where applicable, the flame spread characteristics of the installed furniture, there shall be installed a fixed fire alarm and fire detection system complying with the Performance Standard referred to in clause 29 of the general code.

- (2) In every new ship to which Part II of this Code of Practice applies where the provision of a fixed fire alarm and fire detection system as prescribed in sub-clause (1) of this clause is not required there shall be installed in the accommodation spaces electrically operated fire-alarm bells actuated from the navigating bridge and from manually operated call points suitably located throughout the accommodation spaces. Such bells shall be supplied with electrical power from 2 separate sources, 1 of which shall be the ships' emergency source of electrical power.
- (3) Every existing ship to which Part II of this Code of Practice applies not provided with a fire alarm system as provided in sub-clause (1) or (2) of this clause shall be provided with manual fire alarm bells. Such bells shall be sufficient in number, so distributed, and of such type that, in the event of a fire being detected in or adjacent to the accommodation spaces, whether at sea or in port, an alarm bell is readily accessible and is clearly audible throughout adjacent accommodation spaces. Such bells shall be permanently secured to the ship's structure and shall be clearly labelled.
- **14. Fire pumps**—Every ship to which Part II of this Code of Practice applies shall be provided with:
- (a) At least 1 power-operated fire pump, which may be driven by the main engine provided that the propeller shafting can be readily disconnected or provided that a controllable pitch propeller is fitted. Such pump shall be capable of delivering at least 1 jet of water from any fire hydrant hose and nozzle provided in the ship and shall comply with the requirements of clause 16(3) of the general code.
- (b) Where in any such ship fitted with oil-fired boilers or internal combustion type propelling machinery, the pump required by paragraph (a) of this clause and its source of power and sea connections are situated within spaces containing such boilers or machinery, there shall be provided in a position outside such spaces an additional fire pump and its source of power. If that pump is operated by power it shall comply with the requirements of clause 16(8) of the general code and if it is manually operated it shall comply with the requirements of clause 16(9) of the general code.
- 15. Fire main, water-service pipes hydrants, hoses, and nozzles—(1) Every ship to which Part II of this Code of Practice applies shall be provided with a fire main, water-service pipes, and hydrants complying with the provisions of clause 17 of the general code and with fire hoses and nozzles complying with the provisions of clause 18 of the general code. Arrangements of fire main, water service pipes and the number and position of fire hydrants shall be such that at least one jet of water having a throw of at least 6m can reach any part of the ship normally accessible to passengers or crew while the ship is being navigated and any store room and any part of any cargo space when empty.
- (2) In accommodation spaces, service spaces, and machinery spaces, the requirements of subclause (1) above shall be able to be complied with when all watertight doors are closed.
- (3) Every space containing oil-fired boilers or propelling machinery of internal-combustion type shall be provided with at least 1 fire hydrant which shall be located outside the space and near the entrance.
- (4) In every ship to which Part II of this Code of Practice applies a hose and dual purpose nozzle shall be provided for every hydrant fitted in the ship. In addition there shall be at least 1 spare hose.
- 16. Portable fire extinguishers in control stations and service spaces—Every ship to which Part II of this Code of Practice applies shall be provided with at least 3 portable fire extinguishers so situated as to be readily available for use in

- control stations and in any part of the accommodation and service spaces. In addition, 1 portable extinguisher and 1 fire blanket shall be provided in every galley.
- 17. Machinery spaces containing oil-fired boilers or oil-burning equipment—In every ship to which Part II of the Code of Practice applies there shall be provided, for the protection of any space containing any oil-fire boiler, oil-fuel settling tank, or oil-fuel unit:
 - (a) 1 of the following fixed fire-extinguishing installations:
- (i) A pressure water-spraying system complying with the requirements of the Performance Standard referred to in clause 22 of the general code.
- (ii) A fire-smothering gas installation complying with the requirements of the Performance Standard referred to in clause 24 of the general code.
- (iii) A high-expansion foam fire-extinguishing installation complying with the requirements of the Performance Standard referred to in clause 25 of the general code
- and, if the engine and boiler rooms are not entirely separated from each other by a bulkhead, or if fuel oil can drain from the boiler room into the engine room, the combined engine and boiler room shall for the purpose of this subclause be regarded as a single space; and
- (b) In each firing space and in each space which contains any part of any oil-fuel installation, at least 2 portable fire extinguishers; and
- (c) In each firing space a receptacle containing at least 150 litres of sand or other dry material suitable for quenching oil fires, together with a scoop for its distribution, or, alternatively, an additional portable fire extinguisher.
- 18. Machinery spaces containing internal-combustion type machinery—In every ship to which Part II of this Code of Practice applies there shall be provided for the protection of every space containing internal-combustion type machinery used for main propulsion or auxiliary purposes:
- (a) At least 1 foam fire extinguisher of not less than 45 litres capacity or 1 carbon-dioxide fire extinguisher of not less than 16 kg capacity:

Provided that such an extinguisher shall not be required in any machinery space containing only auxiliary machinery; and

(b) Sufficient portable fire extinguishers, so located that a portable extinguisher is not more than 10m walking distance from any point in the space.

Provided that not less than 3 such extinguishers shall be required in any space containing main propulsion machinery with an aggregate power of not less than 250 kW and not less than 1 such extinguisher shall be required in any space containing only auxiliary machinery.

- 19. Machinery spaces containing steam engines—(1) In every ship to which Part II of this Code of Practice applies there shall be provided for the protection of every space containing steam turbines or enclosed pressure-lubricated steam engines used for main-propulsion or auxiliary purposes.
- (a) At least 1 foam fire extinguisher of not less than 45 litres capacity or 1 carbon-dioxide fire extinguisher of not less than 16 kg capacity:

Provided that such an extinguisher shall not be required in any machinery space containing only auxiliary machinery; and

(b) Sufficient portable fire extinguishers, so located that a portable extinguisher is not more than 10m walking distance from any point in the space:

Provided that not less than 2 such extinguishers shall be required in any space containing main-propulsion machinery, and not less than 1 such extinguisher shall be required in any space containing only auxiliary machinery.

(2) The fire extinguishers specified in paragraph (1) of this clause shall not be required if equivalent protection is provided