

L.N. 31 of 2004

**MERCHANT SHIPPING ACT
(CAP. 234)**

Merchant Shipping (Crew Accommodation) Regulations, 2004

IN exercise of the powers conferred by articles 148 & 374 of the Merchant Shipping Act, the Minister for Transport and Communications has made the following regulations: —

Citation and
commencement.

1. (1) The title of these regulations is the Merchant Shipping (Crew Accommodation) Regulations, 2004.

(2) These regulations shall come into force on the 1st March, 2004.

(3) These regulations prescribe the accommodation (including hospital accommodation) to be provided for the Master, officers and the crew of a ship to which these regulations apply.

Interpretation.

2. In these regulations and in the schedules to these regulations, unless the context otherwise requires —

Cap. 234.

“Act” means the Merchant Shipping Act;

“appropriate inspector” means a person so charged in terms of article 154 of the Act;

“approved” means approved by the Registrar-General;

“the certifying authority” means any person authorised by the Minister for the purpose of these regulations and includes a surveyor of ships appointed in terms of article 367 of the Act and organisations or bodies of surveyors authorised by the Minister in that behalf;

“complaint” means any information or report submitted by a member of the crew, a professional body, an association, a trade union or, generally, any person with an interest in the

safety of the ship, including an interest in safety or health hazards to its crew;

“gross tonnage” in relation to a ship, means the gross tonnage as determined in accordance with the provisions of regulations made under article 81 of the Act;

“existing ship” means a ship that is not a new ship;

“new ship” means a ship the keel of which is laid or which is at a similar stage of construction on or after the 10th January, 2003;

“officer” means a person other than a Master holding a certificate of competence issued or recognised and endorsed in terms of the Merchant Shipping (Training and Certification) Regulations, 2001 in the capacity of chief mate or officer in charge of navigational watch or chief engineer officer or second engineer officer or officer in charge of engineering watch or a person holding a GMDSS certificate issued or recognised and endorsed in terms of the Wireless Telegraphy (Certificates of Operators) Regulations, 1999;

“other crew” means a member of the crew other than a Master and an officer and includes a rating;

“similar stage of construction” means the stage at which:

- (i) construction identifiable with a specific ship begins; and
- (ii) assembly of that ship has commenced comprising at least 50 tonnes or one percent of the estimated mass of all structural material whichever is the less.

Application.

3. (1) These regulations shall not apply to —

- (a) fishing vessels; and
- (b) pleasure yachts.

(2) Subject to sub-regulation (1) hereof, —

(a) these regulations other than regulation 12 hereof apply to sea going ships of 500 gross tonnage or more, registered or

to be registered as Maltese ships under Part II or Part II A of the Act; and

(b) regulation 13 hereof applies to non-Maltese sea-going ships of 500 tonnage or more when in a Maltese port:

Provided that these regulations other than regulation 12 hereof shall, whenever reasonable and practicable, as determined by the Registrar General, also apply to sea-going ships of between 200 and 500 gross tonnage, registered or to be registered as Maltese ships under Part II or Part II A of the Act.

Plans of ship.

4. (1) Every person to whose order a ship to which these regulations apply is being constructed shall:

(a) before the construction of the ship commences, submit for approval to the certifying authority a plan of the ship, on a scale not smaller than 1 in 200, showing the proposed location and general arrangement of the crew accommodation; and

(b) before the construction of any part of the crew accommodation is commenced, submit for approval to the certifying authority, plans of the proposed accommodation, on a scale not smaller than 1 in 50, showing clearly and in detail the purpose for which each space in the crew accommodation is to be used, the proposed disposition of furniture and fittings, the proposed arrangements for ventilation, lighting and heating, and the sanitary arrangements.

(2) The owner of a ship to which these regulations apply shall, before any reconstruction or alteration of the ship's crew accommodation is carried out, submit for approval to the certifying authority plans of the proposed crew accommodation as reconstructed or altered as the case may be, on a scale not smaller than 1 in 50, showing clearly and in detail the purpose for which each space in the crew accommodation is to be used, the proposed disposition of furniture and fittings, the proposed arrangements for ventilation, lighting and heating, and the sanitary arrangements:

Provided that if the crew accommodation is reconstructed or altered at a place outside Malta in consequence of any emergency or any accident to the ship, the relative plans shall be submitted for approval to the certifying authority as soon as practicable.

Requirements for existing ships.

5. The crew accommodation of an existing ship to which these regulations apply shall comply with the requirements laid down in schedule I to these regulations.

Requirements for new ships.

6. The crew accommodation of a new ship to which these regulations apply shall comply with the requirements laid down in schedule II to these regulations.

Use of crew accommodation.

7. Subject to sub-regulation 8 (17), no part of the crew accommodation provided under these regulations is to be appropriated for use by passengers.

Hospital accommodation.

8. (1) Every ship to which these regulations apply carrying a crew of fifteen or more persons and engaged in a voyage of more than three days' duration, shall be provided with separate hospital accommodation:

Provided that the Registrar-General may authorize alternative arrangements in respect of ships engaged in coastal trade.

(2) In every other ship to which these regulations apply (except one in which all officers and other crew have separate sleeping rooms) a suitable room shall be appropriated for use, in case of need, as a temporary hospital.

(3) Hospital accommodation, whether permanent or temporary, shall be marked as such and shall not be used for any purpose other than the medical purposes.

(4) Every hospital, whether permanent or temporary, shall be so situated that it is as quiet and comfortable as possible and is readily accessible in all weather –

(a) from the sleeping room of the member of the crew who is, and is employed as, a duly qualified doctor or a qualified nurse; or

if no such doctor or nurse is carried, from the master's accommodation or from the accommodation provided for the person in charge of the patients.

(5) The minimum width of the entrance to any permanent hospital shall, where practicable, be 760 millimetres and every hospital, whether permanent or temporary, shall be so situated and arranged that a stretcher can be easily carried into it with a person lying on the stretcher.

(6) Every permanent hospital shall be provided with at least one berth for every 50, or fraction of 50, members of the crew.

(7) At least one berth in every permanent hospital shall be a single-tier berth and shall, wherever practicable, be so placed that it is accessible from both sides and from the foot.

(8) If double-tier berths are provided in a hospital, the upper-tier shall be either hinged or removable.

(9) Berths in permanent hospitals shall comply with the requirements of paragraphs 13.1 to 13.10 of Schedule II to these regulations.

(10) All side-scuttles and windows in a permanent hospital, and all skylights therein which are exposed to the direct rays of the sun shall be provided with curtains or blinds.

(11) Every permanent hospital, even if served by an air conditioning system or a mechanical ventilation system, shall be provided with a natural system of inlet and exhaust ventilation to the open air independent of any ventilators provided for other parts of the ship.

(12) Unless otherwise provided in this regulation, hospital accommodation shall comply with the requirements of paragraphs 9.1 to 11.8 of Schedule I to these regulations with regard to ventilation, heating and lighting.

(13) A suitable locker, a water bottle, a tumbler, and an electric bell push communicating with the sleeping room of the doctor, nurse or the person in charge of the patient, shall be provided for each berth in the hospital accommodation and shall be within reach of that berth.

(14) The hospital accommodation shall be provided with a clothes locker, an adequate number of seats and a bed pan.

(15) A wash basin with cold and hot water laid on to it shall be fitted in every permanent hospital or in washing accommodation in the hospital.

(16) A water closet provided with the items specified in paragraph 17.9 of Schedule II to these regulations shall be fitted in every permanent hospital either in a separate closet or in washing accommodation in the hospital.

(17) In passenger ships, the hospital may be provided to serve both crew and passengers.

Medical Cabinet

9. (1) A locked cabinet or a locked container suitable for storing medicines and the medical stores, which the ship is required by regulations made under article 152 of the Act to carry for the crew, shall be well ventilated and fitted in a place in the crew area for the ship which –

- (a) is always dry;
- (b) is readily accessible from (but not sited in) the permanent or temporary hospital; and
- (c) is not subject to abnormal heat

(2) Where a medical cabinet is fitted it shall be provided with the following –

- (a) an outer door with an efficient lock;
- (b) where controlled drugs are to be stored, an inner cupboard fitted with a door and a lock which cannot be opened by the same key as the lock to the outer door; and
- (c) a dispensing counter with a surface that can be easily kept clean

(3) Where a medical cabinet is fitted it shall be lit by an electric light (which may be inside or immediately outside it) which enables the contents to be clearly seen.

Maintenance and inspection of crew accommodation.

10. (1) The crew and hospital accommodation shall be maintained in a clean and habitable condition and all equipment and installations required by these regulations shall be maintained in good working order.

(2) Every part of the crew accommodation, except store rooms, shall be kept free from stores and other property not belonging to or provided for the use of persons for whom that part of the accommodation is appropriated.

(3) The master of the ship or the officer appointed by the master for the purpose shall inspect every part of the crew and hospital accommodation at intervals not exceeding seven days and

shall be accompanied on the inspection by at least one member of the crew.

(4) The master of the ship or the officer appointed by the master for the purpose of inspecting the crew and hospital accommodation shall cause to be entered in the ship's official log book a record of -

(a) the date and time of the inspection;

(b) the names and ranks and of the persons making the inspection;
and

(c) the particulars of any respect in which the crew and hospital accommodation or any part of it was found by any of the persons making the inspection not to comply with these regulations.

Survey, inspection
and other measures
in respect of Maltese
ships.

11. (1) The crew and hospital accommodation of a Maltese ship to which these regulations apply shall be surveyed and inspected by the Certifying Authority whenever:

(a) The ship is [being] registered as Maltese ship under Part II or Part IIA of the Act; or

(b) all or part of the crew or hospital accommodation of a Maltese ship undergoes substantial alteration or repair,

and, the certifying authority shall, if satisfied that the ship complies with the requirements of these regulations, issue to the owner of the ship a Crew Accommodation Certificate in the approved form or as near thereto as circumstances permit, certifying that the ship is in compliance with the requirements of these regulations.

(2) The Registrar-General -

(a) may inspect a Maltese ship to which these regulations apply at any time; and

(b) shall inspect a Maltese ship to which these regulations apply whenever the Registrar-General receives a complaint, in sufficient time to prevent any delay to the ship, or obtains evidence that the ship does not comply with the requirements of these regulations; and

(i) if satisfied that the ship complies with the requirements of these regulations, the Registrar-General may issue, or may require the certifying authority to issue, a Crew Accommodation Certificate in the approved form or as near thereto as circumstances permit, certifying that the ship is in compliance with the requirements of these regulations; or

(ii) if satisfied that there has been a failure to comply in relation to that ship with the requirements of these regulations the Registrar-General may, without prejudice to the provisions of article 148(4) of the Act, take such measures as are necessary to rectify those conditions and any expenses incurred therefor shall be a charge on the ship.

(3) The Registrar-General may either on a case by case basis or through the issue of Merchant Shipping Notices:-

- (a) require Maltese ships to which these regulations apply to submit to him a Crew Accommodation Certificate in the approved form or as near thereto as circumstances permit, certifying that the ship is in compliance with the requirements of these regulations; and
- (b) prescribe the form and the maximum period of validity of any certificate required to be issued in terms of these regulations.

Inspection, detention
and other measures in
respect of non-Maltese
ships

12. (1) The Registrar-General or an appropriate inspector may inspect any ship to which this regulation applies which is not a Maltese ship when such ship is in a Maltese port, and if satisfied that the ship does not conform to the standards required of Maltese ships by these regulations, the Registrar-General may:

(a) send a report to the government of the country in which the ship is registered and a copy thereof to the Director-General of the International Labour Office; and

(b) where conditions on board are clearly hazardous to safety or health

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(i) take such measures as are necessary to rectify those conditions and any expenses incurred therefor shall be a charge on the ship;

(ii) detain the ship:

Provided that the measures specified in sub-paragraphs (i) and (ii) hereof may be taken only when the ship has called at a Maltese port in the normal course of business or for operational reasons.

(2) If the Registrar-General takes either of the measures specified in sub-regulation (1)(b) thereof, the Registrar-General shall forthwith notify the maritime Administration and the nearest maritime, consular or diplomatic representative of the flag State of the ship.

Exemptions and
equivalents

13. (1) The Registrar-General may, taking into consideration the special circumstances that apply to each individual ship and following consultation with the owner of the ship and with the *bona fide* trade union of seafarers representing the crew of the ship, allow variations from the requirements of these regulations in the case of :

(a) ferries and similar ships which are not continuously manned with one permanent crew;

(b) ships with additional repair personnel temporarily embarked for repairs;

(c) ships engaged in such short voyages which allow the crew to go home or make use of comparable facilities for part of the day; and

(d) any ship provided that the variations to be made provide corresponding advantages as a result of which the overall conditions are not less favourable than those which would result from the full application of the requirements of these regulations.

(2) The Registrar-General may, in the case of ships the manning of which has to take account, without discrimination, of the interest of the crew having different and distinctive religions and social practices, following consultation with the organisations of ship owners and with the *bona fide* trade unions of seafarers concerned and subject to agreement between the said two parties, allow variations from the requirements of paragraphs 12.3 to 12.9 (both included) and paragraphs 17.2, 17.3 and 17.5 to 17.8 (both included) of Schedule II to these regulations provided that such variations do not result in overall facilities less favourable than those which would result from the application of the requirements of the paragraphs mentioned in this sub-regulation.

SCHEDULE I

(Regulation 5)

REQUIREMENTS FOR EXISTING SHIPS

1. General requirements

1.1 Crew accommodation (except store rooms) shall:

1.1.1 whenever practicable be situated amidships or aft; but in no case shall any part of the crew accommodation (except store rooms) be situated forward of the collision bulkhead;

1.1.2 be situated wholly above the Summer Load Line (if any) marked on the ship in accordance with the provisions of rules made under article 251 of the Act:

Provided that in the case of a passenger ship the crew accommodation may, on condition that satisfactory arrangements are made for lighting and ventilation of sleeping rooms, be situated below the Summer Load Line, but in no case immediately beneath working alleyways; and

1.1.3 be arranged and constructed, and situated in such a position, as to ensure:

- (a) the protection of the crew against injury to the greatest practicable extent;
- (b) the protection of the crew accommodation against the weather and the sea;
- (c) the insulation of the crew accommodation from heat and cold;
- (d) the protection of the crew accommodation against moisture due to condensation;
- (e) the exclusion from the crew accommodation of effluvia originating in other spaces in the ship;
- (f) the exclusion from the crew accommodation, to the greatest practicable extent, of noise originating in other spaces in the ship; and
- (g) the prevention of the harbouring of vermin.

1.2 Where the crew accommodation of a ship is not normally air-conditioned, the crew accommodation shall:

1.2.1 if the ship regularly trades to mosquito-infested ports, be provided with suitable screens to sidescuttles, ventilators and doors; and

1.2.2 if the ship regularly trades to or in the tropics or the Persian Gulf, be fitted with suitable awnings.

1.3 Crew accommodation shall be accessible at all times from the open deck. An opening from an open deck into the crew accommodation shall be protected against the weather and the sea.

2. Bulkheads

2.1 Bulkheads separating a part of the crew accommodation (other than a recreation deck space) from a space used as:

- (a) a bunker,
- (b) a cargo or machinery space,
- (c) a lamp room or paint room,
- (d) a store room not forming part of the crew accommodation (other than a dry provision store room),
- (e) a chain locker; or
- (f) a cofferdam,

shall be so constructed as to be gaslight and, where necessary to protect the crew accommodation, watertight.

- 2.2 A bulkhead that separates a part of the crew accommodation from a dry provision store room (whether or not that store room forms part of the crew accommodation) shall be gastight.
- 2.3 A bulkhead that separates a part of the crew accommodation from sanitary accommodation, a laundry, a drying room, a galley or a cold store room (whether or not they form part of the crew accommodation) shall be gaslight, and shall be watertight to such height as is necessary to prevent the passage of water into the adjoining space.
- 2.4 A bulkhead that separates sanitary accommodation from another part of the crew accommodation shall, except in a doorway, be watertight to a height of not less than 230 millimetres above the floor of the sanitary accommodation.
- 2.5 Paragraphs 2.3 and 2.4 do not apply to bulkheads that separate:
 - (a) sanitary accommodation from other sanitary accommodation;
 - (b) a laundry or drying room from another laundry or drying room;
 - (c) a galley from another galley or from a pantry;
 - (d) a cold store room from another cold store room; or
 - (e) en suite sanitary accommodation from its associated sleeping room or rooms.
- 2.6 Inside paneling in the crew accommodation shall be constructed of material with a surface that can easily be kept clean.
- 2.7 Bulkheads or paneling shall not be constructed of material likely to harbour vermin.
- 2.8 Bulkheads enclosing rooms used as sleeping rooms, mess rooms or recreation rooms shall be lined on the side of those bulkheads with those rooms.

3. Openings

- 3.1 There shall not be a direct opening between the crew accommodation (other than recreation deck spaces) and spaces used as:
 - (a) a bunker;
 - (b) cargo or machinery spaces;
 - (c) lamp rooms or paint rooms;
 - (d) store rooms not forming part of the crew accommodation;
 - (e) chain lockers; or
 - (f) cofferdams.
- 3.2 Except in the case of en suite sanitary accommodation, there shall not be a direct opening between the crew accommodation (other than recreation deck spaces or passageways) and any sanitary accommodation, laundry or drying room (whether or not that sanitary accommodation, laundry or drying room forms part of the crew accommodation).
- 3.3 Paragraph 3.2 does not prohibit a direct opening between spaces forming part of the sanitary accommodation or between spaces appropriated for use as laundries or drying rooms.
- 3.4 There shall not be a direct opening between a sleeping room and a galley.

4. Pipes

- 4.1 Except where no other arrangement is reasonably practicable, steam supply and exhaust pipes to machinery shall not pass through the crew accommodation.
- 4.2 Where such pipes pass through the crew accommodation, they pass through open deck alleyways only, shall be properly encased, and in the case of supply pipes, they shall be:
 - (a) constructed of solid drawn steel or equivalent material;
 - (b) of a scantling sufficient to withstand the maximum pressure from the ship's boiler system;
 - (c) connected by faced flanges properly jointed; and
 - (d) fitted with adequate drainage arrangements.
- 4.3 Steam pipes and hot water pipes leading to radiators in or serving the crew accommodation shall be properly protected or encased.
- 4.4 Hawse pipes shall not be situated in the crew accommodation.
- 4.5 Chain pipes and ventilators to cargo spaces shall, where they pass through the crew accommodation, be watertight and gastight.
- 4.6 Hot water pipes shall be insulated where necessary for the conservation of heat or to ensure the safety of the crew.

5. Batteries

Batteries shall not be located in the crew accommodation, and precautions shall be taken to ensure that fumes from batteries do not discharge into any part of the crew accommodation.

6. Floors

- 6.1 Decks that form the floors in the crew accommodation shall be properly constructed and shall be covered with a material that:
 - (a) is impervious to water;
 - (b) is capable of being easily kept clean; and
 - (c) provides a good foothold.
- 6.2 Where a composition or other like material is used to cover a metal deck, the material shall be properly laid and the joins where the floor meets the walls shall be rounded in such a way as to avoid crevices.
- 6.3 Floors of wash places, bathrooms, shower recesses, laundries and other compartments where water is used shall be:
 - (a) covered with rubber-based or other impervious material; and
 - (b) fitted with a coving around the perimeter of the compartment.
- 6.4 The floor of a galley shall be covered with a rubber-based or other impervious material.
- 6.5 The floor of a galley shall be provided with efficient scuppers

7. Drainage

- 7.1 Efficient drainage shall be provided for the crew accommodation.

- 7.2 There shall be no drainage from any source into wash places or sanitary accommodation forming part of the crew accommodation, which shall be drained separately and independently of other spaces.

8. Surface finishes

- 8.1 The interior sides and ceilings of the crew accommodation shall be covered with enamel, paint or other suitable material, of good quality and white or light in colour.
- 8.2 Paint, varnishes and other surface materials containing nitro-cellulose shall not be used.
- 8.3 All paint, varnish or other finishes in the crew accommodation shall be capable of being easily kept clean and shall be maintained in good condition.

9. Ventilation system

- 9.1 Every enclosed space in the crew accommodation, except a cold store room, shall be provided with a ventilation system capable of maintaining the air in that space in a sufficiently pure condition for the health and comfort of the crew in all conditions of weather and climate which the ship is likely to encounter during the voyages on which she is intended to be engaged, and capable of being controlled as necessary for that purpose.
- 9.2 Without prejudice to the generality of paragraph 9.1, in all ships except those of under 500 gross tonnage, every enclosed space in the crew accommodation except a cold store room, shall, if it is not ventilated by an air conditioning system, be provided with a mechanical ventilation system capable of ensuring rates of air changes sufficient for the type of accommodation for which it is provided.
- 9.3 Ships regularly engaged on voyages in the tropics and the Persian Gulf shall, if not ventilated by an air conditioning system, be provided with both mechanical means of ventilation and electric fans:
- Provided that one only of these means need be adopted in spaces where this ensures satisfactory ventilation.
- 9.4 A supply of power adequate to operate a mechanical ventilation system or, if it is provided, an air conditioning system shall be provided. Any such system fitted shall be in operation at all times when any members of the crew are on board and the circumstances are such that ventilation by means of such system is required.
- 9.5 In every ship, every enclosed space in the crew accommodation which is not ventilated either by an air conditioning system or by a mechanical ventilation system shall be provided with a natural system of inlet and exhaust ventilation suitable to its purpose.

10. Heating system

- 10.1 Except in the case of ships engaged exclusively in the tropics and the Persian Gulf, the crew accommodation of all the ships shall be provided with a heating system which shall:
- (a) be permanently installed; and
 - (b) whose capacity shall be sufficient to maintain a room temperature of at least 20°C in all circumstances.
- 10.2 The heating system may be operated by steam, hot water or electricity or may be a system supplying warm air.

10.3 The heating system shall be so constructed, installed and, if necessary, shielded as to avoid the risk of fire and not to constitute a source of danger or discomfort to the crew.

10.4 The heating system shall be in operation at all times when any members of the crew are living or working on board the ship and conditions require its use.

11. Lighting system

11.1 Crew accommodation shall be properly lit.

11.2 Sleeping rooms, living rooms, mess rooms and hospitals shall be lit by natural light. The supply of natural light shall be sufficient to read ordinary newsprint in clear weather anywhere in the room where persons may normally be. In passenger ships, special arrangements may, however, be permitted.

11.3 An efficient system of electric lighting shall be provided capable of supplying adequate lighting to all parts of the crew accommodation.

11.4 Electric lights shall be so arranged as to give the maximum benefit to the crew.

11.5 The head of each berth shall be fitted with an electric light that is capable of supplying sufficient light to enable a person of normal vision to read in the berth.

11.6 If two sources of electricity are not installed independent of each other, reserve lighting shall be provided for use in case of emergency. Such emergency lighting may, for example, consist of permanently installed electric battery lamps that are recharged when the main current is on or a similar system.

11.7 The following guidelines are laid down as to the luminous power that shall be considered suitable for artificial lighting:

- | | |
|--|---------|
| (a) sleeping rooms and day rooms: | |
| (i) general lighting | 50 lux |
| (ii) lighting at tables where reading and writing take place | 150 lux |
| (b) mess rooms | |
| (i) general lighting | 50 lux |
| (ii) lighting on dining tables | 150 lux |
| (c) sanitary accommodation | |
| (i) general lighting | 50 lux |
| (ii) at mirrors | 200 lux |
| (d) corridors and staircases | |
| general lighting | 50 lux |
| (e) hospital accommodation | |
| (i) general lighting | 50 lux |
| (ii) at any wash basin | 100 lux |

11.8 The general lighting is measured at a horizontal plane of 850 millimetres above floor level.

12. Sleeping rooms

12.1 Unless the circumstances are such that no members of the crew are required to sleep on board, sleeping rooms shall be provided for the crew.

12.2 The clear headroom in sleeping rooms shall be at least 1.90 metres.

- 12.3 Whenever reasonable and practicable, having regard to the size of the ship and the activity on which it is to be engaged, there shall be a sufficient number of sleeping rooms to provide a separate room or rooms for each department.
- 12.4 A separate sleeping room shall be provided for the master and each officer and, whenever reasonable and practicable, having regard to the size of the ship, the activity on which it is to be engaged and its layout, for each person over the age of 18 years.
- 12.5 The number of persons accommodated in the same sleeping room shall not exceed four persons.
- 12.6 When more than one person is accommodated in the same sleeping room, as far as practicable, they shall be members of the same watch.
- 12.7 The minimum floor area that shall be provided for each person in a sleeping room is:
- (a) in the case of a ship of less than 800 gross tonnage, 1.85 square metres;
 - (b) in the case of a ship of 800 gross tonnage or more but less than 3000 gross tonnage, 2.35 square metres; and
 - (c) in the case of a ship of 3000 gross tonnage or more, 2.78 square metres.
- 12.8 In the case of ships in which are employed such groups of ratings as necessitate the employment of a substantially larger member of ratings than would otherwise be employed, the Registrar-General may, in respect of such groups, reduce the minimum floor area of sleeping rooms per person, provided that:
- (a) the total sleeping space allotted to the group or groups is not less than would have been allotted had the numbers not been so increased; and
 - (b) the minimum floor area of sleeping rooms is not less than:
 - (i) 1.67 square metres per person in the case of a ship of less than 3000 gross tonnage;
 - (ii) 1.85 square metres per person in the case of a ship of 3000 gross tonnage or more.
- 12.9 In paragraphs 12.6 and 12.7, the measurement of floor area is to:
- (a) include floor space occupied by berths, lockers, seats and chests of drawers; and
 - (b) exclude small or irregularly shaped floor spaces that cannot be used for installing furniture and that do not contribute to the space available for free movement.
- 12.10 Sleeping rooms shall be so planned as to ensure reasonable comfort for the occupants and to facilitate tidiness.
- 12.11 The maximum number of persons that may be accommodated in a sleeping room shall be indelibly and legibly marked in that room.

13. Sleeping berths

- 13.1 Each sleeping room shall be fitted with a separate berth for each person to be accommodated in the room.
- 13.2 The framework of each berth shall be constructed of metal or other material that is hard and smooth and unlikely to become corroded or harbour vermin.
- 13.3 If a berth is constructed with tubular frames, the frames shall be completely sealed and without perforations.
- 13.4 Where a sleeping room has more than one berth:

- (a) no two berths may be placed so that access to one can only be obtained over the other;
 - (b) berths shall not be arranged in tiers of more than two;
 - (c) a berth adjacent to a ship's side and with a sidelight situated above the berth shall be in a single tier; and
 - (d) an upper berth is to be placed approximately midway between the bottom of the lower berth and the lower side of the deckhead beams.
- 13.5 The bottom of a berth shall not be less than 300 millimetres from the floor of the room.
- 13.6 A berth shall be at least 190 centimetres long and at least 68 centimetres wide, the measurements being taken inside the lee-boards or lee-rails, if any, and at right angles to each other.
- 13.7 Each berth shall be fitted with:
 - (a) a spring bottom or other bottom suitable for use with a mattress; and
 - (b) a mattress made of material that will resist damp and is unlikely to harbour vermin.
- 13.8 Where berths are arranged in a double tier, a bottom of dust-proof material shall be fitted to the underside of the upper berth.
- 13.9 Lee-boards fitted to berths shall be constructed of hardwood or other suitable material and shall be so made as to be unlikely to harbour vermin.
- 13.10 Curtains shall be fitted to berths if there is more than one berth in the room.

14. Furniture and fittings

- 14.1 Each sleeping room shall be provided with the following minimum furniture and fittings:
 - (a) a clothes locker or wardrobe which shall be at least 1.52 metres high with a cross section area of at least 12.30 square decimetres and fitted with a shelf and a loop for a padlock;
 - (b) a drawer or equivalent space of at least 0.056 cubic metres for each occupant of the room;
 - (c) a table or desk, which may be of the fixed, drop-leaf or slide-out type, and with comfortable seating accommodation as necessary;
 - (d) a mirror and a cabinet for toilet requisites;
 - (e) a book rack;
 - (f) one coat hook in addition to any coat hooks which may be fitted in a locker or wardrobe; and
 - (g) a curtain or blind fitted to each sidescuttle.
- 14.2 All furniture shall be of smooth, hard material not liable to warp or corrode and shall be so made as to be unlikely to harbour vermin.

15. Mess rooms

- 15.1 Unless the circumstances are such that no members of the crew are required to mess on board, mess rooms shall be provided for the crew.
- 15.2 Mess rooms shall be separate from sleeping rooms and as close as practicable to the galley:
Provided that in ships of less than 300 gross tonnage, the galley may be used as a mess room:

Provided further that in ships of less than 300 gross tonnage, if not combined with a galley, mess rooms may be combined with sleeping accommodation if it is impracticable to provide a separate mess room.

- 15.3 Unless otherwise provided in the agreement with the crew, in ships of 500 gross tonnage or more, mess rooms provided for the master and officers shall be separate from those provided for ratings.
- 15.4 Unless otherwise provided in the agreement with the crew, in ships of 5000 gross tonnage or more, whenever it is reasonable and practicable, consideration shall be given to provide a separate mess room for the catering and serving staff if their number exceeds five persons.
- 15.5 The dimensions and equipment of each mess room shall be sufficient for the number of persons likely to use them at any one time.
- 15.6 Mess rooms shall be equipped with tables and approved seats, fixed or movable, sufficient for the number of persons likely to use them at any one time.
- 15.7 The Registrar-General may permit such exceptions to the provisions of paragraphs 15.3 to 15.6 (both included) as may be necessary to meet the special conditions in passenger ships.
- 15.8 Where available pantries are not accessible to mess rooms, adequate lockers for mess utensils and proper facilities for washing utensils shall be provided.
- 15.9 The surfaces of tables and seats shall be easy to clean and resistant to cracks and damp.

16. Recreation rooms

- 16.1 In ships of 300 gross tonnage or more, one or more places shall be provided on an open deck to which the crew have access when off duty. Such space/s shall be of a suitable size taking into consideration the size and arrangement of the crew and the ship.
- 16.2 In ships of 300 gross tonnage or more, recreation rooms, conveniently situated and appropriately furnished shall be provided for officers and ratings. Where such rooms are not provided separately from the mess rooms, the latter shall be planned, sized, furnished and equipped to give recreational facilities.

17. Sanitary and laundry arrangement

- 17.1 Sufficient sanitary accommodation, including wash basins and baths and/or showers, shall be provided in all ships.
- 17.2 Separate sanitary accommodation shall be provided for males and females.
- 17.3 The following minimum number of separate water closets shall be provided:
 - (a) in ships of less than 800 gross tonnage: three;
 - (b) in ships of 800 gross tonnage or more but less than 3000 gross tonnage: four;
 - (c) in ships of 3000 gross tonnage or more: six; and
 - (d) in ships where the radio officers or operators are accommodated in an isolated position, sanitary facilities near or adjacent thereto shall be provided.
- 17.4 Sanitary facilities for all members of the crew who do not occupy rooms to which private facilities are attached shall be provided for each group of the crew on the following scale:
 - (a) one bath and/or shower for every eight persons or less;
 - (b) one water closet for every eight persons or less;

- (c) one wash basin for every six persons or less.
Provided that when the number of persons in a group exceeds an even multiple of the specified number by less than one-half of the specified number this surplus may be ignored for the purpose of this paragraph.
 - 17.5 When the total number of the crew exceeds 100 and in passenger ships normally engaged on voyages of not more than four hours duration, the Registrar-General may authorise special arrangements or a reduction in the number of facilities required.
 - 17.6 An adequate supply of cold and hot fresh water shall be laid on to each wash basin, bath and shower.
 - 17.7 Washbasins and baths/showers shall be of adequate size, constructed of approved material with a smooth surface not liable to crack, flake or corrode and fitted with an efficient and hygienic discharge system.
 - 17.8 All water closets shall have ventilation to the open air, independently of any other part of the accommodation.
 - 17.9 All water closets shall be of an approved pattern and provided with:
 - (a) an adequate flush of water, which must be always available through self-closing non-concussive supply valves;
 - (b) a connection to a vacuum discharge pipe system or a soil pipe of not less than 100 millimetres in diameter so constructed as to facilitate cleaning and minimise the risk of obstruction; and
 - (c) a device for holding toilet paper.
 - 17.10 Water closets 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 water closets to which there is not other access: Provided that this requirement shall not apply where a water closet is located in a compartment between two sleeping rooms having a total of not more than four persons.
 - 17.11 Where there is more than one water closet in a compartment, they shall be sufficiently screened to ensure privacy.
 - 17.12 All soil pipes and waste pipes shall be of adequate dimensions and shall be fitted in a manner that will facilitate cleaning and minimise the risk of obstruction.
 - 17.13 In all ships facilities for washing, drying and ironing clothes shall be provided on a scale appropriate to the size of the crew and the normal duration of the voyage.
 - 17.14 The facilities for washing clothes shall include suitable sinks which may be installed in wash rooms if provision of a separate laundry facility is not reasonable and practicable, may be installed in wash rooms with an adequate supply of cold and hot fresh water or means of heating water.
 - 17.15 The facilities for drying clothes shall be provided in a compartment separate from sleeping rooms and mess rooms, adequately ventilated and heated and equipped with lines or other fittings for hanging clothes.
- 18. Oilskin lockers**
- 18.1 Adequately ventilated lockers or compartments for use solely for hanging oilskins and other working clothes shall be provided in a place outside but conveniently near to the sleeping rooms.

19. Offices

- 19.1 In ships of 3000 gross tonnage or more, two separate appropriately furnished rooms shall be provided for use as offices for the crew in the deck and engine departments respectively.

20. Galleys

- 20.1 Except in ships in which no member of the crew will be required to mess on board, a galley for the preparation of food for the crew shall be provided.
- 20.2 The galley shall be situated as near as practicable to the mess rooms provided for the crew.
- 20.3 The galley shall be provided with all equipment necessary to enable food in sufficient quantity to be properly and readily prepared for all persons whom the galley is intended to serve and served hot to them in the mess room in all weathers.
- 20.4 All fixed equipment shall be so arranged that it, and all spaces round and behind it, can easily be kept clean.
- 20.5 The galley shall be provided with facilities for washing up. Hot, fresh water and cold drinking water shall be laid on to any sink or other washing up facility in a galley.
- 20.6 No salt water tap shall be fitted in the galley nor in any place at which food may be prepared.
- 20.7 A supply of water connected to a tap or other suitable connection shall be provided in each galley to facilitate washing down the floor.
- 20.8 All furniture and fittings in the galley shall be made of a material which is impervious to dirt and moisture and all metal parts of furniture and fittings shall be rustproof. The bottoms of all fitted furniture shall be either flush with the deck or fitted high enough to enable the deck space beneath to be easily kept clean.
- 20.9 The ventilation in the galley shall be so arranged as to ensure an adequate supply of fresh air and the efficient discharge of fumes into the open air.

21 Dry provision store rooms

- 21.1 Dry provision store rooms used exclusively for the storage of dry provisions for the crew shall be provided and shall have sufficient capacity having regard to:
- (a) the maximum period likely to elapse between successive replenishments of stores, and
 - (b) the maximum number of the crew to be carried.
- 21.2 Dry provision store rooms shall be so situated, constructed and ventilated as to avoid deterioration of the stores through heat, draught, condensation or infestation by insects or vermin.
- 21.3 A dry provision store shall not be:
- (a) situated close to a space in which heat is generated, unless it is adequately insulated against heat; or
 - (b) used for the storage of bedding or textiles.

22. Cold storage rooms and refrigerating equipment

- 22.1 Refrigerating equipment and cold storage rooms shall be provided and be adequate for the storage of perishable provisions for the crew having regard to the period likely to elapse between successive replenishment of stores. In ships of less than 500 gross tonnage, there shall be provided either cold storage rooms or adequate alternative cold storage facilities.

SCHEDULE II

(Regulation 6)

REQUIREMENTS FOR NEW SHIPS

1. General requirements

- 1.1 Crew accommodation (except store rooms) shall:
- 1.1.1 whenever practicable be situated amidships or aft, but in no case shall any part of the crew accommodation (except store rooms) be situated forward of the collision bulkhead;
 - 1.1.2 be situated wholly above the Summer Load Line (if any) marked on the ship in accordance with the provisions of rules made under article 251 of the Act:

 Provided that in the case of a passenger ship the crew accommodation may, on condition that satisfactory arrangements are made for lighting and ventilation of sleeping rooms, be situated below the Summer Load Line, but in no case immediately beneath working alleyways; and
 - 1.1.3 be arranged and constructed, and situated in such a position, as to ensure:
 - (a) the protection of the crew against injury to the greatest practicable extent;
 - (b) the protection of the crew accommodation against the weather and the sea;
 - (c) the insulation of the crew accommodation from heat and cold;
 - (d) the protection of the crew accommodation against moisture due to condensation;
 - (e) the exclusion from the crew accommodation of effluvia originating in other spaces in the ship;
 - (f) the exclusion from the crew accommodation, to the greatest practicable extent, of noise originating in other spaces in the ship; and
 - (g) the prevention of the harbouring of vermin.
- 1.2 Where the crew accommodation of a ship is not normally air-conditioned, the crew accommodation shall:
- 1.2.1 if the ship regularly trades to mosquito-infested ports, be provided with suitable screens to sidescuttles, ventilators and doors; and
 - 1.2.2 if the ship regularly trades to or in the tropics or the Persian Gulf, be fitted with suitable awnings.
- 1.3 Crew accommodation shall be accessible at all times from the open deck. An opening from an open deck into the crew accommodation shall be protected against the weather and the sea.
- 1.4 All parts of the crew accommodation, except cold store rooms, shall have a clear headroom of at least 1.98 metres at every point where full and free movement is necessary, but a reduction in the headroom in any space or part of a space in such accommodation may be permitted if it is reasonable to do so and such a reduction will not result in discomfort to the crew.

2. Bulkheads

- 2.1 Bulkheads separating a part of the crew accommodation (other than a recreation deck space) from a space used as:

- (a) a bunker;
- (b) a cargo or machinery space;
- (c) a lamp room or paint room;
- (d) a store room not forming part of the crew accommodation (other than a dry provision store room);
- (e) a chain locker; or
- (f) a cofferdam,

shall be so constructed as to be gaslight and, where necessary to protect the crew accommodation, watertight.

- 2.2 A bulkhead that separates a part of the crew accommodation from a dry provision store room (whether or not that store room forms part of the crew accommodation) shall be gastight.
- 2.3 A bulkhead that separates a part of the crew accommodation from sanitary accommodation, a laundry, a drying room, a galley or a cold store room (whether or not they form part of the crew accommodation) shall be gaslight, and shall be watertight to such height as is necessary to prevent the passage of water into the adjoining space.
- 2.4 A bulkhead that separates sanitary accommodation from another part of the crew accommodation shall, except in a doorway, be watertight to a height of not less than 230 millimetres above the floor of the sanitary accommodation.
- 2.5 Paragraphs 2.3 and 2.4 do not apply to bulkheads that separate:
 - (a) sanitary accommodation from other sanitary accommodation;
 - (b) a laundry or drying room from another laundry or drying room;
 - (c) a galley from another galley or from a pantry;
 - (d) a cold store room from another cold store room; or
 - (e) en suite sanitary accommodation from its associated sleeping room or rooms.
- 2.6 Inside paneling in the crew accommodation shall be constructed of material with a surface that can easily be kept clean.
- 2.7 Bulkheads or paneling shall not be constructed of material likely to harbour vermin.
- 2.8 Bulkheads enclosing rooms used as sleeping rooms, mess rooms or recreation rooms shall be lined on the side of those bulkheads with those rooms.

3 Openings

- 3.1 There shall not be a direct opening between the crew accommodation (other than recreation deck spaces) and spaces used as:
 - (a) a bunker;
 - (b) cargo or machinery spaces;
 - (c) lamp rooms or paint rooms;
 - (d) store rooms not forming part of the crew accommodation;
 - (e) chain lockers; or
 - (f) cofferdams.
- 3.2 Except in the case of en suite sanitary accommodation, there shall not be a direct opening between the crew accommodation (other than recreation deck spaces or passageways) and any sanitary accommodation, laundry or drying room (whether or not that sanitary accommodation, laundry or drying room forms part of the crew accommodation).

3.3 Paragraph 3.2 does not prohibit a direct opening between spaces forming part of the sanitary accommodation or between spaces appropriated for use as laundries or drying rooms.

3.4 There shall not be a direct opening between a sleeping room and a galley.

4 Pipes

4.1 Except where no other arrangement is reasonable practicable, steam supply and exhaust pipes to machinery shall not pass through the crew accommodation.

4.2 Where such pipes pass through the crew accommodation, they pass through open deck alleyways only, shall be properly encased, and in the case of supply pipes, they shall be:

- (a) constructed of solid drawn steel or equivalent material;
- (b) of a scantling sufficient to withstand the maximum pressure from the ship's boiler system;
- (c) connected by faced flanges properly jointed; and
- (d) fitted with adequate drainage arrangements.

4.3 Steam pipes and hot water pipes leading to radiators in or serving the crew accommodation shall be properly protected or encased.

4.4 Hawse pipes shall not be situated in the crew accommodation.

4.5 Chain pipes and ventilators to cargo spaces shall, where they pass through the crew accommodation, be watertight and gaslight.

4.6 Hot water pipes shall be insulated where necessary for the conservation of heat or to ensure the safety of the crew.

5 Batteries

Batteries shall not be located in the crew accommodation, and precautions shall be taken to ensure that fumes from batteries do not discharge into any part of the crew accommodation.

6 Floors

6.1 Decks that form the floors in the crew accommodation shall be properly constructed and shall be covered with a material that:

- (a) is impervious to water;
- (b) is capable of being easily kept clean; and
- (c) provides a good foothold.

6.2 Where a composition or other like material is used to cover a metal deck, the material shall be properly laid and the joins where the floor meets the walls shall be rounded in such a way as to avoid crevices.

6.3 Floors of wash places, bathrooms, shower recesses, laundries and other compartments where water is used shall be:

- (a) covered with rubber-based or other impervious material; and
- (b) fitted with a coving around the perimeter of the compartment.

6.4 The floor of a galley shall be covered with a rubber-based or other impervious material.

6.5 The floor of a galley shall be provided with efficient scuppers.

7. Drainage

- 7.1 Efficient drainage shall be provided for the crew accommodation.
- 7.2 There shall be no drainage from any source into wash places or sanitary accommodation forming part of the crew accommodation, which shall be drained separately and independently of other spaces.

8. Surface finishes

- 8.1 The interior sides and ceilings of the crew accommodation shall be covered with enamel, paint or other suitable material, of good quality and white or light in colour.
- 8.2 Paint, varnishes and other surface materials containing nitro-cellulose shall not be used.
- 8.3 All paint, varnish or other finishes in the crew accommodation shall be capable of being easily kept clean and shall be maintained in good condition.

9. Ventilation system

- 9.1 Every enclosed space in the crew accommodation, except a cold store room, shall be provided with a ventilation system capable of maintaining the air in that space in a sufficiently pure condition for the health and comfort of the crew in all conditions of weather and climate which the ship is likely to encounter during the voyages on which she is intended to be engaged, and capable of being controlled as necessary for that purpose.
- 9.2 Without prejudice to the generality of paragraph 9.1, in all ships except those of under 500 gross tonnage, every enclosed space in the crew accommodation except a cold store room, shall, if it is not ventilated by an air conditioning system, be provided with a mechanical ventilation system capable of ensuring rates of air changes sufficient for the type of accommodation for which it is provided.
- 9.3 Ships regularly engaged on voyages in the tropics and the Persian Gulf shall be provided with an air conditioning system.
- 9.4 Wherever an air conditioning system is provided, it shall be designed:
 - (a) to maintain the air at a satisfactory temperature and relative humidity as compared with outside air conditions, and to ensure a sufficiency of air changes in all air-conditioned spaces; and
 - (b) to take account of the particular characteristics of operations at sea and not produce objectionable noises and vibrations.
- 9.4.1 In ships provided with an air conditioning system, sanitary accommodation, laundries, drying rooms, changing rooms and pantries shall be provided with mechanical exhaust ventilation capable of ensuring rates of air changes sufficient for the type of accommodation for which it is provided.
- 9.6 A supply of power adequate to operate a mechanical ventilation system or, if it is provided, an air conditioning system shall be provided. Any such system fitted shall be in operation at all times when any members of the crew are on board and the circumstances are such that ventilation by means of such system is required.
- 9.7 In every ship, every enclosed space in the crew accommodation which is not ventilated either by an air conditioning system or by a mechanical ventilation system shall be provided with a natural system of inlet and exhaust ventilation suitable to its purpose.

10. Heating system

- 10.1 Except in the case of ships engaged exclusively in the tropics and the Persian Gulf, the crew accommodation of all the ships shall be provided with a heating system which shall:
- (a) be permanently installed; and
 - (b) whose capacity shall be sufficient to maintain a room temperature of at least 20°C in all circumstances.
- 10.2 The heating system may be operated by steam, hot water or electricity or may be a system supplying warm air.
- 10.3 The heating system shall be so constructed, installed and, if necessary, shielded as to avoid the risk of fire and not to constitute a source of danger or discomfort to the crew.
- 10.4 The heating system shall be in operation at all times when any members of the crew are living or working on board the ship and conditions require its use.

11. Lighting system

- 11.1 Crew accommodation shall be properly lit.
- 11.2 Sleeping rooms, living rooms, mess rooms and hospitals shall be lit by natural light. The supply of natural light shall be sufficient to read ordinary newsprint in clear weather anywhere in the room where persons may normally be. In passenger ships, special arrangements may, however, be permitted.
- 11.3 An efficient system of electric lighting shall be provided capable of supplying adequate lighting to all parts of the crew accommodation.
- 11.4 Electric lights shall be so arranged as to give the maximum benefit to the crew.
- 11.5 The head of each berth shall be fitted with an electric light that is capable of supplying sufficient light to enable a person of normal vision to read in the berth.
- 11.6 If two sources of electricity are not installed independent of each other, reserve lighting shall be provided for use in case of emergency. Such emergency lighting may, for example, consist of permanently installed electric battery lamps that are recharged when the main current is on a similar system.
- 11.7 The following guidelines are laid down as to the luminous power that shall be considered suitable for artificial lighting:
- (a) sleeping rooms and day rooms:
 - (i) general lighting 50 lux
 - (ii) lighting at tables where reading and writing take place 150 lux
 - (b) mess rooms
 - (i) general lighting 50 lux
 - (ii) lighting on dining tables 150 lux
 - (c) sanitary accommodation
 - (i) general lighting 50 lux
 - (ii) at mirrors 200 lux
 - (d) corridors and staircases
 - general lighting 50 lux
 - (e) hospital accommodation
 - (i) general lighting 50 lux
 - (ii) at any wash basin 100 lux

- 11.8 The general lighting is measured at a horizontal plane of 850 millimetres above floor level.
- 12. Sleeping rooms**
- 12.1 Unless the circumstances are such that no members of the crew are required to sleep on board, sleeping rooms shall be provided for the crew.
- 12.2 Whenever reasonable and practicable, having regard to the size of the ship and the activity on which it is to be engaged, there shall be a sufficient number of sleeping rooms to provide a separate room or rooms for each department.
- 12.3 A separate sleeping room shall be provided for the master and each officer and, whenever reasonable and practicable, having regard to the size of the ship, the activity on which it is to be engaged and its layout, for each person over the age of 18 years.
- 12.4 In ships other than passenger ships, the number of persons accommodated in the same sleeping room shall not exceed two persons, and in the case of passenger ships shall not exceed four persons.
- 12.5 When more than one person is accommodated in the same sleeping room, as far as practicable, they shall be members of the same watch.
- 12.6 In ships other than passenger ships the minimum floor area that shall be provided for each person in a sleeping room accommodating one person is:
- (a) in the case of a ship of less than 800 gross tonnage, 1.85 square metres;
 - (b) in the case of a ship of 800 gross tonnage or more but less than 1000 gross tonnage, 2.35 square metres;
 - (c) in the case of a ship of 1000 gross tonnage or more but less than 3000 gross tonnage, 3.75 square metres;
 - (d) in the case of a ship of 3000 gross tonnage or more but less than 10000 gross tonnage, 4.25 square metres; and
 - (e) in the case of a ship of 10000 gross tonnage or more, 4.75 square metres.
- 12.7 In ships other than passenger ships the minimum floor area that shall be provided for each person in a sleeping room accommodating two persons is:
- (a) in the case of a ship of less than 3000 gross tonnage, 2.75 square metres;
 - (b) in the case of a ship of 3000 gross tonnage or more but less than 10000 gross tonnage, 3.25 square metres; and
 - (c) in the case of a ship of 10000 gross tonnage or more, 3.75 square metres.
- 12.8 In passenger ships the minimum floor area that shall be provided for each person in a sleeping room accommodating one person is:
- (a) in the case of a ship of less than 800 gross tonnage, 1.85 square metres;
 - (b) in the case of a ship of 800 gross tonnage or more but less than 3000 gross tonnage, 2.35 square metres; and
 - (c) in the case of a ship of 3000 gross tonnage or more, 3.75 square metres.
- 12.9 In passenger ships the minimum floor area that shall be provided for each person in a sleeping room accommodating two, three or four persons is:
- (a) in the case of a ship of less than 3000 gross tonnage, 2.35 square metres;
 - (b) in the case of a ship of 3000 gross tonnage or more, 3.00 square metres.
- 12.10 Where a separate sitting room or day room is not appropriated for the exclusive use of an officer, the minimum floor area of the sleeping room of that officer shall be 6.50 square

metres in the case of a ship of less than 3000 gross tonnage and 7.50 square metres in the case of a ship of 3000 gross tonnage or more.

- 12.11 In the case of ships in which are employed such groups of ratings as necessitate the employment of a substantially larger member of ratings than would otherwise be employed, the Registrar-General may, in respect of such groups, reduce the minimum floor area of sleeping rooms per person, provided that:
- (a) the total sleeping space allotted to the group or groups is not less than would have been allotted had the numbers not been so increased; and
 - (b) the minimum floor area of sleeping rooms is not less than:
 - (i) 1.67 square metres per person in the case of a ship of less than 3000 gross tonnage;
 - (ii) 1.85 square metres per person in the case of a ship of 3000 gross tonnage or more.
- 12.12 In paragraphs 12.6 to 12.11 (both included), the measurement of floor area is to:
- (a) include floor space occupied by berths, lockers, seats and chests of drawers; and
 - (b) exclude small or irregularly shaped floor spaces that cannot be used for installing furniture and that do not contribute to the space available for free movement.
- 12.13 Where practicable, in the case of a ship of 3000 gross tonnage or more, a sitting room or a day room adjoining their sleeping room shall be provided for the Chief Mate and the Chief Engineer.
- 12.14 Sleeping rooms shall be so planned as to ensure reasonable comfort for the occupants and to facilitate tidiness.
- 12.15 The maximum number of persons that may be accommodated in a sleeping room shall be indelibly and legibly marked in that room.

13. Sleeping berths

- 13.1 Each sleeping room shall be fitted with a separate berth for each person to be accommodated in the room.
- 13.2 The framework of each berth shall be constructed of metal or other material that is hard and smooth and unlikely to become corroded or harbour vermin.
- 13.3 If a berth is constructed with tubular frames, the frames shall be completely sealed and without perforations.
- 13.4 Where a sleeping room has more than one berth:
- (e) no two berths may be placed so that access to one can only be obtained over the other;
 - (f) berths shall not be arranged in tiers of more than two;
 - (g) a berth adjacent to a ship's side and with a sidelight situated above the berth shall be in a single tier; and
 - (h) an upper berth is to be placed approximately midway between the bottom of the lower berth and the lower side of the deckhead beams.
- 13.5 The bottom of a berth shall not be less than 300 millimetres from the floor of the room.
- 13.6 A berth shall be at least 198 centimetres long and at least 80 centimetres wide, the measurements being taken inside the lee-boards or lee-rails, if any, and at right angles to each other.

- 13.7 Each berth shall be fitted with:
- (a) a spring bottom or other bottom suitable for use with a mattress; and
 - (b) a mattress made of material that will resist damp and is unlikely to harbour vermin.
- 13.8 Where berths are arranged in a double tier, a bottom of dust-proof material shall be fitted to the underside of the upper berth.
- 13.9 Lee-boards fitted to berths shall be constructed of hardwood or other suitable material and shall be so made as to be unlikely to harbour vermin.
- 13.10 Curtains shall be fitted to berths if there is more than one berth in the room.

14. Furniture and fittings

- 14.1 Each sleeping room shall be provided with the following minimum furniture and fittings:
- (a) a clothes locker or wardrobe which shall be at least 1.52 metres high with a cross section area of at least 12.30 square decimetres and fitted with a shelf and a loop for a padlock;
 - (b) a drawer or equivalent space of at least 0.056 cubic metres for each occupant of the room;
 - (c) a table or desk, which may be of the fixed, drop-leaf or slide-out type, and with comfortable seating accommodation as necessary;
 - (d) a mirror and a cabinet for toilet requisites;
 - (e) a book rack;
 - (f) one coat hook in addition to any coat hooks which may be fitted in a locker or wardrobe;
 - (g) a curtain or blind fitted to each sidescuttle; and
 - (h) in ships of 5000 gross tonnage or more, other than passenger ships, a wash basin, unless a wash basin is fitted in private facilities provided for the occupant/s of that sleeping room.
- 14.2 All furniture shall be of smooth, hard material not liable to warp or corrode and shall be so made as to be unlikely to harbour vermin.

15. Mess rooms

- 15.1 Unless the circumstances are such that no members of the crew are required to mess on board, mess rooms shall be provided for the crew.
- 15.2 Mess rooms shall be separate from sleeping rooms and as close as practicable to the galley:
Provided that in ships of less than 300 gross tonnage, the galley may be used as a mess room:
Provided further that in ships of less than 300 gross tonnage, if not combined with a galley, mess rooms may be combined with sleeping accommodation if it is impracticable to provide a separate mess room.
- 15.3 Unless otherwise provided in the agreement with the crew, in ships of 500 gross tonnage or more, mess rooms provided for the master and officers shall be separate from those provided for ratings.
- 15.4 Unless otherwise provided in the agreement with the crew, in ships of 5000 gross tonnage or more, whenever it is reasonable and practicable, consideration shall be given to provide a separate mess room for the catering and serving staff if their number exceeds five persons.

- 15.5 The floor area of every mess room shall be not less than 1 square metre per person for as many persons as are likely to use the room at any one time.
- 15.6 Mess rooms shall be equipped with tables and approved seats, fixed or movable, sufficient for the number of persons likely to use them at any one time.
- 15.7 The Registrar-General may permit such exceptions to the provisions of paragraphs 15.3 to 15.6 (both included) as may be necessary to meet the special conditions in passenger ships.
- 15.8 Where available pantries are not accessible to mess rooms, adequate lockers for mess utensils and proper facilities for washing utensils shall be provided.
- 15.9 The surfaces of tables and seats shall be easy to clean and resistant to cracks and damp.
- 15.10 In ships of 500 gross tonnage or more, there shall at all times be:
 - (a) access to appropriately placed cooling equipment with a capacity corresponding to the number of persons using the mess rooms;
 - (b) facilities for getting hot beverages; and
 - (c) facilities for getting cold drinking water.

16. Recreation rooms

- 16.1 In ships of 300 gross tonnage or more, one or more places shall be provided on an open deck to which the crew have access when off duty. Such space/s shall be of a suitable size taking into consideration the size and arrangement of the crew and the ship.
- 16.2 In ships of 300 gross tonnage or more, recreation rooms, conveniently situated and appropriately furnished shall be provided for officers and ratings. The furniture in such rooms shall include a bookcase as well as furniture providing the opportunity to read, write and play games. Where such rooms are not provided separately from the mess rooms, the latter shall be planned, sized, furnished and equipped to give recreational facilities.
- 16.3 In ships of 8000 gross tonnage or more, a smoking room or reading room in which films or television may be shown and a hobby and games room shall be provided. Whenever reasonable and practicable, consideration shall be given to provide a swimming pool.
- 16.4 In ships of 1000 gross tonnage or more, when planning the mess rooms and recreation rooms, whenever reasonable and practicable, consideration shall be given to provide a canteen.

17. Sanitary and laundry arrangement

- 17.1 Sufficient sanitary accommodation, including washbasins and tub and/or shower baths, shall be provided in all ships.
- 17.2 Separate sanitary accommodation shall be provided for males and females.
- 17.3 In ships of 300 gross tonnage or more, there shall be, for every six persons or fewer in each of the groups of officers and other crew who do not have their own private facilities attached to their sleeping rooms, a minimum of one water closet and one bath and/or shower.
- 17.4 Without prejudice to the requirements of paragraph 17.3, the following minimum number of separate water closets, including the separate water closets required by paragraph 17.10, shall be provided:
 - (a) in ships of less than 800 gross tonnage: three;
 - (b) in ships of 800 gross tonnage or more but less than 3000 gross tonnage: four;

- (c) in ships of 3000 gross tonnage or more: six; and
 - (d) in ships where the radio officers or operators are accommodated in an isolated position, sanitary facilities near or adjacent thereto shall be provided.
- 17.5 In ships of 5000 gross tonnage or more but under 15000 gross tonnage, at least five officers' sleeping rooms shall be provided with adjoining private bathroom facilities fitted with a water closet, bath and/or shower and a wash basin. The wash basin may be situated in the sleeping room.
- 17.6 Without prejudice to the requirements of paragraph 17.5, in ships of 10000 gross tonnage or more but less than 15000 gross tonnage, every officer's sleeping room which is not provided with an adjoining private bathroom shall have an intercommunicating bathroom similarly fitted.
- 17.7 In ships of 15000 gross tonnage or more, every officer's sleeping room shall be provided with an adjoining private bathroom facilities fitted with a water closet, bath and/or shower and a wash basin. The wash basin may be situated in the sleeping room.
- 17.8 In ships of 25000 gross tonnage or more, other than passenger ships, at least one bathroom shall be provided to every two members of other crew. The bathroom shall be located either in an intercommunicating compartment between adjoining sleeping rooms or opposite the entrance of such rooms and shall be fitted with a water closet, bath and/or shower and a wash basin.
- 17.9 When the total number of the crew exceeds 100 and in passenger ships normally engaged on voyages of not more than four hours duration, the Registrar-General may authorise special arrangements or a reduction in the number of facilities required.
- 17.10 In ships of 1600 gross tonnage or more, there shall be provided:
 - (a) a separate compartment containing a water closet and a wash basin easily accessible from the navigation bridge for the use of those working in that area;
 - (b) a water closet and a wash basin easily accessible from the machinery space if not fitted near the engine room control centre; and
 - (c) except in ships in which private sleeping rooms and private or semi-private bathroom facilities are provided for the use of all engine room personnel, a wash place fitted with individual clothes lockers as well as with showers and wash basins sufficient in number having regard to the number of such personnel, not provided with private sleeping rooms and private or semi-private bathroom facilities and situated in a place outside but conveniently close to the machinery space.
- 17.11 An adequate supply of cold and hot fresh water shall be laid on to each wash basin, bath and shower.
- 17.12 Washbasins and baths/showers shall be of adequate size, constructed of approved material with a smooth surface not liable to crack, flake or corrode and fitted with an efficient and hygienic discharge system.
- 17.13 All water closets shall have ventilation to the open air, independently of any other part of the accommodation.
- 17.14 All water closets shall be of an approved pattern and provided with:
 - (a) an adequate flush of water, which must be always available through self-closing non-concussive supply valves;
 - (b) a connection to a vacuum discharge pipe system or a soil pipe of not less than 100 millimetres in diameter so constructed as to facilitate cleaning and minimise the risk of obstruction; and

(c) a device for holding toilet paper.

- 17.15 Water closets 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 water closets to which there is not other access: Provided that this requirement shall not apply where a water closet is located in a compartment between two sleeping rooms having a total of not more than four persons.
- 17.16 Where there is more than one water closet in a compartment, they shall be sufficiently screened to ensure privacy.
- 17.17 All soil pipes and waste pipes shall be of adequate dimensions and shall be fitted in a manner that will facilitate cleaning and minimise the risk of obstruction.
- 17.18 In all ships facilities for washing, drying and ironing clothes shall be provided on a scale appropriate to the size of the crew and the normal duration of the voyage. The facilities to be provided shall include:
- (a) suitable sinks and washing machines, which may be installed in wash rooms if provision of a separate laundry facility is not reasonably practicable, with an adequate supply of cold and hot fresh water or means of heating water;
 - (b) drying machines or adequately heated and ventilated drying rooms; and
 - (c) electric irons and ironing boards or their equivalent.
- 17.19 The facilities for drying clothes shall be provided in a compartment separate from sleeping rooms and mess rooms, adequately ventilated and heated and equipped with lines or other fittings for hanging clothes.

18. Oilskin lockers

- 18.1 Adequately ventilated lockers or compartments for use solely for hanging oilskins and other working clothes shall be provided in a place outside but conveniently near to the sleeping rooms.

19. Offices

- 19.1 In ships of 3000 gross tonnage or more, two separate appropriately furnished rooms shall be provided for use as offices for the crew in the deck and engine departments respectively.

20. Galleys

- 20.1 Except in ships in which no member of the crew will be required to mess on board, a galley for the preparation of food for the crew shall be provided.
- 20.2 The galley shall be situated as near as practicable to the mess rooms provided for the crew.
- 20.3 The galley shall be provided with all equipment necessary to enable food in sufficient quantity to be properly and readily prepared for all persons whom the galley is intended to serve and served hot to them in the mess room in all weathers.
- 20.4 All fixed equipment shall be so arranged that it, and all spaces round and behind it, can easily be kept clean.
- 20.5 The galley shall be provided with facilities for washing up. Hot, fresh water and cold drinking water shall be laid on to any sink or other washing up facility in a galley.
- 20.6 No salt water tap shall be fitted in the galley nor in any place at which food may be prepared.

- 20.7 A supply of water connected to a tap or other suitable connection shall be provided in each galley to facilitate washing down the floor.
- 20.8 All furniture and fittings in the galley shall be made of a material which is impervious to dirt and moisture and all metal parts of furniture and fittings shall be rustproof. The bottoms of all fitted furniture shall be either flush with the deck or fitted high enough to enable the deck space beneath to be easily kept clean.
- 20.9 The ventilation in the galley shall be so arranged as to ensure an adequate supply of fresh air and the efficient discharge of fumes into the open air.

21 Dry provision store rooms

- 21.1 Dry provision store rooms used exclusively for the storage of dry provisions for the crew shall be provided and shall have sufficient capacity having regard to:
- (a) the maximum period likely to elapse between successive replenishments of stores, and
 - (b) the maximum number of the crew to be carried.
- 21.2 Dry provision store rooms shall be so situated, constructed and ventilated as to avoid deterioration of the stores through heat draught, condensation or infestation by insects or vermin.
- 21.3 A dry provision store shall not be:
- (a) situated close to a space in which heat is generated, unless it is adequately insulated against heat; or
 - (b) used for the storage of bedding or textiles.

22 Cold storage rooms and refrigerating equipment

- 22.1 Refrigerating equipment and cold storage rooms shall be provided and be adequate for the storage of perishable provisions for the crew having regard to the period likely to elapse between successive replenishment of stores. In ships of less than 500 gross tonnage, there shall be provided either cold storage rooms or adequate alternative cold storage facilities.