ships in which a heating system is required, the heating shall be by means of hot water, warm air, electricity, steam or equivalent. However, within the accommodation area, steam shall not be used as a medium for heat transmission. The heating system shall be capable of maintaining the temperature in seafarer accommodation at a satisfactory level under normal conditions of weather and climate likely to be met within the trade in which the ship is engaged. The standard of heating shall be in accordance with section 14(1) of Cap. 478I. Radiators and other heating apparatus shall be placed and, where necessary, shielded so as to avoid risk of fire or danger or discomfort to the occupants.

8.1.3 With respect to requirements for lighting:

- (a) subject to such special arrangements as may be permitted in passenger ships, sleeping rooms and mess rooms shall be lit by natural light and provided with adequate artificial light.
- (b) In all ships, electric light shall be provided in the seafarer accommodation. If there are not two independent sources of electricity for lighting, additional lighting shall be provided by properly constructed lamps or lighting apparatus for emergency use. In sleeping rooms an electric reading lamp shall be installed at the head of each berth.
- (c) The standard of lighting shall be in accordance with section 15 of Cap. 478I.

8.1.4 When sleeping accommodation on board ships is required, the following requirements for sleeping rooms shall be applicable:

- (a) in ships other than passenger ships, an individual sleeping room shall be provided for each seafarer; in the case of ships of less than 3,000 gross tonnage or special purpose ships, exemptions from this requirement may be granted by the Authority after consultation with the Advisory Board;
- (b) separate sleeping rooms shall be provided for men and for women;
- (c) sleeping rooms shall be of adequate size and properly equipped

so as to ensure reasonable comfort and to facilitate tidiness;

- (d) a separate berth for each seafarer shall in all circumstances be provided;
- (e) the minimum inside dimensions of a berth shall be at least 198 centimetres by 80 centimetres;
- (f) in single berth seafarers' sleeping rooms the floor area shall not be less than:
 - (i) 4.5 square metres in ships of less than 3,000 gross tonnage;
 - (ii) 5.5 square metres in ships of 3,000 gross tonnage or over but less than 10,000 gross tonnage;
 - (iii) 7 square metres in ships of 10,000 gross tonnage or over;
- (g) however, in order to provide single berth sleeping rooms on ships of less than 3,000 gross tonnage, passenger ships and special purpose ships, the Authority may allow a reduced floor area;
- (h) in ships of less than 3,000 gross tonnage other than passenger ships and special purpose ships, sleeping rooms may be occupied by a maximum of two seafarers; the floor area of such sleeping rooms shall not be less than 7 square metres;
- (i) on passenger ships and special purpose ships the floor area of sleeping rooms for seafarers not performing the duties of ships' officers shall not be less than:
 - (i) 7.5 square metres in rooms accommodating two persons;
 - (ii) 11.5 square metres in rooms accommodating three persons;
 - (iii) 14.5 square metres in rooms accommodating four persons;
- (j) on special purpose ships sleeping rooms may accommodate more than four persons; the floor area of such sleeping rooms shall not be less than 3.6 square metres per person;
- (k) on ships other than passenger ships and special purpose ships, sleeping rooms for seafarers who perform the duties of ships' officers, where no private sitting room or day room is provided, the floor area per person shall not be less than:
 - (i) 7.5 square metres in ships of less than 3,000 gross tonnage;
 - (ii) 8.5 square metres in ships of 3,000 gross tonnage or over but less than 10,000 gross tonnage;

- (iii) 10 square metres in ships of 10,000 gross tonnage or over;
- (l) on passenger ships and special purpose ships the floor area for seafarers performing the duties of ships' officers where no private sitting room or day room is provided, the floor area per person for junior officers shall not be less than 7.5 square metres and for senior officers not less than 8.5 square metres; junior officers are understood to be at the operational level, and senior officers at the management level
- (m) the master, the chief engineer and the chief navigating officer shall have, in addition to their sleeping rooms, an adjoining sitting room, day room or equivalent additional space; ships of less than 3,000 gross tonnage may be exempted by the Authority from this requirement after consultation with the Advisory Board;
- (n) for each occupant, the furniture shall include a clothes locker of ample space (minimum 475 litres) and a drawer or equivalent space of not less than 56 litres shall be provided; if the drawer is incorporated in the clothes locker then the combined minimum volume of the clothes locker shall be 500 litres; it shall be fitted with a shelf and be able to be locked by the occupant so as to ensure privacy;
- (o) each sleeping room shall be provided with a table or desk, which may be of the fixed, drop-leaf or slide-out type, and with comfortable seating accommodation as necessary.
- (p) In addition to the above, the following general principles shall also be applicable:
 - (i) There shall be adequate berth arrangements on board, making it as comfortable as possible for the seafarer and any partner who may accompany the seafarer.
 - (ii) Where the size of the ship, the activity in which it is to be engaged and its layout make it reasonable and practicable, sleeping rooms shall be planned and equipped with a private bathroom, including a toilet, so as to provide reasonable comfort for the occupants and to facilitate tidiness.
 - (iii) As far as practicable, sleeping rooms of seafarers shall be so arranged that watches are separated and that no seafarers working during the day share a room with watchkeepers.

- (iv) In the case of seafarers performing the duty of petty officers there shall be no more than two persons per sleeping room.
- (v) Consideration shall be given to extending the facility referred to in the above item 8.1.4(m), to the second engineer officer when practicable.
- (vi) Space occupied by berths and lockers, chests of drawers and seats shall be included in the measurement of the floor area. Small or irregularly shaped spaces which do not add effectively to the space available for free movement and cannot be used for installing furniture shall be excluded.
- (vii) Berths shall not be arranged in tiers of more than two; in the case of berths placed along the ship's side, there shall be only a single tier where a sidelight is situated above a berth.
- (viii) The lower berth in a double tier shall be not less than 30 centimetres above the floor; the upper berth shall be placed approximately midway between the bottom of the lower berth and the lower side of the deckhead beams.
- (ix) The framework and the lee-board, if any, of a berth shall be of approved material, hard, smooth, and not likely to corrode or to harbour vermin.
- (x) If tubular frames are used for the construction of berths, they shall be completely sealed and without perforations which would give access to vermin.
- (xi) Each berth shall be fitted with a comfortable mattress with cushioning bottom or a combined cushioning mattress, including a spring bottom or a spring mattress. The mattress and cushioning material used shall be made of approved material. Stuffing of material likely to harbour vermin shall not be used.
- (xii) When one berth is placed over another, a dust-proof bottom shall be fitted beneath the bottom mattress or spring bottom of the upper berth.
- (xiii) The furniture shall be of smooth, hard material not liable to warp or corrode.
- (xiv) Sleeping rooms shall be fitted with curtains or equivalent for

the sidelights.

- (xv) Sleeping rooms shall be fitted with a mirror, small cabinets for toilet requisites, a book rack and a sufficient number of coat hooks.

8.1.5 With respect to requirements for mess rooms:

- (a) mess rooms shall be located apart from the sleeping rooms and as close as practicable to the galley; ships of less than 3,000 gross tonnage may be exempted by the Authority from this requirement after consultation with the Advisory Board.
- (b) The principles applied to mess room as stated in below shall be applied :
 - (i) Mess room facilities may be either common or separate as decided by the Authority after consultation with the Advisory Board. Where separate mess room facilities are to be provided to seafarers, then separate mess rooms shall be provided for:
 - (i-1) master and officers; and
 - (i-2) petty officers and other seafarers.
 - (ii) On ships other than passenger ships, the floor area of mess rooms for seafarers shall be not less than 1.5 square metres per person of the planned seating capacity.
 - (iii) In all ships, mess rooms shall be equipped with tables and appropriate seats, fixed or movable, sufficient to accommodate the greatest number of seafarers likely to use them at any one time.
 - (iv) There shall be available at all times when seafarers are on board :
 - (iv-1) a refrigerator, which shall be conveniently situated and of sufficient capacity for the number of persons using the mess room or mess rooms;
 - (iv-2) facilities for hot beverages; and
 - (iv-3) cool water facilities.
 - (v) Where available pantries are not accessible to mess rooms, adequate lockers for mess utensils and proper facilities for

washing utensils shall be provided.

(vi) The tops of tables and seats shall be of damp-resistant material.

8.1.6 With respect to requirements for sanitary facilities:

- (a) all seafarers shall have convenient access on the ship to sanitary facilities meeting minimum standards of health and hygiene and reasonable standards of comfort, with separate sanitary facilities being provided for men and for women;
- (b) there shall be sanitary facilities within easy access of the navigating bridge and the machinery space or near the engine room control centre; ships of less than 3,000 gross tonnage may be exempted by the Authority from this requirement after consultation with the Advisory Board;
- (c) in all ships a minimum of one toilet, one wash basin and one tub or shower or both for every six persons or less who do not have personal facilities shall be provided at a convenient location;
- (d) with the exception of passenger ships, each sleeping room shall be provided with a washbasin having hot and cold running fresh water, except where such a washbasin is situated in the private bathroom provided;
- (e) in passenger ships normally engaged on voyages of not more than four hours' duration, shipowners or master of the ship may apply to the Director for the approval of special arrangements or to a reduction in the number of facilities required; and
- (f) hot and cold running fresh water shall be available in all wash places.
- (g) In addition to the above, the following principles shall be applicable:
 - (i) Washbasins and tub baths shall be of adequate size and constructed of approved material with a smooth surface not liable to crack, flake or corrode.
 - (ii) All toilets shall be of an approved pattern and provided with an ample flush of water or with some other suitable flushing means, such as air, which are available at all times and independently controllable.

- (iii) Sanitary accommodation intended for the use of more than one person shall comply with the following:
 - (iii-1) floors shall be of approved durable material, impervious to damp, and shall be properly drained;
 - (iii-2) bulkheads shall be of steel or other approved material and shall be watertight up to at least 23 centimetres above the level of the deck;
 - (iii-3) the accommodation shall be sufficiently lit, heated and ventilated;
 - (iii-4) toilets shall be situated convenient to, but separate from, sleeping rooms and wash rooms, without direct access from the sleeping rooms or from a passage between sleeping rooms and toilets to which there is no other access; this requirement does not apply where a toilet is located in a compartment between two sleeping rooms having a total of not more than four seafarers; and
 - (iii-5) where there is more than one toilet in a compartment, they shall be sufficiently screened to ensure privacy.
- (iv) The laundry facilities provided for seafarers' use shall include:
 - (iv-1) washing machines;
 - (iv-2) drying machines or adequately heated and ventilated drying rooms; and
 - (iv-3) irons and ironing boards or their equivalent.

8.1.7 With respect to requirements for hospital accommodation :

- (a) ships carrying 15 or more seafarers and engaged in a voyage of more than three days' duration shall be provided with separate hospital accommodation to be used exclusively for medical purposes; the hospital accommodation shall, in all weathers, be easy of access, provide comfortable housing for the occupants and be conducive to their receiving prompt and proper attention.
- (b) The hospital accommodation shall be designed so as to facilitate consultation and the giving of medical first aid and to help prevent the spread of infectious diseases.

- (c) The arrangement of the entrance, berths, lighting, ventilation, heating and water supply shall be designed to ensure the comfort and facilitate the treatment of the occupants.
 - (d) Every hospital shall be provided with at least one bed for every 50 or fraction of 50 members of the crew.
 - (e) Sanitary accommodation shall be provided for the exclusive use of the occupants of the hospital accommodation, either as part of the accommodation or in close proximity thereto. Such sanitary accommodation shall comprise a minimum of one toilet, one washbasin and one tub or shower.
- 8.1.8 Appropriately situated and furnished laundry facilities shall be provided in accordance with the requirements under section 31 of Cap.478I.
- 8.1.9 All ships shall have a space or spaces on open deck to which the seafarers can have access when off duty, which are of adequate area having regard to the size of the ship and the number of seafarers on board.
- 8.1.10 All ships shall be provided with separate offices or a common ship's office for use by deck and engine departments; ships of less than 3,000 gross tonnage may be exempted by the Authority from this requirement after consultation with the Advisory Board.
- 8.1.11 Ships regularly trading to mosquito-infested ports shall be fitted with appropriate devices as required under section 37 of Cap. 478I.
- 8.1.12 Other facilities:
- Where separate facilities for engine department personnel to change their clothes are provided, they shall be:
- (a) located outside the machinery space but with easy access to it; and
 - (b) fitted with individual clothes lockers as well as with tubs or showers or both and washbasins having hot and cold running fresh water.
- 8.1.13 Bedding, mess utensils and miscellaneous provisions :
- (a) clean bedding and mess utensils shall be supplied by the shipowner to all seafarers for use on board during service on the ship, and such seafarers shall be responsible for their return at

times specified by the master and on completion of service in the ship;

- (b) bedding shall be of good quality, and plates, cups and other mess utensils shall be of approved material which can be easily cleaned; and
- (c) towels, soap and toilet paper for all seafarers shall be provided by the shipowner.

8.1.14 Prevention of noise and vibration :

- (a) Accommodation and recreational and catering facilities shall be located as far as practicable from the engines, steering gear rooms, deck winches, ventilation, heating and air-conditioning equipment and other noisy machinery and apparatus.
- (b) Acoustic insulation or other appropriate sound-absorbing materials shall be used in the construction and finishing of bulkheads, deckheads and decks within the sound-producing spaces as well as self-closing noise-isolating doors for machinery spaces.
- (c) Engine rooms and other machinery spaces shall be provided, wherever practicable, with soundproof centralized control rooms for engine-room personnel. Working spaces, such as the machine shop, shall be insulated, as far as practicable, from the general engine-room noise and measures shall be taken to reduce noise in the operation of machinery.
- (d) The limits for noise levels for working and living spaces shall be in conformity with the ILO international guidelines on exposure levels, including those in the ILO code of practice entitled *Ambient factors in the workplace*, 2001, and, where applicable, the specific protection recommended by the International Maritime Organization, and with any subsequent amending and supplementary instruments for acceptable noise levels on board ships. A copy of the applicable instruments in English or the working language of the ship shall be carried on board and shall be accessible to seafarers.
- (e) No accommodation or recreational or catering facilities shall be exposed to excessive vibration.

- 8.2 For ships constructed before the date when the Convention comes into effect in Hong Kong, shipowners shall comply with the requirements of Cap.478I.
- 8.3 Shipowners shall conduct frequent inspections, not exceeding every 7 days, on board ships, by or under the authority of the master, to ensure that seafarer accommodation is clean, decently habitable and maintained in a good state of repair. The result of each such inspection shall be recorded into ship' official log book and be available for review.
- 8.4 The Authority may, after consultation with the Advisory Board, exempt ships of less than 200 gross tonnage where it is reasonable to do so, taking account of the size of the ship and the number of persons on board, in relation to the requirements under item 8 of this Schedule:
- (a) items 8.1.2(b), 8.1.6(d) and 8.1.8; and
 - (b) items 8.1.4(f) and (h) to (l) inclusive, with respect to floor area only.

9. On-board recreational facilities (Regulation 3.1)

- 9.1 For a Hong Kong ship constructed on or after the date when the Convention comes into effect in Hong Kong, shipowners shall provide appropriate seafarers' recreational facilities, amenities and services, as adapted to meet the special needs of seafarers who must live and work on ships. In addition to the requirements relevant to recreation facilities as stated in item 8 above, other minimum requirements are:
- (a) Shipowners shall review the recreational facilities and services frequently to ensure that they are appropriate in the light of changes in the needs of seafarers resulting from technical, operational and other developments in the shipping industry.
 - (b) Furnishings for recreational facilities shall as a minimum include a bookcase and facilities for reading, writing and, where practicable, games.
 - (c) A canteen shall be provided where practicable.
 - (d) Shipowners shall provide as a minimum a television, reading materials containing vocational and other books and space for recreational activities at no cost to the seafarers. The seafarers

shall be given reasonable access to ship-to-shore telephone communications, and email and Internet facilities, where available, with any charges for the use of these services being reasonable in amount.

- (e) Every effort shall be given to ensuring that the forwarding of seafarers' mail is as reliable and expeditious as possible. Efforts shall also be considered for avoiding seafarers being required to pay additional postage when mail has to be readdressed owing to circumstances beyond their control.
- (f) Measures shall be considered to ensure, subject to any applicable laws, that whenever possible and reasonable seafarers are expeditiously granted permission to have their partners, relatives and friends as visitors on board their ship when in port. Such measures shall meet any concerns for security clearances.
- (g) Consideration shall be given to the possibility of allowing seafarers to be accompanied by their partners on occasional voyages where this is practicable and reasonable. Such partners shall carry adequate insurance cover against accident and illness; the shipowners shall give every assistance to the seafarer to effect such insurance.

9.2 For ships constructed before the date when the Convention comes into effect in Hong Kong, shipowners shall comply with the requirements of Cap.478I.

9.3 Frequent inspections, not exceeding every 7 days, shall be carried out on board ships, by or under the authority of the master, to ensure that seafarer on board recreational facilities are clean and maintained in a good state of repair. The result of each such inspection shall be recorded into ship' official log book and be available for review.

10. Food and catering (Regulation 3.2)

10.1 Shipowners shall maintain the minimum standards for food and catering be provided on board a Hong Kong ship as follows :

- (a) Shipowners shall provide food and drinking water supplies, having regard to the number of seafarers on board, their religious requirements and cultural practices as they pertain to food, and

the duration and nature of the voyage, shall be suitable in respect of quantity, nutritional value, quality and variety.

- (b) The organization and equipment of the catering department shall be such as to permit the provision to the seafarers of adequate, varied and nutritious meals prepared and served in hygienic conditions.
 - (c) Catering staff shall be properly trained or instructed for their positions.
- 10.2 Seafarers on board a Hong Kong ship shall be provided with food free of charge during the period of engagement.
- 10.3 Seafarers who are engaged as ships' cooks shall be trained, qualified and found competent.
- 10.4 The requirements in the paragraph 10.3 above shall include a completion of a training course approved or recognized by the Authority, which covers practical cookery, food and personal hygiene, food storage, stock control and environmental protection and catering health and safety. The Authority accepts ship cooks certified by the "Certification of Ships Cooks Convention, 1946" (ILO Convention No.69) issued by a Party to the Convention. The Authority also accepts ships' cooks qualified by experience when they have served as ships' cooks not less than 12 months and completed an approved top-up course.
- 10.5 The Authority allows ships operating with a prescribed manning of less than ten which, by virtue of the size of the seafarers or the trading pattern not to carry a fully qualified cook. Anyone processing food in the galley shall be trained or instructed in areas including food and personal hygiene as well as handling and storage of food on board ship.
- 10.6 Frequent documented inspections shall be carried out on board Hong Kong ships not exceeding every 7 days, by or under the authority of the master, together with a member of the seafarers employed in catering on the ship with respect to:
- (a) supplies of food and drinking water;
 - (b) all spaces and equipment used for the storage and handling of food and drinking water; and

- (c) galley and other equipment for the preparation and service of meals.

The results of each inspection carried out shall be recorded by the master in the official log book and the entry shall be signed by him and a member of the seafarers employed in catering on the ship.

- 10.7 No seafarer under the age of 18 shall be employed or engaged or work as a ship's cook on board Hong Kong ships.

11. Health and safety and accident prevention (Regulation 4.3)

- 11.1 Shipowners shall adopt, implement and promote occupational safety and health policies and programmes on Hong Kong ships, including risk evaluation as well as training and instruction of seafarers. Shipowners conducting risk evaluation in relation to management of occupational safety and health shall refer to appropriate statistical information from their ships and from general statistics provided by the Marine Department.
- 11.2 Shipowners shall provide reasonable precautions to prevent occupational accidents, injuries and diseases on board Hong Kong ships, including measures to reduce and prevent the risk of exposure to harmful levels of ambient factors and chemicals as well as the risk of injury or disease that may arise from the use of equipment and machinery on board ships.
- 11.3 The on-board occupational safety and health policies and programmes for the prevention of occupational accidents, injuries and diseases and for continuous improvement in occupational safety and health protection, involving seafarers' representatives and all other persons concerned in their implementation as set out in item 11.5 below, shall take account of preventive measures, including engineering and design control, substitution of processes and procedures for collective and individual tasks, and the use of personal protective equipment.
- 11.4 Shipowners shall provide protective equipment or other accident preventions safeguards with provisions requiring their use by seafarers. Special attention shall be paid to the safety and health of seafarers

under the age of 18.

- 11.5 Shipowners shall specify the duties of the master or a person designated by the master, or both, in the ship's occupational safety and health policies and programmes for the specific responsibility for the implementation of and compliance with such policies and programmes. Shipowners shall also specify the authority of the ship's seafarers appointed or elected as safety representatives to participate in meetings of the ship's safety committee. Such a committee shall be established on board a Hong Kong ship on which there are five or more seafarers.
- 11.6 Shipowners are required to report occupational accidents, injuries and diseases to the Superintendent and correcting unsafe conditions.
- 11.7 The contents of the on-board occupational safety and health policies and programmes shall, to the least, in compliance with sections 4, 5, 6, 7 of Cap.478C and Cap.478R.

12. On-board medical care (Regulation 4.1)

- 12.1 Shipowners shall implement measures that provide for health protection and medical care, including essential dental care, for seafarers working on board Hong Kong ships as follows:
- (a) Shipowners shall provide occupational health protection and medical care, including essential dental care, for seafarers relevant to their duties, as well as of special provisions specific to work on board a Hong Kong ship.
 - (b) Shipowners shall provide seafarers health protection and medical care as comparable as possible to that which is generally available to workers ashore, including prompt access to the necessary medicines, medical equipment and facilities for diagnosis and treatment and to medical information and expertise. Seafarers shall be allowed to visit a qualified medical doctor or dentist without delay in ports of call, where practicable.
 - (c) Medical care and health protection services while a seafarer is on board ship or landed in a foreign port shall be provided by shipowners free of charge to seafarers.
 - (d) Shipowners shall provide measures of a prevention character such as health promotion and health education programmes in

additional to the treatment of sick or injured seafarers.

- 12.2 Shipowners shall arrange a standard medical report form as approved by the Director to be used by ships' masters and relevant onshore and on-board medical personnel. The form, when completed, and its contents shall be kept confidential and shall only be used to facilitate the treatment of seafarers.
- 12.3 Shipowners shall comply with Cap.478X of the requirements for on-board hospital and medical care facilities and equipment. Medical training on Hong Kong ships for seafarers shall be in accordance with guidelines provided by the Director.
- 12.4 Shipowners shall comply with the following minimum requirements of medical care on board Hong Kong ships :
- (a) All ships shall carry medicine stores, medical equipment and medical guide in compliance with Cap.478X and subject to regular inspection by authorized officer and by shipmasters not exceeding 12 months. Notwithstanding the above, shipmasters shall comply the following requirements:
 - (i) medicines are correctly stored and directions for their uses are checked;
 - (ii) any perishable medicines have been replaced;
 - (iii) all equipment required under Cap.478X are functioning as required; and
 - (iv) the ship is carrying the "International Medical Guide for Ships", as amended, the "*Medical First Aid Guide for Use in Accidents Involving Dangerous Goods*", as amended, the "*STCW 2010 Amendment*" , as amended and the medical section of the "*International Code of Signals*", as amended.
 - (b) Any Hong Kong ship carrying 100 or more persons and ordinarily engaged on international voyages of more than three days' duration shall carry a qualified medical doctor who is responsible for providing medical care. He shall either be a medical practitioner as defined in Cap.1 or a qualified medical doctor from a country mutually recognized with Hong Kong under the STCW Convention, as amended. Shipowner of any Hong Kong ship carrying 100 or more persons and ordinarily engaged on international voyage but with voyage not more than

three days' duration shall apply to the Authority, providing with information of the conditions and nature of the voyage and the number of seafarers on board, for a decision if a qualified medical doctor is required to be carried on board.

- (c) Ships which do not carry a medical doctor shall have either at least one seafarer on board who is in charge of medical care and administering medicine as part of his regular duties or at least one seafarer on board competent to provide medical first aid. Persons in charge of medical care on board who are not medical doctors shall have satisfactorily completed training in medical care that meets the requirements as specified by the Director, including practical training and training in life-saving techniques such as intravenous therapy, which will enable the persons concerned to participate effectively in coordinated schemes for medical assistance to ships at sea, and to provide the sick or injured with a satisfactory standard of medical care during the period they are likely to remain on board. Seafarers designated to provide medical first aid shall have satisfactorily completed training in medical first aid that meets the requirements as specified by the Director which will enable such persons to take immediate, effective action in case of accidents or illnesses likely to occur on board a ship and to make use of medical advice by radio or satellite communication. Both types of designated seafarers are required to undergo, at approximately five year intervals, refresher courses to enable them to maintain and increase their knowledge and skills and to keep up-to-date with new developments.

13. On-board complaint procedures (Regulation 5.1.5)

- 13.1 All Hong Kong ships shall have on-board complaint procedures for the fair, effective and expeditious handling of seafarer complaints alleging breaches of the requirements of the Convention.
- 13.2 On board complaint procedures shall seek to resolve complaints at the lowest level possible. However, in all cases, seafarers shall have a right to complain directly to the master and, where they consider it necessary, to appropriate external authorities such as the

Superintendent or seafarers' organizations.

- 13.3 The on-board complaint procedures shall include the right of the seafarer to be accompanied or represented during the complaints procedure, as well as safeguards against the possibility of victimization of seafarers for filing complaints.
- 13.4 In addition to a copy of their crew agreement, all seafarers shall be provided with a copy of the on-board complaint procedures applicable on the ship. This shall include contact information of the Director, where different, in the seafarers' country of residence, and the name of a person or persons on board the ship who can, on a confidential basis, provide seafarers with impartial advice on their complaint and otherwise assist them in following the complaint procedures available to them on board the ship.

14. Payment of wages (Regulation 2.2)

- 14.1 All seafarers shall be paid for their work regularly and in full in accordance with their crew agreements. Payments due to seafarers working on Hong Kong ships are made at no greater than monthly intervals and in accordance with applicable crew agreement.
- 14.2 Seafarers shall be given a monthly account of the payments due and the amounts paid, including wages, additional payments and the rate of exchange used where payment has been made in a currency or at a rate different from the one agreed to.
- 14.3 Shipowners are required to take measures in accordance with section 6 of Cap. 478A to provide seafarers with a means to transmit all or part of their earnings to their families or dependants or legal beneficiaries.
- 14.4 Any charge for the service under item 14.3 shall be reasonable in amount, and the rate of currency exchange shall be at the prevailing market rate and not unfavourable to the seafarer.

CHAPTER III

Life-saving appliances and arrangements

	<i>Page</i>
Part A – General	
1 Application	199
2 Exemptions	199
3 Definitions	200
4 Evaluation, testing and approval of life-saving appliances and arrangements	201
5 Production tests	202
Part B – Requirements for ships and life-saving appliances	
SECTION I – PASSENGER SHIPS AND CARGO SHIPS	
6 Communications	203
7 Personal life-saving appliances	204
8 Muster list and emergency instructions	205
9 Operating instructions	206
10 Manning of survival craft and supervision	206
11 Survival craft muster and embarkation arrangements	206
12 Launching stations	207
13 Stowage of survival craft	207
14 Stowage of rescue boats	208
15 Stowage of marine evacuation systems	208
16 Survival craft launching and recovery arrangements	209
17 Rescue boat embarkation, launching and recovery arrangements	209
18 Line-throwing appliances	210
19 Emergency training and drills	210
20 Operational readiness, maintenance and inspections	212
SECTION II – PASSENGER SHIPS (additional requirements)	
21 Survival craft and rescue boats	215
22 Personal life-saving appliances	217
23 Survival craft and rescue boat embarkation arrangements	218
24 Stowage of survival craft	218
25 Muster stations	218
26 Additional requirements for ro-ro passenger ships	218

Chapter III: Life-saving appliances and arrangements
Contents

27	Information on passengers	220
28	Helicopter landing and pick-up areas	220
29	Decision support system for masters of passenger ships	220
30	Drills	221
SECTION III – CARGO SHIPS (additional requirements)		
31	Survival craft and rescue boats	221
32	Personal life-saving appliances	223
33	Survival craft embarkation and launching arrangements	224
SECTION IV – LIFE-SAVING APPLIANCES AND ARRANGEMENTS REQUIREMENTS		
34	[untitled]	224
SECTION V – MISCELLANEOUS		
35	Training manual and on-board training aids	224
36	Instructions for on-board maintenance	225
37	Muster list and emergency instructions	225

Part A General

Regulation 1

Application

- 1 Unless expressly provided otherwise, this chapter shall apply to ships the keels of which are laid or which are at a similar stage of construction on or after 1 July 1998.
- 2 For the purpose of this chapter the term *a similar stage of construction* means the stage at which:
 - .1 construction identifiable with a specific ship begins; and
 - .2 assembly of that ship has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is less.
- 3 For the purpose of this chapter:
 - .1 the expression *ships constructed* means “ships the keels of which are laid or which are at a similar stage of construction”;
 - .2 the expression *all ships* means ships constructed before, on or after 1 July 1998; the expressions *all passenger ships* and *all cargo ships* shall be construed accordingly;
 - .3 a cargo ship, whenever built, which is converted to a passenger ship shall be treated as a passenger ship constructed on the date on which such a conversion commences.
- 4 For ships constructed before 1 July 1998, the Administration shall:
 - .1 ensure that, subject to the provisions of paragraph 4.2, the requirements which are applicable under chapter III of the International Convention for the Safety of Life at Sea, 1974, in force prior to 1 July 1998 to new or existing ships as prescribed by that chapter are complied with; and
 - .2 ensure that when life-saving appliances or arrangements on such ships are replaced or such ships undergo repairs, alterations or modifications of a major character which involve replacement of, or any addition to, their existing life-saving appliances or arrangements, such life-saving appliances or arrangements, in so far as is reasonable and practicable, comply with the requirements of this chapter. However, if a survival craft other than an inflatable liferaft is replaced without replacing its launching appliance, or vice versa, the survival craft or launching appliance may be of the same type as that replaced.

Regulation 2

Exemptions

- 1 The Administration may, if it considers that the sheltered nature and conditions of the voyage are such as to render the application of any specific requirements of this chapter unreasonable or unnecessary, exempt from those requirements individual ships or classes of ships which, in the course of their voyage, do not proceed more than 20 miles from the nearest land.
- 2 In the case of passenger ships which are employed in special trades for the carriage of large numbers of special trade passengers, such as the pilgrim trade, the Administration, if satisfied that it is impracticable to enforce compliance with the requirements of this chapter, may exempt such ships from those requirements, provided that such ships comply fully with the provisions of:
 - .1 the rules annexed to the Special Trade Passenger Ships Agreement, 1971; and
 - .2 the rules annexed to the Protocol on Space Requirements for Special Trade Passenger Ships, 1973.

Regulation 3

Definitions

For the purpose of this chapter, unless expressly provided otherwise:

- 1 *Anti-exposure suit* is a protective suit designed for use by rescue boat crews and marine evacuation system parties.
- 2 *Certificated person* is a person who holds a certificate of proficiency in survival craft issued under the authority of, or recognized as valid by, the Administration in accordance with the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, in force; or a person who holds a certificate issued or recognized by the Administration of a State not a Party to that Convention for the same purpose as the convention certificate.
- 3 *Detection* is the determination of the location of survivors or survival craft.
- 4 *Embarkation ladder* is the ladder provided at survival craft embarkation stations to permit safe access to survival craft after launching.
- 5 *Float-free launching* is that method of launching a survival craft whereby the craft is automatically released from a sinking ship and is ready for use.
- 6 *Free-fall launching* is that method of launching a survival craft whereby the craft with its complement of persons and equipment on board is released and allowed to fall into the sea without any restraining apparatus.
- 7 *Immersion suit* is a protective suit which reduces the body heat loss of a person wearing it in cold water.
- 8 *Inflatable appliance* is an appliance which depends upon non-rigid, gas-filled chambers for buoyancy and which is normally kept uninflated until ready for use.
- 9 *Inflated appliance* is an appliance which depends upon non-rigid, gas-filled chambers for buoyancy and which is kept inflated and ready for use at all times.
- 10 *International Life-Saving Appliance (LSA) Code* (referred to as "the Code" in this chapter) means the International Life-Saving Appliance (LSA) Code adopted by the Maritime Safety Committee of the Organization by resolution MSC.48(66), as it may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter I.
- 11 *Launching appliance or arrangement* is a means of transferring a survival craft or rescue boat from its stowed position safely to the water.
- 12 *Length* is 96% of the total length on a waterline at 85% of the least moulded depth measured from the top of the keel, or the length from the fore-side of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this is measured shall be parallel to the designed waterline.
- 13 *Lightest seagoing condition* is the loading condition with the ship on even keel, without cargo, with 10% stores and fuel remaining and in the case of a passenger ship with the full number of passengers and crew and their luggage.
- 14 *Marine evacuation system* is an appliance for the rapid transfer of persons from the embarkation deck of a ship to a floating survival craft.
- 15 *Moulded depth*
 - 1 The *moulded depth* is the vertical distance measured from the top of the keel to the top of the freeboard deck beam at side. In wood and composite ships the distance is measured from the lower edge of the keel rabbet. Where the form at the lower part of the midship section is of a hollow character, or where thick garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel.

- 2 In ships having rounded gunwales, the *moulded depth* shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design.
- 3 Where the freeboard deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, the *moulded depth* shall be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part.
- 16 *Novel life-saving appliance or arrangement* is a life-saving appliance or arrangement which embodies new features not fully covered by the provisions of this chapter or the Code but which provides an equal or higher standard of safety.
- 17 *Positive stability* is the ability of a craft to return to its original position after the removal of a heeling moment.
- 18 *Recovery time* for a rescue boat is the time required to raise the boat to a position where persons on board can disembark to the deck of the ship. Recovery time includes the time required to make preparations for recovery on board the rescue boat such as passing and securing a painter, connecting the rescue boat to the launching appliance, and the time to raise the rescue boat. Recovery time does not include the time needed to lower the launching appliance into position to recover the rescue boat.
- 19 *Rescue boat* is a boat designed to rescue persons in distress and to marshal survival craft.
- 20 *Retrieval* is the safe recovery of survivors.
- 21 *Ro-ro passenger ship* means a passenger ship with ro-ro cargo spaces or special category spaces as defined in regulation II-2/3.
- 22 *Short international voyage* is an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety. Neither the distance between the last port of call in the country in which the voyage begins and the final port of destination nor the return voyage shall exceed 600 miles. The final port of destination is the last port of call in the scheduled voyage at which the ship commences its return voyage to the country in which the voyage began.
- 23 *Survival craft* is a craft capable of sustaining the lives of persons in distress from the time of abandoning the ship.
- 24 *Thermal protective aid* is a bag or suit made of waterproof material with low thermal conductance.

Regulation 4

Evaluation, testing and approval of life-saving appliances and arrangements

- 1 Except as provided in paragraphs 5 and 6, life-saving appliances and arrangements required by this chapter shall be approved by the Administration.
- 2 Before giving approval to life-saving appliances and arrangements, the Administration shall ensure that such life-saving appliances and arrangements:
- 1 are tested, to confirm that they comply with the requirements of this chapter and the Code, in accordance with the recommendations of the Organization;* or
 - 2 have successfully undergone, to the satisfaction of the Administration, tests which are substantially equivalent to those specified in those recommendations.

* Refer to the Recommendation on testing of life-saving appliances adopted by the Organization by resolution A.689(17). For life-saving appliances installed on board on or after 1 July 1999, refer to the Revised Recommendations on testing of life-saving appliances adopted by the Maritime Safety Committee of the Organization by resolution MSC.81(70).

- 3** Before giving approval to novel life-saving appliances or arrangements, the Administration shall ensure that such appliances or arrangements:
- .1** provide safety standards at least equivalent to the requirements of this chapter and the Code and have been evaluated and tested in accordance with the recommendations of the Organization;* or
 - .2** have successfully undergone, to the satisfaction of the Administration, evaluation and tests which are substantially equivalent to those recommendations.
- 4** Procedures adopted by the Administration for approval shall also include the conditions whereby approval would continue or would be withdrawn.
- 5** Before accepting life-saving appliances and arrangements that have not been previously approved by the Administration, the Administration shall be satisfied that life-saving appliances and arrangements comply with the requirements of this chapter and the Code.
- 6** Life-saving appliances required by this chapter for which detailed specifications are not included in the Code shall be to the satisfaction of the Administration.

Regulation 5 *Production tests*

The Administration shall require life-saving appliances to be subjected to such production tests as are necessary to ensure that the life-saving appliances are manufactured to the same standard as the approved prototype.

* Refer to the Code of Practice for the Evaluation, Testing and Acceptance of Prototype Novel Life-Saving Appliances and Arrangements adopted by the Organization by resolution A.520(13).

Part B
Requirements for ships and life-saving appliances
SECTION I – PASSENGER SHIPS AND CARGO SHIPS

Regulation 6
Communications

1 Paragraph 2 applies to all passenger ships and to all cargo ships of 300 gross tonnage and upwards.

2 Radio life-saving appliances

2.1 Two-way VHF radiotelephone apparatus

2.1.1 At least 3 two-way VHF radiotelephone apparatus shall be provided on every passenger ship and on every cargo ship of 500 gross tonnage and upwards. At least 2 two-way VHF radiotelephone apparatus shall be provided on every cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage. Such apparatus shall conform to performance standards not inferior to those adopted by the Organization.* If a fixed two-way VHF radiotelephone apparatus is fitted in a survival craft it shall conform to performance standards not inferior to those adopted by the Organization.*

2.1.2 Two-way VHF radiotelephone apparatus provided on board ships prior to 1 February 1992 and not complying fully with the performance standards adopted by the Organization may be accepted by the Administration until 1 February 1999 provided the Administration is satisfied that they are compatible with approved two-way VHF radiotelephone apparatus.

2.2 Radar transponders

At least one radar transponder shall be carried on each side of every passenger ship and of every cargo ship of 500 gross tonnage and upwards. At least one radar transponder shall be carried on every cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage. Such radar transponders shall conform to performance standards not inferior to those adopted by the Organization.† The radar transponders† shall be stowed in such locations that they can be rapidly placed in any survival craft other than the liferaft or liferafts required by regulation 31.1.4. Alternatively one radar transponder shall be stowed in each survival craft other than those required by regulation 31.1.4. On ships carrying at least two radar transponders and equipped with free-fall lifeboats one of the radar transponders shall be stowed in a free-fall lifeboat and the other located in the immediate vicinity of the navigation bridge so that it can be utilized on board and ready for transfer to any of the other survival craft.

3 Distress flares

Not less than 12 rocket parachute flares, complying with the requirements of section 3.1 of the Code, shall be carried and be stowed on or near the navigation bridge.

4 On-board communications and alarm systems

4.1 An emergency means comprised of either fixed or portable equipment or both shall be provided for two-way communications between emergency control stations, muster and embarkation stations and strategic positions on board.

* Refer to the Performance standards for survival craft two-way VHF radiotelephone apparatus adopted by the Organization by resolution A.809(19), as it may be amended, annex 1 or annex 2 as applicable.

† Refer to the Performance standards for survival craft radar transponders for use in search and rescue operations adopted by the Organization by resolution A.802(19), as may be amended.

‡ One of these radar transponders may be the radar transponder required by regulation IV/7.1.3.

4.2 A general emergency alarm system complying with the requirements of paragraph 7.2.1 of the Code shall be provided and shall be used for summoning passengers and crew to muster stations and to initiate the actions included in the muster list. The system shall be supplemented by either a public address system complying with the requirements of paragraph 7.2.2 of the Code or other suitable means of communication. Entertainment sound systems shall automatically be turned off when the general emergency alarm system is activated.

4.3 The general emergency alarm system shall be audible throughout all the accommodation and normal crew working spaces. On passenger ships, the system shall also be audible on all open decks.

4.4 On ships fitted with a marine evacuation system communication between the embarkation station and the platform or the survival craft shall be ensured.

5 Public address systems on passenger ships

5.1 In addition to the requirements of regulation II-2/40.5* or regulation II-2/41-2*, as appropriate, and of paragraph 4.2, all passenger ships shall be fitted with a public address system. With respect to passenger ships constructed before 1 July 1997 the requirements of paragraphs 5.2 and 5.4, subject to the provisions of paragraph 5.5, shall apply not later than the date of the first periodical survey after 1 July 1997.

5.2 The public address system shall be clearly audible above the ambient noise in all spaces, prescribed by paragraph 7.2.2.1 of the Code, and shall be provided with an override function controlled from one location on the navigation bridge and such other places on board as the Administration deems necessary, so that all emergency messages will be broadcast if any loudspeaker in the spaces concerned has been switched off, its volume has been turned down or the public address system is used for other purposes.

5.3 On passenger ships constructed on or after 1 July 1997:

- .1** the public address system shall have at least two loops which shall be sufficiently separated throughout their length and have two separate and independent amplifiers; and
- .2** the public address system and its performance standards shall be approved by the Administration having regard to the recommendations adopted by the Organization.†

5.4 The public address system shall be connected to the emergency source of electrical power required by regulation II-1/42.2.2.

5.5 Ships constructed before 1 July 1997 which are already fitted with the public address system approved by the Administration which complies substantially with those required by sections 5.2 and 5.4 and paragraph 7.2.2.1 of the Code are not required to change their system.

Regulation 7

Personal life-saving appliances

1 Lifebuoys

1.1 Lifebuoys complying with the requirements of paragraph 2.1.1 of the Code shall be:

- .1** so distributed as to be readily available on both sides of the ship and as far as practicable on all open decks extending to the ship's side; at least one shall be placed in the vicinity of the stern; and
- .2** so stowed as to be capable of being rapidly cast loose, and not permanently secured in any way.

1.2 At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline complying with the requirements of paragraph 2.1.4 of the Code equal in length to not less than twice the height at which it is stowed above the waterline in the lightest seagoing condition, or 30 m, whichever is the greater.

* These relate to the chapter II-2 in force before 1 July 2002. The equivalent for each in the amended chapter II-2 is 12.3.

† Refer to MSC/Circ.808, Recommendation on performance standards for public address systems on passenger ships, including cabling.

1.3 Not less than one half of the total number of lifebuoys shall be provided with lifebuoy self-igniting lights complying with the requirements of paragraph 2.1.2 of the Code; not less than two of these shall also be provided with lifebuoy self-activating smoke signals complying with the requirements of paragraph 2.1.3 of the Code and be capable of quick release from the navigation bridge; lifebuoys with lights and those with lights and smoke signals shall be equally distributed on both sides of the ship and shall not be the lifebuoys provided with lifelines in compliance with the requirements of paragraph 1.2.

1.4 Each lifebuoy shall be marked in block capitals of the Roman alphabet with the name and port of registry of the ship on which it is carried.

2 Lifejackets

2.1 A lifejacket complying with the requirements of paragraph 2.2.1 or 2.2.2 of the Code shall be provided for every person on board the ship and, in addition:

- .1** a number of lifejackets suitable for children equal to at least 10% of the number of passengers on board shall be provided or such greater number as may be required to provide a lifejacket for each child; and
- .2** a sufficient number of lifejackets shall be carried for persons on watch and for use at remotely located survival craft stations. The lifejackets carried for persons on watch should be stowed on the bridge, in the engine control room and at any other manned watch station.

2.2 Lifejackets shall be so placed as to be readily accessible and their position shall be plainly indicated. Where, due to the particular arrangements of the ship, the lifejackets provided in compliance with the requirements of paragraph 2.1 may become inaccessible, alternative provisions shall be made to the satisfaction of the Administration which may include an increase in the number of lifejackets to be carried.

2.3 The lifejackets used in totally enclosed lifeboats, except free-fall lifeboats, shall not impede entry into the lifeboat or seating, including operation of the seat belts in the lifeboat.

2.4 Lifejackets selected for free-fall lifeboats, and the manner in which they are carried or worn, shall not interfere with entry into the lifeboat, occupant safety or operation of the lifeboat.

3 Immersion suits and anti-exposure suits

An immersion suit, complying with the requirements of section 2.3 of the Code or an anti-exposure suit complying with section 2.4 of the Code, of an appropriate size, shall be provided for every person assigned to crew the rescue boat or assigned to the marine evacuation system party. If the ship is constantly engaged in warm climates* where, in the opinion of the Administration thermal protection is unnecessary, this protective clothing need not be carried.

Regulation 8

Muster list and emergency instructions

1 This regulation applies to all ships.

2 Clear instructions to be followed in the event of an emergency shall be provided for every person on board. In the case of passenger ships these instructions shall be drawn up in the language or languages required by the ship's flag State and in the English language.

3 Muster lists and emergency instructions complying with the requirements of regulation 37 shall be exhibited in conspicuous places throughout the ship including the navigation bridge, engine-room and crew accommodation spaces.

4 Illustrations and instructions in appropriate languages shall be posted in passenger cabins and be conspicuously displayed at muster stations and other passenger spaces to inform passengers of:

- .1** their muster station;

* Refer to MSC/Circ.1046, Guidelines for the assessment of thermal protection.

- .2 the essential actions they must take in an emergency; and
- .3 the method of donning lifejackets.

Regulation 9

Operating instructions

- 1 This regulation applies to all ships.
- 2 Posters or signs shall be provided on or in the vicinity of survival craft and their launching controls and shall:
 - .1 illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions or warnings;
 - .2 be easily seen under emergency lighting conditions; and
 - .3 use symbols in accordance with the recommendations of the Organization.*

Regulation 10

Manning of survival craft and supervision

- 1 This regulation applies to all ships.
- 2 There shall be a sufficient number of trained persons on board for mustering and assisting untrained persons.
- 3 There shall be a sufficient number of crew members, who may be deck officers or certificated persons, on board for operating the survival craft and launching arrangements required for abandonment by the total number of persons on board.
- 4 A deck officer or certificated person shall be placed in charge of each survival craft to be used. However, the Administration, having due regard to the nature of the voyage, the number of persons on board and the characteristics of the ship, may permit persons practised in the handling and operation of liferafts to be placed in charge of liferafts in lieu of persons qualified as above. A second-in-command shall also be nominated in the case of lifeboats.
- 5 The person in charge of the survival craft shall have a list of the survival craft crew and shall see that the crew under his command are acquainted with their duties. In lifeboats the second-in-command shall also have a list of the lifeboat crew.
- 6 Every motorized survival craft shall have a person assigned who is capable of operating the engine and carrying out minor adjustments.
- 7 The master shall ensure the equitable distribution of persons referred to in paragraphs 2, 3 and 4 among the ship's survival craft.

Regulation 11

Survival craft muster and embarkation arrangements

- 1 Lifeboats and liferafts for which approved launching appliances are required shall be stowed as close to accommodation and service spaces as possible.
- 2 Muster stations shall be provided close to the embarkation stations. Each muster station shall have sufficient clear deck space to accommodate all persons assigned to muster at that station, but at least 0.35 m² per person.
- 3 Muster and embarkation stations shall be readily accessible from accommodation and work areas.

* Refer to the Symbols related to life-saving appliances and arrangements adopted by the Organization by resolution A.760(18), as amended by resolution MSC.82(70).

4 Muster and embarkation stations shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate.

5 Alleyways, stairways and exits giving access to the muster and embarkation stations shall be lighted. Such lighting shall be capable of being supplied by the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate. In addition to and as part of the markings required under regulation II-2/28.1.10,* routes to muster stations shall be indicated with the muster station symbol, intended for that purpose, in accordance with the recommendations of the Organization.†

6 Davit-launched and free-fall launched survival craft muster and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.

7 An embarkation ladder complying with the requirements of paragraph 6.1.6 of the Code extending, in a single length, from the deck to the waterline in the lightest seagoing condition under all conditions of trim of up to 10° and a list of up to 20° either way shall be provided at each embarkation station or at every two adjacent embarkation stations for survival craft launched down the side of the ship. However, the Administration may permit such ladders to be replaced by approved devices to afford access to the survival craft when waterborne, provided that there shall be at least one embarkation ladder on each side of the ship. Other means of embarkation enabling descent to the water in a controlled manner may be permitted for the liferafts required by regulation 31.1.4.

8 Where necessary, means shall be provided for bringing the davit-launched survival craft against the ship's side and holding them alongside so that persons can be safely embarked.

Regulation 12

Launching stations

Launching stations shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull and so that, as far as possible, survival craft, except survival craft specially designed for free-fall launching, can be launched down the straight side of the ship. If positioned forward, they shall be located abaft the collision bulkhead in a sheltered position and, in this respect, the Administration shall give special consideration to the strength of the launching appliance.

Regulation 13

Stowage of survival craft

- 1** Each survival craft shall be stowed:
- .1** so that neither the survival craft nor its stowage arrangements will interfere with the operation of any other survival craft or rescue boat at any other launching station;
 - .2** as near the water surface as is safe and practicable and, in the case of a survival craft other than a liferaft intended for throw over board launching, in such a position that the survival craft in the embarkation position is not less than 2 m above the waterline with the ship in the fully loaded condition under unfavourable conditions of trim of up to 10° and listed up to 20° either way, or to the angle at which the ship's weather deck edge becomes submerged, whichever is less;
 - .3** in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than 5 min;
 - .4** fully equipped as required by this chapter and the Code; and
 - .5** as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion. In particular, survival craft on tankers, other than the liferafts required by regulation 31.1.4, shall not be stowed on or above a cargo tank, slop tank, or other tank containing explosive or hazardous cargoes.

* This relates to the chapter II-2 in force before 1 July 2002. The equivalent in the amended chapter II-2 is 13.3.2.5.1.

† Refer to the Symbols related to life-saving appliances and arrangements adopted by the Organization by resolution A.760(18), as amended by resolution MSC.82(70), and to the Guidelines for the evaluation, testing and application of low-location lighting on passenger ships adopted by the Organization by resolution A.752(18).

- 2 Lifeboats for lowering down the ship's side shall be stowed as far forward of the propeller as practicable. On cargo ships of 80 m in length and upwards but less than 120 m in length, each lifeboat shall be so stowed that the after end of the lifeboat is not less than the length of the lifeboat forward of the propeller. On cargo ships of 120 m in length and upwards and passenger ships of 80 m in length and upwards, each lifeboat shall be so stowed that the after end of the lifeboat is not less than 1.5 times the length of the lifeboat forward of the propeller. Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas.
- 3 Lifeboats shall be stowed attached to launching appliances.
- 4.1 Every liferaft shall be stowed with its painter permanently attached to the ship.
- 4.2 Each liferaft or group of liferafts shall be stowed with a float-free arrangement complying with the requirements of paragraph 4.1.6 of the Code so that each floats free and, if inflatable, inflates automatically when the ship sinks.
- 4.3 Liferafts shall be so stowed as to permit manual release of one raft or container at a time from their securing arrangements.
- 4.4 Paragraphs 4.1 and 4.2 do not apply to liferafts required by regulation 31.1.4.
- 5 Davit-launched liferafts shall be stowed within reach of the lifting hooks, unless some means of transfer is provided which is not rendered inoperable within the limits of trim and list prescribed in paragraph 1.2 or by ship motion or power failure.
- 6 Liferafts intended for throw-overboard launching shall be so stowed as to be readily transferable for launching on either side of the ship unless liferafts, of the aggregate capacity required by regulation 31.1 to be capable of being launched on either side, are stowed on each side of the ship.

Regulation 14

Stowage of rescue boats

Rescue boats shall be stowed:

- .1 in a state of continuous readiness for launching in not more than 5 min, and, if the inflated type, in a fully inflated condition at all times;
- .2 in a position suitable for launching and recovery;
- .3 so that neither the rescue boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station; and
- .4 if it is also a lifeboat, in compliance with the requirements of regulation 13.

Regulation 15

Stowage of marine evacuation systems

- 1 The ship's side shall not have any openings between the embarkation station of the marine evacuation system and the waterline in the lightest seagoing condition and means shall be provided to protect the system from any projections.
- 2 Marine evacuation systems shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging positions of the hull and so that, as far as practicable, the system can be launched down the straight side of the ship.
- 3 Each marine evacuation system shall be stowed so that neither the passage nor platform nor its stowage or operational arrangements will interfere with the operation of any other life-saving appliance at any other launching station.
- 4 Where appropriate, the ship shall be so arranged that the marine evacuation systems in their stowed positions are protected from damage by heavy seas.

Regulation 16

Survival craft launching and recovery arrangements

1 Unless expressly provided otherwise, launching and embarkation appliances complying with the requirements of section 6.1 of the Code shall be provided for all survival craft except those which are:

- .1 boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which have a mass of not more than 185 kg; or
- .2 boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10° and list of up to 20° either way; or
- .3 carried in excess of the survival craft for 200% of the total number of persons on board the ship and which have a mass of not more than 185 kg; or
- .4 carried in excess of the survival craft for 200% of the total number of persons on board the ship, are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10° and list of up to 20° either way; or
- .5 provided for use in conjunction with a marine evacuation system, complying with the requirements of section 6.2 of the Code and stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10° and list of up to 20° either way.

2 Each lifeboat shall be provided with an appliance which is capable of launching and recovering the lifeboat. In addition there shall be provision for hanging-off the lifeboat to free the release gear for maintenance.

3 Launching and recovery arrangements shall be such that the appliance operator on the ship is able to observe the survival craft at all times during launching and for lifeboats during recovery.

4 Only one type of release mechanism shall be used for similar survival craft carried on board the ship.

5 Preparation and handling of survival craft at any one launching station shall not interfere with the prompt preparation and handling of any other survival craft or rescue boat at any other station.

6 Falls, where used, shall be long enough for the survival craft to reach the water with the ship in its lightest seagoing condition, under unfavourable conditions of trim of up to 10° and list of up to 20° either way.

7 During preparation and launching, the survival craft, its launching appliance, and the area of water into which it is to be launched shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate.

8 Means shall be available to prevent any discharge of water onto survival craft during abandonment.

9 If there is a danger of the survival craft being damaged by the ship's stabilizer wings, means shall be available, powered by an emergency source of energy, to bring the stabilizer wings inboard; indicators operated by an emergency source of energy shall be available on the navigating bridge to show the position of the stabilizer wings.

10 If partially enclosed lifeboats complying with the requirements of section 4.5 of the Code are carried, a davit span shall be provided, fitted with not less than two lifelines of sufficient length to reach the water with the ship in its lightest seagoing condition, under unfavourable conditions of trim of up to 10° and list of up to 20° either way.

Regulation 17

Rescue boat embarkation, launching and recovery arrangements

1 The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time.

2 If the rescue boat is one of the ship's survival craft, the embarkation arrangements and launching station shall comply with the requirements of regulations 11 and 12.

3 Launching arrangements shall comply with the requirements of regulation 16. However, all rescue boats shall be capable of being launched, where necessary utilizing painters, with the ship making headway at speeds up to 5 knots in calm water.

4 Recovery time of the rescue boat shall be not more than 5 min in moderate sea conditions when loaded with its full complement of persons and equipment. If the rescue boat is also a lifeboat, this recovery time shall be possible when loaded with its lifeboat equipment and the approved rescue boat complement of at least six persons.

5 Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case. Foul weather recovery strops shall be provided for safety if heavy fall blocks constitute a danger.

Regulation 18

Line-throwing appliances

A line-throwing appliance complying with the requirements of section 7.1 of the Code shall be provided.

Regulation 19

Emergency training and drills

1 This regulation applies to all ships.

2 Familiarity with safety installations and practice musters

2.1 Every crew member with assigned emergency duties shall be familiar with these duties before the voyage begins.

2.2 On a ship engaged on a voyage where passengers are scheduled to be on board for more than 24 h, musters of the passengers shall take place within 24 h after their embarkation. Passengers shall be instructed in the use of the lifejackets and the action to take in an emergency.

2.3 Whenever new passengers embark, a passenger safety briefing shall be given immediately before sailing, or immediately after sailing. The briefing shall include the instructions required by regulations 8.2 and 8.4, and shall be made by means of an announcement, in one or more languages likely to be understood by the passengers. The announcement shall be made on the ship's public address system, or by other equivalent means likely to be heard at least by the passengers who have not yet heard it during the voyage. The briefing may be included in the muster required by paragraph 2.2 if the muster is held immediately upon departure. Information cards or posters or video programmes displayed on ships video displays may be used to supplement the briefing, but may not be used to replace the announcement.

3 Drills

3.1 Drills shall, as far as practicable, be conducted as if there were an actual emergency.

3.2 Every crew member shall participate in at least one abandon ship drill and one fire drill every month. The drills of the crew shall take place within 24 h of the ship leaving a port if more than 25% of the crew have not participated in abandon ship and fire drills on board that particular ship in the previous month. When a ship enters service for the first time, after modification of a major character or when a new crew is engaged, these drills shall be held before sailing. The Administration may accept other arrangements that are at least equivalent for those classes of ships for which this is impracticable.

3.3 *Abandon ship drill*

3.3.1 Each abandon ship drill shall include:

- 1** summoning of passengers and crew to muster stations with the alarm required by regulation 6.4.2 followed by drill announcement on the public address or other communication system and ensuring that they are made aware of the order to abandon ship;
- 2** reporting to stations and preparing for the duties described in the muster list;

- .3 checking that passengers and crew are suitably dressed;
- .4 checking that lifejackets are correctly donned;
- .5 lowering of at least one lifeboat after any necessary preparation for launching;
- .6 starting and operating the lifeboat engine;
- .7 operation of davits used for launching liferafts;
- .8 a mock search and rescue of passengers trapped in their staterooms; and
- .9 instruction in the use of radio life-saving appliances.

3.3.2 Different lifeboats shall, as far as practicable, be lowered in compliance with the requirements of paragraph 3.3.1.5 at successive drills.

3.3.3 Except as provided in paragraphs 3.3.4 and 3.3.5, each lifeboat shall be launched, and manoeuvred in the water by its assigned operating crew, at least once every three months during an abandon ship drill.

3.3.4 In the case of a lifeboat arranged for free-fall launching, at least once every three months during an abandon ship drill the crew shall board the lifeboat, properly secure themselves in their seats and commence launch procedures up to, but not including, the actual release of the lifeboat (i.e., the release hook shall not be released). The lifeboat shall then either be free-fall launched with only the required operating crew on board, or lowered into the water by means of the secondary means of launching with or without the operating crew on board. In both cases, the lifeboat shall thereafter be manoeuvred in the water by the operating crew. At intervals of not more than six months, the lifeboat shall either be launched by free fall with only the operating crew on board, or simulated launching shall be carried out in accordance with the guidelines developed by the Organization.*

3.3.5 The Administration may allow ships operating on short international voyages not to launch the lifeboats on one side if their berthing arrangements in port and their trading patterns do not permit launching of lifeboats on that side. However, all such lifeboats shall be lowered at least once every three months and launched at least annually.

3.3.6 As far as is reasonable and practicable, rescue boats other than lifeboats which are also rescue boats, shall be launched each month with their assigned crew aboard and manoeuvred in the water. In all cases this requirement shall be complied with at least once every three months.

3.3.7 If lifeboat and rescue boat launching drills are carried out with the ship making headway, such drills shall, because of the dangers involved, be practised in sheltered waters only and under the supervision of an officer experienced in such drills.†

3.3.8 If a ship is fitted with marine evacuation systems, drills shall include exercising of the procedures required for the deployment of such a system up to the point immediately preceding actual deployment of the system. This aspect of drills should be augmented by regular instruction using the on-board training aids required by regulation 35.4. Additionally every system party member shall, as far as practicable, be further trained by participation in a full deployment of a similar system into water, either on board a ship or ashore, at intervals of not longer than two years, but in no case longer than three years. This training can be associated with the deployments required by regulation 20.8.2.

3.3.9 Emergency lighting for mustering and abandonment shall be tested at each abandon ship drill.

3.4 *Fire drills*

3.4.1 Fire drills should be planned in such a way that due consideration is given to regular practice in the various emergencies that may occur depending on the type of ships and the cargo.

3.4.2 Each fire drill shall include:

- .1 reporting to stations and preparing for the duties described in the muster list required by regulation 8;

* Refer to Measures to prevent accidents with lifeboats (MSC.1/Circ.1206/Rev.1).

† Refer to the Guidelines on training for the purpose of launching lifeboats and rescue boats from ships making headway through the water adopted by the Organization by resolution A.624(15).

- .2 starting of a fire pump, using at least the two required jets of water to show that the system is in proper working order;
- .3 checking of fireman's outfit and other personal rescue equipment;
- .4 checking of relevant communication equipment;
- .5 checking the operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area; and
- .6 checking the necessary arrangements for subsequent abandoning of the ship.

3.4.3 The equipment used during drills shall immediately be brought back to its fully operational condition and any faults and defects discovered during the drills shall be remedied as soon as possible.

4 On-board training and instructions

4.1 On-board training in the use of the ship's life-saving appliances, including survival craft equipment, and in the use of the ship's fire-extinguishing appliances shall be given as soon as possible but not later than two weeks after a crew member joins the ship. However, if the crew member is on a regularly scheduled rotating assignment to the ship, such training shall be given not later than two weeks after the time of first joining the ship. Instructions in the use of the ship's fire-extinguishing appliances, life-saving appliances, and in survival at sea shall be given at the same interval as the drills. Individual instruction may cover different parts of the ship's life-saving and fire-extinguishing appliances, but all the ship's life-saving and fire-extinguishing appliances shall be covered within any period of two months.

4.2 Every crew member shall be given instructions which shall include but not necessarily be limited to:

- .1 operation and use of the ship's inflatable liferafts;
- .2 problems of hypothermia, first-aid treatment for hypothermia and other appropriate first-aid procedures;
- .3 special instructions necessary for use of the ship's life-saving appliances in severe weather and severe sea conditions; and
- .4 operation and use of fire-extinguishing appliances.

4.3 On-board training in the use of davit-launched liferafts shall take place at intervals of not more than four months on every ship fitted with such appliances. Whenever practicable this shall include the inflation and lowering of a liferaft. This liferaft may be a special liferaft intended for training purposes only, which is not part of the ship's life-saving equipment; such a special liferaft shall be conspicuously marked.

5 Records

The date when musters are held, details of abandon ship drills and fire drills, drills of other life-saving appliances and on board training shall be recorded in such log-book as may be prescribed by the Administration. If a full muster, drill or training session is not held at the appointed time, an entry shall be made in the log-book stating the circumstances and the extent of the muster, drill or training session held.

Regulation 20

Operational readiness, maintenance and inspections

1 This regulation applies to all ships. The requirements of paragraphs 3.2, 3.3 and 6.2 shall be complied with, as far as is practicable, on ships constructed before 1 July 1986.

2 Operational readiness

Before the ship leaves port and at all times during the voyage, all life-saving appliances shall be in working order and ready for immediate use.

3 Maintenance

3.1 Maintenance, testing and inspections of life-saving appliances shall be carried out based on the guidelines developed by the Organization* and in a manner having due regard to ensuring reliability of such appliances.

3.2 Instructions for on-board maintenance of life-saving appliances complying with regulation 36 shall be provided and maintenance shall be carried out accordingly.

3.3 The Administration may accept, in compliance with the requirements of paragraph 3.2, a shipboard planned maintenance programme, which includes the requirements of regulation 36.

4 Maintenance of falls

Falls used in launching shall be inspected periodically* with special regard for areas passing through sheaves, and renewed when necessary due to deterioration of the falls or at intervals of not more than 5 years, whichever is the earlier.

5 Spares and repair equipment

Spares and repair equipment shall be provided for life-saving appliances and their components which are subject to excessive wear or consumption and need to be replaced regularly.

6 Weekly inspection

The following tests and inspections shall be carried out weekly and a report of the inspection shall be entered in the log-book:

- .1 all survival craft, rescue boats and launching appliances shall be visually inspected to ensure that they are ready for use. The inspection shall include, but is not limited to, the condition of hooks, their attachment to the lifeboat and the on-load release gear being properly and completely reset;
- .2 all engines in lifeboats and rescue boats shall be run for a total period of not less than 3 minutes, provided the ambient temperature is above the minimum temperature required for starting and running the engine. During this period of time, it should be demonstrated that the gearbox and gearbox train are engaging satisfactorily. If the special characteristics of an outboard motor fitted to a rescue boat would not allow it to be run other than with its propeller submerged for a period of 3 minutes, a suitable water supply may be provided. In special cases, the Administration may waive this requirement for ships constructed before 1 July 1986;
- .3 lifeboats, except free-fall lifeboats, on cargo ships shall be moved from their stowed position, without any persons on board, to the extent necessary to demonstrate satisfactory operation of launching appliances, if weather and sea conditions so allow; and
- .4 the general emergency alarm shall be tested.

7 Monthly inspections

7.1 All lifeboats, except free-fall lifeboats, shall be turned out from their stowed position, without any persons on board if weather and sea conditions so allow.

7.2 Inspection of the life-saving appliances, including lifeboat equipment, shall be carried out monthly using the checklist required by regulation 36.1 to ensure that they are complete and in good order. A report of the inspection shall be entered in the log-book.

8 Servicing of inflatable liferafts, inflatable lifejackets, marine evacuation systems, and maintenance and repair of inflated rescue boats

8.1 Every inflatable liferaft, inflatable lifejacket, and marine evacuation system shall be serviced:

- .1 at intervals not exceeding 12 months, provided where in any case this is impracticable, the Administration may extend this period to 17 months; and

* Refer to the Measures to prevent accidents with lifeboats (MSC.1/Circ.1206/Rev.1).

- .2 at an approved servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.*

8.2 Rotational deployment of marine evacuation systems

In addition to or in conjunction with the servicing intervals of marine evacuation systems required by paragraph 8.1, each marine evacuation system should be deployed from the ship on a rotational basis at intervals to be agreed by the Administration provided that each system is to be deployed at least once every six years.

8.3 An Administration which approves new and novel inflatable liferaft arrangements pursuant to regulation 4 may allow for extended service intervals on the following conditions:

8.3.1 The new and novel liferaft arrangement has proved to maintain the same standard, as required by testing procedure, during extended service intervals.

8.3.2 The liferaft system shall be checked on board by certified personnel according to paragraph 8.1.1.

8.3.3 Service at intervals not exceeding five years shall be carried out in accordance with the recommendations of the Organization.*

8.4 All repairs and maintenance of inflated rescue boats shall be carried out in accordance with the manufacturer's instructions. Emergency repairs may be carried out on board the ship; however, permanent repairs shall be effected at an approved servicing station.

8.5 An Administration which permits extension of liferaft service intervals in accordance with paragraph 8.3 shall notify the Organization of such action in accordance with regulation I/5(b).

9 Periodic servicing of hydrostatic release units

Hydrostatic release units, other than disposable hydrostatic release units, shall be serviced:

- .1 at intervals not exceeding 12 months, provided where in any case this is impracticable, the Administration may extend this period to 17 months;† and
- .2 at a servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.

10 Marking of stowage locations

Containers, brackets, racks, and other similar stowage locations for life-saving equipment shall be marked with symbols in accordance with the recommendations of the Organization,‡ indicating the devices stowed in that location for that purpose. If more than one device is stowed in that location, the number of devices shall also be indicated.

11 Periodic servicing of launching appliances and on-load release gear

11.1 Launching appliances shall be:

- .1 maintained in accordance with instructions for on-board maintenance as required by regulation 36;
- .2 subject to a thorough examination at the annual surveys required by regulations I/7 or I/8, as applicable; and
- .3 upon completion of the examination referred to in .2 subjected to a dynamic test of the winch brake at maximum lowering speed. The load to be applied shall be the mass of the survival craft or rescue boat without persons on board, except that, at intervals not exceeding five years, the

* Refer to the Recommendation on conditions for the approval of servicing stations for inflatable liferafts adopted by the Organization by resolution A.761(18).

† Refer to MSC/Circ.955, Servicing of life-saving appliances and radiocommunication equipment under the harmonized system of survey and certification (HSSC).

‡ Refer to the Symbols related to life-saving appliances and arrangements adopted by the Organization by resolution A.760(18).

test shall be carried out with a proof load equal to 1.1 times the weight of the survival craft or rescue boat and its full complement of persons and equipment.

- 11.2** Lifeboat or rescue boat on-load release gear, including free-fall lifeboat release systems, shall be:
- .1 maintained in accordance with instructions for on-board maintenance as required by regulation 36;
 - .2 subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 by properly trained personnel familiar with the system; and
 - .3 operationally tested under a load of 1.1 times the total mass of the boat when loaded with its full complement of persons and equipment whenever the release gear is overhauled. Such overhauling and test shall be carried out at least once every five years.*
- 11.3** Davit-launched liferaft automatic release hooks shall be:
- .1 maintained in accordance with instructions for on-board maintenance as required by regulation 36;
 - .2 subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 by properly trained personnel familiar with the system; and
 - .3 operationally tested under a load of 1.1 times the total mass of the liferaft when loaded with its full complement of persons and equipment whenever the automatic release hook is overhauled. Such overhauling and test shall be carried out at least once every five years.*

SECTION II – PASSENGER SHIPS (Additional requirements)

Regulation 21

Survival craft and rescue boats

1 Survival craft

- 1.1** Passenger ships engaged on international voyages which are not short international voyages shall carry:
- .1 partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code on each side of such aggregate capacity as will accommodate not less than 50% of the total number of persons on board. The Administration may permit the substitution of lifeboats by liferafts of equivalent total capacity provided that there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37.5% of the total number of persons on board. The inflatable or rigid liferafts shall comply with the requirements of section 4.2 or 4.3 of the Code and shall be served by launching appliances equally distributed on each side of the ship; and
 - .2 in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as will accommodate at least 25% of the total number of persons on board. These liferafts shall be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of paragraph 1.1.1 or equivalent approved appliances capable of being used on both sides. However, stowage of these liferafts need not comply with the requirements of regulation 13.5.
- 1.2** Passenger ships engaged on short international voyages shall carry:
- .1 partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code of such aggregate capacity as will accommodate at least 30% of the total number of persons on board. The lifeboats shall, as far as practicable, be equally distributed on each side of the ship. In addition inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code shall be carried of such aggregate capacity that, together with the lifeboat capacity, the

* Refer to the Recommendation on testing of life-saving appliances, as adopted by the Organization by resolution A.689(17). For life-saving appliances installed on board on or after 1 July 1999, refer to the Revised Recommendations on testing of life-saving appliances, as adopted by the Maritime Safety Committee of the Organization by resolution MSC.81(70), as amended.

survival craft will accommodate the total number of persons on board. The liferafts shall be served by launching appliances equally distributed on each side of the ship; and

- .2 in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as will accommodate at least 25% of the total number of persons on board. These liferafts shall be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of paragraph 1.2.1 or equivalent approved appliances capable of being used on both sides. However, stowage of these liferafts need not comply with the requirements of regulation 13.5.

1.3 All survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 30 min from the time the abandon ship signal is given after all persons have been assembled, with lifejackets donned.

1.4 In lieu of meeting the requirements of paragraph 1.1 or 1.2, passenger ships of less than 500 gross tonnage where the total number of persons on board is less than 200, may comply with the following:

- .1 they shall carry on each side of the ship, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code and of such aggregate capacity as will accommodate the total number of persons on board;
- .2 unless the liferafts required by paragraph 1.4.1 are stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall be provided so that the total capacity available on each side will accommodate 150% of the total number of persons on board;
- .3 if the rescue boat required by paragraph 2.2 is also a partially or totally enclosed lifeboat complying with the requirements of section 4.5 or 4.6 of the Code, it may be included in the aggregate capacity required by paragraph 1.4.1, provided that the total capacity available on either side of the ship is at least 150% of the total number of persons on board; and
- .4 in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side, including those which are stowed in a position providing for easy side-to-side transfer at a single open deck level, to accommodate the total number of persons on board.

1.5 A marine evacuation system or systems complying with section 6.2 of the Code may be substituted for the equivalent capacity of liferafts and launching appliances required by paragraph 1.1.1 or 1.2.1.

2 Rescue boats

2.1 Passenger ships of 500 gross tonnage and over shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code on each side of the ship.

2.2 Passenger ships of less than 500 gross tonnage shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code.

2.3 A lifeboat may be accepted as a rescue boat provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat.

3 Marshalling of liferafts

3.1 The number of lifeboats and rescue boats that are carried on passenger ships shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than six liferafts need be marshalled by each lifeboat or rescue boat.

3.2 The number of lifeboats and rescue boats that are carried on passenger ships engaged on short international voyages shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than nine liferafts need be marshalled by each lifeboat or rescue boat.

Regulation 22

Personal life-saving appliances

1 Lifebuoys

1.1 A passenger ship shall carry not less than the number of lifebuoys complying with the requirements of regulation 7.1 and section 2.1 of the Code prescribed in the following table:

Length of ship in metres	Minimum number of lifebuoys
Under 60	8
60 and under 120	12
120 and under 180	18
180 and under 240	24
240 and over	30

1.2 Notwithstanding regulation 7.1.3, passenger ships of under 60 m in length shall carry not less than six lifebuoys provided with self-igniting lights.

2 Lifejackets

2.1 In addition to the lifejackets required by regulation 7.2, every passenger ship shall carry lifejackets for not less than 5% of the total number of persons on board. These lifejackets shall be stowed in conspicuous places on deck or at muster stations.

2.2 Where lifejackets for passengers are stowed in staterooms which are located remotely from direct routes between public spaces and muster stations, the additional lifejackets for these passengers required under regulation 7.2.2, shall be stowed either in the public spaces, the muster stations, or on direct routes between them. The lifejackets shall be stowed so that their distribution and donning does not impede orderly movement to muster stations and survival craft embarkation stations.

3 Lifejacket lights

3.1 On all passenger ships each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.

3.2 Lights fitted on lifejackets on board passenger ships prior to 1 July 1998 and not complying fully with paragraph 2.2.3 of the Code may be accepted by the Administration until the lifejacket light would normally be replaced or until the first periodical survey after 1 July 2002, whichever is the earliest.

4 Immersion suits and thermal protective aids

4.1 All passenger ships shall carry for each lifeboat on the ship at least three immersion suits complying with the requirements of section 2.3 of the Code and, in addition, a thermal protective aid complying with the requirements of section 2.5 of the Code for every person to be accommodated in the lifeboat and not provided with an immersion suit. These immersion suits and thermal protective aids need not be carried:

- .1 for persons to be accommodated in totally or partially enclosed lifeboats; or
- .2 if the ship is constantly engaged on voyages in warm climates* where, in the opinion of the Administration, they are unnecessary.

4.2 The provisions of paragraph 4.1.1 also apply to partially or totally enclosed lifeboats not complying with the requirements of section 4.5 or 4.6 of the Code, provided they are carried on ships constructed before 1 July 1986.

* Refer to MSC/Circ.1046, Guidelines for the assessment of thermal protection.

Regulation 23

Survival craft and rescue boat embarkation arrangements

- 1 On passenger ships, survival craft embarkation arrangements shall be designed for:
 - .1 all lifeboats to be boarded and launched either directly from the stowed position or from an embarkation deck but not both; and
 - .2 davit-launched liferafts to be boarded and launched from a position immediately adjacent to the stowed position or from a position to which, in compliance with the requirements of regulation 13.5, the liferaft is transferred prior to launching.
- 2 Rescue boat arrangements shall be such that the rescue boat can be boarded and launched directly from the stowed position with the number of persons assigned to crew the rescue boat on board. Notwithstanding the requirements of paragraph 1.1, if the rescue boat is also a lifeboat and the other lifeboats are boarded and launched from an embarkation deck, the arrangements shall be such that the rescue boat can also be boarded and launched from the embarkation deck.

Regulation 24

Stowage of survival craft

The stowage height of a survival craft on a passenger ship shall take into account the requirements of regulation 13.1.2, the escape provisions of regulation II-2/28,* the size of the ship, and the weather conditions likely to be encountered in its intended area of operation. For a davit-launched survival craft, the height of the davit head with the survival craft in embarkation position, shall, as far as practicable, not exceed 15 m to the waterline when the ship is in its lightest seagoing condition.

Regulation 25

Muster stations

Every passenger ship shall, in addition to complying with the requirements of regulation 11, have passenger muster stations which shall:

- .1 be in the vicinity of, and permit ready access for the passengers to, the embarkation stations unless in the same location; and
- .2 have ample room for marshalling and instruction of the passengers, but at least 0.35 m² per passenger.

Regulation 26

Additional requirements for ro-ro passenger ships

- 1 This regulation applies to all ro-ro passenger ships. Ro-ro passenger ships constructed:
 - .1 on or after 1 July 1998 shall comply with the requirements of paragraphs 2.3, 2.4, 3.1, 3.2, 3.3, 4 and 5;
 - .2 on or after 1 July 1986 and before 1 July 1998 shall comply with the requirements of paragraph 5 not later than the first periodical survey after 1 July 1998 and with the requirements of paragraphs 2.3, 2.4, 3 and 4 not later than the first periodical survey after 1 July 2000;
 - .3 before 1 July 1986 shall comply with the requirements of paragraph 5 not later than the first periodical survey after 1 July 1998 and with the requirements of paragraphs 2.1, 2.2, 2.3, 2.4, 3 and 4 not later than the first periodical survey after 1 July 2000; and
 - .4 before 1 July 2004 shall comply with the requirements of paragraph 2.5 not later than the first survey on or after that date.

* This relates to the chapter II-2 in force before 1 July 2002. The equivalent in the amended chapter II-2 is 13.

2 Liferafts

2.1 The ro-ro passenger ship's liferafts shall be served by marine evacuation systems complying with the requirements of section 6.2 of the Code or launching appliances complying with the requirements of paragraph 6.1.5 of the Code, equally distributed on each side of the ship.

2.2 Every liferaft on ro-ro passenger ships shall be provided with float-free stowage arrangements complying with the requirements of regulation 13.4.

2.3 Every liferaft on ro-ro passenger ships shall be of a type fitted with a boarding ramp complying with the requirements of paragraph 4.2.4.1 or 4.3.4.1 of the Code, as appropriate.

2.4 Every liferaft on ro-ro passenger ships shall either be automatically self-righting or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, the ship shall carry automatically self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50% of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats. Every such liferaft shall be approved by the Administration having regard to the recommendations adopted by the Organization.*

2.5 Liferafts carried on ro-ro passenger ships shall be fitted with a radar transponder[†] in the ratio of one transponder for every four liferafts. The transponder shall be mounted inside the liferaft so its antenna is more than one metre above the sea level when the liferaft is deployed, except that for canopied reversible liferafts the transponder shall be so arranged as to be readily accessed and erected by survivors. Each transponder shall be arranged to be manually erected when the liferaft is deployed. Containers of liferafts fitted with transponders shall be clearly marked.

3 Fast rescue boats

3.1 At least one of the rescue boats on a ro-ro passenger ship shall be a fast rescue boat complying with section 5.1.4 of the Code.*

3.2 Each fast rescue boat shall be served by a suitable launching appliance complying with section 6.1.7 of the Code.*

3.3 At least two crews of each fast rescue boat shall be trained and drilled regularly having regard to the Seafarers Training, Certification and Watchkeeping (STCW) Code and recommendations adopted by the Organization,[‡] including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsizing.

3.4 In the case where the arrangement or size of a ro-ro passenger ship, constructed before 1 July 1997, is such as to prevent the installation of the fast rescue boat required by paragraph 3.1, the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a rescue boat or, in the case of ships constructed prior to 1 July 1986, boats for use in an emergency, provided that all of the following conditions are met:

- .1 the fast rescue boat installed is served by a launching appliance complying with the provisions of paragraph 3.2;
- .2 the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the lifeboat replaced; and
- .3 such liferafts are served by the existing launching appliances or marine evacuation systems.

* Refer to MSC/Circ.809, Recommendation for canopied reversible liferafts, automatically self-righting liferafts and fast rescue boats, including testing, on ro-ro passenger ships.

[†] Refer to the Performance standards for survival craft radar transponders for use in search and rescue operations, adopted by the Organization by resolution A.802(19).

[‡] Refer to the Recommendation on training requirements for crews of fast rescue boats adopted by the Organization by resolution A.771(18) and to section A-VI/2, table A-VI/2-2, "Specification of the minimum standard of competence in fast rescue boats", of the STCW Code.

4 Means of rescue*

4.1 Each ro-ro passenger ship shall be equipped with efficient means for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship.

4.2 The means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes.

4.3 If the slide of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the slide shall be equipped with handlines or ladders to aid in climbing up the slide.

5 Lifejackets

5.1 Notwithstanding the requirements of regulations 7.2 and 22.2, a sufficient number of lifejackets shall be stowed in the vicinity of the muster stations so that passengers do not have to return to their cabins to collect their lifejackets.

5.2 In ro-ro passenger ships, each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.

Regulation 27

Information on passengers

1 All persons on board all passenger ships shall be counted prior to departure.

2 Details of persons who have declared a need for special care or assistance in emergency situations shall be recorded and communicated to the master prior to departure.

3 In addition, not later than 1 January 1999, the names and gender of all persons on board, distinguishing between adults, children and infants shall be recorded for search and rescue purposes.

4 The information required by paragraphs 1, 2 and 3 shall be kept ashore and made readily available to search and rescue services when needed.

5 Administrations may exempt passenger ships from the requirements of paragraph 3, if the scheduled voyages of such ships render it impracticable for them to prepare such records.

Regulation 28

Helicopter landing and pick-up areas

1 All ro-ro passenger ships shall be provided with a helicopter pick-up area approved by the Administration having regard to the recommendations adopted by the Organization.[†]

2 Ro-ro[‡] passenger ships of 130 m in length and upwards, constructed on or after 1 July 1999, shall be fitted with a helicopter landing area approved by the Administration having regard to the recommendations adopted by the Organization.[§]

Regulation 29

Decision support system for masters of passenger ships

1 This regulation applies to all passenger ships. Passenger ships constructed before 1 July 1997 shall comply with the requirements of this regulation not later than the date of the first periodical survey after 1 July 1999.

2 In all passenger ships, a decision support system for emergency management shall be provided on the navigation bridge.

* Refer to MSC/Circ.810, Recommendation on means of rescue on ro-ro passenger ships.

† Refer to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR Manual).

‡ Refer to MSC/Circ.907, Application of SOLAS regulation III/28.2 concerning helicopter landing areas on non-ro-ro passenger ships.

§ Refer to MSC/Circ.895, Recommendation on helicopter landing areas on ro-ro passenger ships.

3 The system shall, as a minimum, consist of a printed emergency plan or plans.* All foreseeable emergency situations shall be identified in the emergency plan or plans, including, but not limited to, the following main groups of emergencies:

- .1 fire;
- .2 damage to ship;
- .3 pollution;
- .4 unlawful acts threatening the safety of the ship and the security of its passengers and crew;
- .5 personnel accidents;
- .6 cargo-related accidents; and
- .7 emergency assistance to other ships.

4 The emergency procedures established in the emergency plan or plans shall provide decision support to masters for handling any combination of emergency situations.

5 The emergency plan or plans shall have a uniform structure and be easy to use. Where applicable, the actual loading condition as calculated for the passenger ship's voyage stability shall be used for damage control purposes.

6 In addition to the printed emergency plan or plans, the Administration may also accept the use of a computer-based decision support system on the navigation bridge which provides all the information contained in the emergency plan or plans, procedures, checklists, etc., which is able to present a list of recommended actions to be carried out in foreseeable emergencies.

Regulation 30

Drills

1 This regulation applies to all passenger ships.

2 On passenger ships, an abandon ship drill and fire drill shall take place weekly. The entire crew need not be involved in every drill, but each crew member must participate in an abandon ship drill and a fire drill each month as required in regulation 19.3.2. Passengers shall be strongly encouraged to attend these drills.

SECTION III – CARGO SHIPS (Additional requirements)

Regulation 31

Survival craft and rescue boats

1 Survival craft

1.1 Cargo ships shall carry:

- .1 one or more totally enclosed lifeboats complying with the requirements of section 4.6 of the Code of such aggregate capacity on each side of the ship as will accommodate the total number of persons on board; and
- .2 in addition, one or more inflatable or rigid liferafts, complying with the requirements of section 4.2 or 4.3 of the Code, of a mass of less than 185 kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, and of such aggregate capacity as will accommodate the total number of persons on board. If the liferaft or liferafts are not of a mass of less than 185 kg and stowed

* Refer to the Guidelines for a structure of an integrated system of contingency planning for shipboard emergencies adopted by the Organization by resolution A.852(20).

in a position providing for easy side-to-side transfer at a single open deck level, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board.

- 1.2** In lieu of meeting the requirements of paragraph 1.1, cargo ships may carry:
- .1** one or more free-fall lifeboats, complying with the requirements of section 4.7 of the Code, capable of being free-fall launched over the stern of the ship of such aggregate capacity as will accommodate the total number of persons on board; and
 - .2** in addition, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code, on each side of the ship, of such aggregate capacity as will accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.
- 1.3** In lieu of meeting the requirements of paragraph 1.1 or 1.2, cargo ships of less than 85 m in length other than oil tankers, chemical tankers and gas carriers, may comply with the following:
- .1** they shall carry on each side of the ship, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code and of such aggregate capacity as will accommodate the total number of persons on board;
 - .2** unless the liferafts required by paragraph 1.3.1 are of a mass of less than 185 kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall be provided so that the total capacity available on each side will accommodate 150% of the total number of persons on board;
 - .3** if the rescue boat required by paragraph 2 is also a totally enclosed lifeboat complying with the requirements of section 4.6 of the Code, it may be included in the aggregate capacity required by paragraph 1.3.1, provided that the total capacity available on either side of the ship is at least 150% of the total number of persons on board; and
 - .4** in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side, including any which are of a mass of less than 185 kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, to accommodate the total number of persons on board.
- 1.4** Cargo ships where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the closest survival craft is more than 100 m shall carry, in addition to the liferafts required by paragraphs 1.1.2 and 1.2.2, a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable. Such liferaft or liferafts may be securely fastened so as to permit manual release and need not be of the type which can be launched from an approved launching device.
- 1.5** With the exception of the survival craft referred to in regulation 16.1.1, all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 10 min from the time the abandon ship signal is given.
- 1.6** Chemical tankers and gas carriers carrying cargoes emitting toxic vapours or gases* shall carry, in lieu of totally enclosed lifeboats complying with the requirements of section 4.6 of the Code, lifeboats with a self-contained air support system complying with the requirements of section 4.8 of the Code.
- 1.7** Oil tankers, chemical tankers and gas carriers carrying cargoes having a flashpoint not exceeding 60°C (closed-cup test) shall carry, in lieu of totally enclosed lifeboats complying with the requirements of section 4.6 of the Code, fire-protected lifeboats complying with the requirements of section 4.9 of the Code.
- 1.8** Notwithstanding the requirements of paragraph 1.1, bulk carriers as defined in regulation IX/1.6 constructed on or after 1 July 2006 shall comply with the requirements of paragraph 1.2.

* Refer to the products for which emergency escape respiratory protection is required in chapter 17 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted by the Maritime Safety Committee by resolution MSC.4(48), as amended, and in chapter 19 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted by the Maritime Safety Committee by resolution MSC.5(48), as amended.

2 Rescue boats

Cargo ships shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code. A lifeboat may be accepted as a rescue boat, provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat.

3 In addition to their lifeboats, all cargo ships constructed before 1 July 1986 shall carry:

- .1 one or more liferafts capable of being launched on either side of the ship and of such aggregate capacity as will accommodate the total number of persons on board. The liferaft or liferafts shall be equipped with a lashing or an equivalent means of securing the liferaft which will automatically release it from a sinking ship; and
- .2 where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the closest survival craft is more than 100 m, in addition to the liferafts required by paragraph 3.1, a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable. Notwithstanding the requirements of paragraph 3.1, such liferaft or liferafts may be securely fastened so as to permit manual release.

Regulation 32

Personal life-saving appliances

1 Lifebuoys

1.1 Cargo ships shall carry not less than the number of lifebuoys complying with the requirements of regulation 7.1 and section 2.1 of the Code prescribed in the following table:

Length of ship in metres	Minimum number of lifebuoys
Under 100	8
100 and under 150	10
150 and under 200	12
200 and over	14

1.2 Self-igniting lights for lifebuoys on tankers required by regulation 7.1.3 shall be of an electric battery type.

2 Lifejacket lights

2.1 This paragraph applies to all cargo ships.

2.2 On cargo ships, each lifejacket shall be fitted with a lifejacket light complying with the requirements of paragraph 2.2.3 of the Code.

2.3 Lights fitted on lifejackets on board cargo ships prior to 1 July 1998 and not complying fully with paragraph 2.2.3 of the Code may be accepted by the Administration until the lifejacket light would normally be replaced or until the first periodical survey after 1 July 2001, whichever is the earliest.

3 Immersion suits

3.1 This paragraph applies to all cargo ships. However, with respect to cargo ships constructed before 1 July 2006, paragraphs 3.2 to 3.5 shall be complied with not later than the first safety equipment survey on or after 1 July 2006.

3.2 An immersion suit of an appropriate size complying with the requirements of section 2.3 of the Code shall be provided for every person on board the ship. However, for ships other than bulk carriers, as defined in regulation IX/1, these immersion suits need not be required if the ship is constantly engaged on voyages in warm climates* where, in the opinion of the Administration, immersion suits are unnecessary.

* Refer to the Guidelines for the assessment of thermal protection (MSC/Circ.1046).

3.3 If a ship has any watch or work stations which are located remotely from the place or places where immersion suits are normally stowed, including remotely located survival craft carried in accordance with regulation 31.1.4, additional immersion suits of an appropriate size shall be provided at these locations for the number of persons normally on watch or working at those locations at any time.

3.4 Immersion suits shall be so placed as to be readily accessible and their position shall be plainly indicated.

3.5 The immersion suits required by this regulation may be used to comply with the requirements of regulation 7.3.

Regulation 33

Survival craft embarkation and launching arrangements

1 Cargo ship survival craft embarkation arrangements shall be so designed that lifeboats can be boarded and launched directly from the stowed position and davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which the liferaft is transferred prior to launching in compliance with the requirements of regulation 13.5.

2 On cargo ships of 20,000 gross tonnage and upwards, lifeboats shall be capable of being launched, where necessary utilizing painters, with the ship making headway at speeds up to 5 knots in calm water.

SECTION IV – LIFE-SAVING APPLIANCES AND ARRANGEMENTS REQUIREMENTS

Regulation 34

All life-saving appliances and arrangements shall comply with the applicable requirements of the Code.

SECTION V – MISCELLANEOUS

Regulation 35

Training manual and on-board training aids

1 This regulation applies to all ships.

2 A training manual complying with the requirements of paragraph 3 shall be provided in each crew mess room and recreation room or in each crew cabin.

3 The training manual, which may comprise several volumes, shall contain instructions and information, in easily understood terms illustrated wherever possible, on the life-saving appliances provided in the ship and on the best methods of survival. Any part of such information may be provided in the form of audio-visual aids in lieu of the manual. The following shall be explained in detail:

- .1** donning of lifejackets, immersion suits and anti-exposure suits, as appropriate;
- .2** muster at the assigned stations;
- .3** boarding, launching, and clearing the survival craft and rescue boats, including, where applicable, use of marine evacuation systems;
- .4** method of launching from within the survival craft;
- .5** release from launching appliances;
- .6** methods and use of devices for protection in launching areas, where appropriate;
- .7** illumination in launching areas;
- .8** use of all survival equipment;
- .9** use of all detection equipment;

- .10 with the assistance of illustrations, the use of radio life-saving appliances;
 - .11 use of drogues;
 - .12 use of engine and accessories;
 - .13 recovery of survival craft and rescue boats including stowage and securing;
 - .14 hazards of exposure and the need for warm clothing;
 - .15 best use of the survival craft facilities in order to survive;
 - .16 methods of retrieval, including the use of helicopter rescue gear (slings, baskets, stretchers), breeches-buoy and shore life-saving apparatus and ship's line-throwing apparatus;
 - .17 all other functions contained in the muster list and emergency instructions; and
 - .18 instructions for emergency repair of the life-saving appliances.
- 4 Every ship fitted with a marine evacuation system shall be provided with on-board training aids in the use of the system.
- 5 The training manual shall be written in the working language of the ship.

Regulation 36

Instructions for on-board maintenance

Instructions for on-board maintenance of life-saving appliances shall be easily understood, illustrated wherever possible, and, as appropriate, shall include the following for each appliance:

- .1 a checklist for use when carrying out the inspections required by regulation 20.7;
- .2 maintenance and repair instructions;
- .3 schedule of periodic maintenance;
- .4 diagram of lubrication points with the recommended lubricants;
- .5 list of replaceable parts;
- .6 list of sources of spare parts; and
- .7 log for records of inspections and maintenance.

Regulation 37

Muster list and emergency instructions

- 1 The muster list shall specify details of the general emergency alarm and public address system prescribed by section 7.2 of the Code and also action to be taken by crew and passengers when this alarm is sounded. The muster list shall also specify how the order to abandon ship will be given.
- 2 Each passenger ship shall have procedures in place for locating and rescuing passengers trapped in their staterooms.
- 3 The muster list shall show the duties assigned to the different members of the crew including:
- .1 closing of the watertight doors, fire doors, valves, scuppers, sidescuttles, skylights, portholes and other similar openings in the ship;
 - .2 equipping of the survival craft and other life-saving appliances;
 - .3 preparation and launching of survival craft;
 - .4 general preparations of other life-saving appliances;
 - .5 muster of passengers;
 - .6 use of communication equipment;

- .7 manning of fire parties assigned to deal with fires; and
 - .8 special duties assigned in respect to the use of fire-fighting equipment and installations.
- 4 The muster list shall specify which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use.
- 5 The muster list shall specify substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions.
- 6 The muster list shall show the duties assigned to members of the crew in relation to passengers in case of emergency. These duties shall include:
- .1 warning the passengers;
 - .2 seeing that they are suitably clad and have donned their lifejackets correctly;
 - .3 assembling passengers at muster stations;
 - .4 keeping order in the passageways and on the stairways and generally controlling the movements of the passengers; and
 - .5 ensuring that a supply of blankets is taken to the survival craft.
- 7 The muster list shall be prepared before the ship proceeds to sea. After the muster list has been prepared, if any change takes place in the crew which necessitates an alteration in the muster list, the master shall either revise the list or prepare a new list.
- 8 The format of the muster list used on passenger ships shall be approved.

Example of Legislation Having Adopted “Direct Reference Approach”

Merchant Shipping (Safety) Ordinance (Chapter 369) (the Ordinance)

Relevant provision in the Ordinance – Section 112B of the Ordinance

For the purposes of giving effect (whether in whole or in part) to any provisions of any international agreement applicable to Hong Kong (including the Convention [i.e. [International Convention for the Safety of Life at Sea](#)] and the Convention of 1966 referred to in Part IV) -

- (a) as in force from time to time; and
- (b) so far as the agreement relates to any matter for or in relation to which provision may be made by regulations made under this Ordinance, any such regulations may -
 - (i) set out or refer directly to those provisions (whether in a Schedule or otherwise); and
 - (ii) specify (whether in a Schedule or otherwise) amendments, modifications or adaptations subject to which those provisions shall have effect.

Example 1

Provision referring to an international convention – Section 4(1) & (2) of Merchant Shipping (Safety) (Life-Saving Appliances) Regulation (Chapter 369AY)

- (1) Every ship to which this Regulation applies shall be provided with, except where otherwise stated in this Regulation, the life-saving appliances and arrangements as described in Chapter III of the Convention.
- (2) Every ship to which this Regulation applies shall comply with the life-saving appliances and arrangements requirements as described in Chapter III of the Convention or, where such requirements are modified or varied in this Regulation, with such requirements so modified or varied.

The international convention provisions being referred – Chapter III of International Convention for the Safety of Life at Sea

Relevant provisions are at **Annex II**.

Example 2

Provision referring to an international convention – Section 5(2) of Merchant Shipping (Safety) (Musters and Training) Regulations (Chapter 369AI)

- (2) A ship built on or after 1 July 1998 shall be provided with a general emergency alarm system complying with the requirements of section 7.2.1 of the LSA Code

The international convention provisions being referred – Section 7.2.1 of the International Life-Saving Appliance Code

7.2.1 General emergency alarm system

- 7.2.1.1 The general emergency alarm system shall be capable of sounding the general emergency alarm signal consisting of seven or more short blasts followed by one long blast on the ship's whistle or siren and additionally on an electrically operated bell or klaxon or other equivalent warning system, which shall be powered from the ship's main supply and the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate. The system shall be capable of operation from the navigation bridge and, except for the ship's whistle, also from other strategic points. The system shall be audible throughout all the accommodation and normal crew working spaces. The alarm shall continue to function after it has been triggered until it is manually turned off or is temporarily interrupted by a message on the public address system.
- 7.2.1.2 The minimum sound pressure levels for the emergency alarm tone in interior and exterior spaces shall be 80 dB (A) and at least 10 dB (A) above ambient noise levels existing during normal equipment operation with the ship underway in moderate weather. In cabins without a loudspeaker installation, an electronic alarm transducer shall be installed, e.g. a buzzer or similar.
- 7.2.1.3 The sound pressure levels at the sleeping position in cabins and in cabin bathrooms shall be at least 75 dB (A) and at least 10 dB (A) above ambient noise levels.

**Examples of adoption of “direct reference approach” in legislation by
Australia, Canada and New Zealand**

**Marine Orders - Part 41: Carriage of Dangerous Goods, Issue 10
(Order no.11/2009) (Australia)**

7. For the purposes of subsection 253A (2) of the Navigation Act, the requirements with which dangerous goods and the packing, stowing and carriage of such goods must comply are the following:
- (a) Parts A and D of Chapter VII of SOLAS;
 - (b) the provisions of the IMDG Code that are expressed by the Code to be mandatory;
 - (c) the Appendix to this Part; and
 - (d) for goods to which the INF Code applies, the INF Code (International Convention for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-level Radioactive Wastes on Board ships).

Marine Transportation Security Regulations (Canada)

- 803 (1) The Minister shall approve a course as an approved training course if the Minister determines that it
- (a) provides training to participants to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/5 of the STCW Code (Seafarers' Training, Certification and Watchkeeping Code) and the knowledge listed in column 2 of that table; and
 - (b) uses the criteria listed in column 4 of table A-VI/5 of the STCW Code to evaluate the participants' competence to undertake the tasks, duties and responsibilities referred to in paragraph (a).

Maritime Rules (New Zealand)

24A Appendix 1 - 1.5

- (1) (a) Dangerous goods must be loaded, stowed, and secured safely and appropriately in accordance with the nature of the goods and the requirements of volume I, Section 14 of the IMDG Code (International Maritime Dangerous Goods Code).
- (b) Incompatible dangerous goods must be segregated from one another as required by Volume I, Section 15 of the IMDG Code.

40B.34 The owner of a ship must ensure that the ship is permanently marked with the ship's identification number in accordance with regulation 3 of Chapter XI-1 of SOLAS (International Convention for the Safety of Life at Sea) (as amended in December 2002).

Proposed Requirements under the Maritime Labour Convention, 2006 (MLC) to be Legislated in the New Regulation Using “Direct Reference Approach”

Standard A3.1 of the MLC – Accommodation and recreational facilities

6. With respect to general requirements for accommodation:
- (a) there shall be adequate headroom in all seafarer accommodation; the minimum permitted headroom in all seafarer accommodation where full and free movement is necessary shall be not less than 203 centimetres; the competent authority may permit some limited reduction in headroom in any space, or part of any space, in such accommodation where it is satisfied that such reduction:
 - (i) is reasonable; and
 - (ii) will not result in discomfort to the seafarers;
 - (b) the accommodation shall be adequately insulated;
 - (c) in ships other than passenger ships, as defined in Regulation 2(e) and (f) of the International Convention for the Safety of Life at Sea, 1974, as amended (the “SOLAS Convention”), sleeping rooms shall be situated above the load line amidships or aft, except that in exceptional cases, where the size, type or intended service of the ship renders any other location impracticable, sleeping rooms may be located in the fore part of the ship, but in no case forward of the collision bulkhead;
 - (d) in passenger ships, and in special ships constructed in compliance with the IMO Code of Safety for Special Purpose Ships, 1983, and subsequent versions (hereinafter called “special purpose ships”), the competent authority may, on condition that satisfactory arrangements are made for lighting and ventilation, permit the location of sleeping rooms below the load line, but in no case shall they be located immediately beneath working alleyways;
 - (e) there shall be no direct openings into sleeping rooms from cargo and machinery spaces or from galleys, storerooms, drying rooms or communal sanitary areas; that part of a bulkhead separating such places from sleeping rooms and external bulkheads shall be efficiently constructed of steel or other approved substance and be watertight and gas-tight;
 - (f) the materials used to construct internal bulkheads, panelling and sheeting, floors and joinings shall be suitable for the purpose and

- conductive to ensuring a healthy environment;
- (g) proper lighting and sufficient drainage shall be provided; and
 - (h) accommodation and recreational and catering facilities shall meet the requirements in Regulation 4.3, and the related provisions in the Code, on health and safety protection and accident prevention, with respect to preventing the risk of exposure to hazardous levels of noise and vibration and other ambient factors and chemicals on board ships, and to provide an acceptable occupational and onboard living environment for seafarers.
7. With respect to requirements for ventilation and heating:
- (a) sleeping rooms and mess rooms shall be adequately ventilated;
 - (b) ships, except those regularly engaged in trade where temperate climatic conditions do not require this, shall be equipped with air conditioning for seafarer accommodation, for any separate radio room and for any centralized machinery control room;
 - (c) all sanitary spaces shall have ventilation to the open air, independently of any other part of the accommodation; and
 - (d) adequate heat through an appropriate heating system shall be provided, except in ships exclusively on voyages in tropical climates.
8. With respect to requirements for lighting, subject to such special arrangements as may be permitted in passenger ships, sleeping rooms and mess rooms shall be lit by natural light and provided with adequate artificial light.
9. When sleeping accommodation on board ships is required, the following requirements for sleeping rooms apply:
- (a) in ships other than passenger ships, an individual sleeping room shall be provided for each seafarer; in the case of ships of less than 3,000 gross tonnage or special purpose ships, exemptions from this requirement may be granted by the competent authority after consultation with the shipowners' and seafarers' organizations concerned;
 - (b) separate sleeping rooms shall be provided for men and for women;
 - (c) sleeping rooms shall be of adequate size and properly equipped so as to ensure reasonable comfort and to facilitate tidiness;
 - (d) a separate berth for each seafarer shall in all circumstances be provided;
 - (e) the minimum inside dimensions of a berth shall be at least 198 centimetres by 80 centimetres;
 - (f) in single berth seafarers' sleeping rooms the floor area shall not be less than:

- (i) 4.5 square metres in ships of less than 3,000 gross tonnage;
 - (ii) 5.5 square metres in ships of 3,000 gross tonnage or over but less than 10,000 gross tonnage;
 - (iii) 7 square metres in ships of 10,000 gross tonnage or over;
- (g) however, in order to provide single berth sleeping rooms on ships of less than 3,000 gross tonnage, passenger ships and special purpose ships, the competent authority may allow a reduced floor area;
- (h) in ships of less than 3,000 gross tonnage other than passenger ships and special purpose ships, sleeping rooms may be occupied by a maximum of two seafarers; the floor area of such sleeping rooms shall not be less than 7 square metres;
- (i) on passenger ships and special purpose ships the floor area of sleeping rooms for seafarers not performing the duties of ships' officers shall not be less than:
- (i) 7.5 square metres in rooms accommodating two persons;
 - (ii) 11.5 square metres in rooms accommodating three persons;
 - (iii) 14.5 square metres in rooms accommodating four persons;
- (j) on special purpose ships sleeping rooms may accommodate more than four persons; the floor area of such sleeping rooms shall not be less than 3.6 square metres per person;
- (k) on ships other than passenger ships and special purpose ships, sleeping rooms for seafarers who perform the duties of ships' officers, where no private sitting room or day room is provided, the floor area per person shall not be less than:
- (i) 7.5 square metres in ships of less than 3,000 gross tonnage;
 - (ii) 8.5 square metres in ships of 3,000 gross tonnage or over but less than 10,000 gross tonnage;
 - (iii) 10 square metres in ships of 10,000 gross tonnage or over;
- (l) on passenger ships and special purpose ships the floor area for seafarers performing the duties of ships' officers where no private sitting room or day room is provided, the floor area per person for junior officers shall not be less than 7.5 square metres and for senior officers not less than 8.5 square metres; junior officers are understood to be at the operational level, and senior officers at the management level;
- (m) the master, the chief engineer and the chief navigating officer shall have, in addition to their sleeping rooms, an adjoining sitting room, day room or equivalent additional space; ships of less than 3,000 gross tonnage may be exempted by the competent authority from this requirement after consultation with the shipowners' and seafarers' organizations concerned;

- (n) for each occupant, the furniture shall include a clothes locker of ample space (minimum 475 litres) and a drawer or equivalent space of not less than 56 litres; if the drawer is incorporated in the clothes locker then the combined minimum volume of the clothes locker shall be 500 litres; it shall be fitted with a shelf and be able to be locked by the occupant so as to ensure privacy;
 - (o) each sleeping room shall be provided with a table or desk, which may be of the fixed, drop-leaf or slide-out type, and with comfortable seating accommodation as necessary.
10. With respect to requirements for mess rooms:
- (a) mess rooms shall be located apart from the sleeping rooms and as close as practicable to the galley; ships of less than 3,000 gross tonnage may be exempted by the competent authority from this requirement after consultation with the shipowners' and seafarers' organizations concerned; and
 - (b) mess rooms shall be of adequate size and comfort and properly furnished and equipped (including ongoing facilities for refreshment), taking account of the number of seafarers likely to use them at any one time; provision shall be made for separate or common mess room facilities as appropriate.
11. With respect to requirements for sanitary facilities:
- (a) all seafarers shall have convenient access on the ship to sanitary facilities meeting minimum standards of health and hygiene and reasonable standards of comfort, with separate sanitary facilities being provided for men and for women;
 - (b) there shall be sanitary facilities within easy access of the navigating bridge and the machinery space or near the engine room control centre; ships of less than 3,000 gross tonnage may be exempted by the competent authority from this requirement after consultation with the shipowners' and seafarers' organizations concerned;
 - (c) in all ships a minimum of one toilet, one wash basin and one tub or shower or both for every six persons or less who do not have personal facilities shall be provided at a convenient location;
 - (d) with the exception of passenger ships, each sleeping room shall be provided with a washbasin having hot and cold running fresh water, except where such a washbasin is situated in the private bathroom provided;
 - (e) in passenger ships normally engaged on voyages of not more than four hours' duration, consideration may be given by the competent authority to special arrangements or to a reduction in the number of facilities required; and

- (f) hot and cold running fresh water shall be available in all wash places.
12. With respect to requirements for hospital accommodation, ships carrying 15 or more seafarers and engaged in a voyage of more than three days' duration shall provide separate hospital accommodation to be used exclusively for medical purposes; the competent authority may relax this requirement for ships engaged in coastal trade; in approving on-board hospital accommodation, the competent authority shall ensure that the accommodation will, in all weathers, be easy of access, provide comfortable housing for the occupants and be conducive to their receiving prompt and proper attention.
 13. Appropriately situated and furnished laundry facilities shall be available.
 14. All ships shall have a space or spaces on open deck to which the seafarers can have access when off duty, which are of adequate area having regard to the size of the ship and the number of seafarers on board.
 15. All ships shall be provided with separate offices or a common ship's office for use by deck and engine departments; ships of less than 3,000 gross tonnage may be exempted by the competent authority from this requirement after consultation with the shipowners' and seafarers' organizations concerned.
 16. Ships regularly trading to mosquito-infested ports shall be fitted with appropriate devices as required by the competent authority.
 17. Appropriate seafarers' recreational facilities, amenities and services, as adapted to meet the special needs of seafarers who must live and work on ships, shall be provided on board for the benefit of all seafarers, taking into account Regulation 4.3 and the associated Code provisions on health and safety protection and accident prevention.