

TECHNICAL REGULATIONS FOR SHIPS

PART ONE

Purpose, Scope, Basis and Definitions

Purpose

ARTICLE 1 – (1) The purpose of these Regulations is to specify the technical rules on the basis of which ships are certified seaworthy and load line certificates, port departure certificates and vessel certificates are issued; and to set out load line limits, operating areas and the procedures and principles relating to the practice and certification of these.

Scope

ARTICLE 2 – (1) Unless otherwise stated, these Regulations shall apply to commercial ships and vessels carrying the Turkish flag.

(2) The provisions in these Regulations relating to new ships shall also apply to ships converted into passenger ships or to carry dangerous goods.

(3) On matters not provided for in existing special legislation on ships and vessels the provisions in these Regulations shall apply.

(4) For ships making international voyages the provisions of international agreements shall take precedence.

(5) Load line requirements shall not apply to fishing ships, makeshift ships, or private crafts and vessels.

(6) The provisions in these Regulations shall not apply to military ships and vessels.

Basis

ARTICLE 3 – (1) These Regulations have been prepared on the basis of Articles 2, 3, 4, 5, 6 and 11 of Law 4922 on the Protection of Life and Property at Sea, dated 10/6/1946 and Decree Law 491 on the Organization and Duties of the Undersecretariat for Maritime Affairs, dated 10/08/1993.

Definitions

ARTICLE 4 – (1) In these Regulations:

- a) “Bathroom” shall mean any type of structure used for bathing;
- b) “A similar stage of construction” shall mean the stage at which construction identifiable with a specific ship begins and assembly of that ship has commenced, comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is less;
- c) “Adjacent port” shall mean the area of sea covering the administrative borders of other Port Authorities which are neighbours on land to the Port Authority in the place where the ship is located;
- d) “Regional authority” shall mean the regional authority of the Undersecretariat for Maritime Affairs;
- e) “Deadweight tonnage” shall mean the sum of the weight such as of passengers, cargo, water and provisions that a ship can carry to its capacity limit;
- f) “Testing” shall mean inspection, control and examination carried out according to the provisions of national legislation or international agreements;

- g) "Testing activities" shall mean all tests, recognition, approval, verification, certification and other control activities put in place by the provisions of relevant national legislation and international agreements;
- h) "Testing expert" shall mean graduates of the faculties relevant to Maritime Affairs: Ship Survey Committee Experts, Maritime Experts, Maritime Expert Assistants and engineer staff of the Undersecretariat for Maritime Affairs carrying out duties in the agreed framework of personnel in Article 4/B of Law 657 on Civil Servants dated 14/7/1965, and Ship Survey Committee Experts who are not graduates of faculties relevant to Maritime Affairs but who are certificated as having been trained on the matter of testing;
- i) "Breadth" shall mean the width defined in the Regulation on Measuring the Tonnage of Ships and Vessels which was published in Official Gazette no. 27167 on 12/03/2009;
- j) "Freeboard" shall mean the vertical distance between a ship or vessel's water line when fully loaded and its main deck;
- k) "Freeboard height" shall mean 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;
- l) "Ship" shall mean any vehicle able to navigate at sea except for craft under oars, regardless of its name, tonnage and purpose of use;
- m) "Ship's age" shall mean the time calculated since the date the keel was laid or block construction began;
- n) "Seafarer" shall mean the ship's captain, officers, assistant officers, apprentices, deckhands and assistant service personnel;
- o) "Touring/excursion ship" shall mean passenger ships carrying out daily tours within the same day and according to a pre-set schedule leaving from a specific point and within port areas, and with a capacity of more than 12 passengers and certified seaworthy for use for leisure, social or cultural activities, with or without fixed seating;
- p) "Grey water" shall mean dirty water coming from any bathroom, kitchen or washroom source and which has not mixed with black water;
- q) "Route permission" shall mean permission given by the Administration to real or legal persons who will use an organised route, according to pre-arranged schedules communicated amongst ports and landing stages;
- r) "IMO" shall mean the International Maritime Organisation;
- s) "ISO" shall mean the International Organisation for Standardisation;
- t) "Administration" shall mean the Undersecretariat for Maritime Affairs;
- u) "Moulded depth" shall mean the depth defined in the Regulation on Measuring the Tonnage of Ships and Vessels;
- v) "Hull" shall mean the part which remains under the waterline when the ship or vessel is not loaded;
- w) "Hull discharge outlet" shall mean every type of outlet that has the capability to discharge dirty water into the sea from below the level of the waterline when the ship or vessel is fully loaded;
- x) "Control stations" shall mean areas with emergency power and light supplies, the bridge and map room, rooms housing the boat's wireless equipment, fire fighting rooms, and fire control rooms;
- y) "Control engineer" shall mean a ship construction engineer responsible for appropriately carrying out construction or modification operations on the ship or vessel, a ship construction and ship engine engineer, a ship construction and

- marine engineer, or a marine technology engineer registered with the Chamber of Turkish Naval Architects and Marine Engineers;
- z) “Small vessel” shall mean every type of commercial ship smaller than 24 metres in length, except for passenger ships;
 - aa) “Washroom” shall mean items such as the kitchen sink, hand basin, washing machine waste and dishwasher waste;
 - bb) “Port authority” shall mean the port authority connected to the regional authority;
 - cc) “MARPOL” shall mean the International Convention for the Prevention of Pollution from Ships, to which Turkey is party by way of Decision no. 1990/442 of the Committee of Ministers, dated 3/5/1990;
 - dd) “Existing ship” shall mean a ship which is not a new ship;
 - ee) “Dirty water” shall mean black water and grey water in general;
 - ff) “Dirty water tank” shall mean the tank used to collect and store dirty water;
 - gg) “Preliminary dirty water tank” shall mean a primary treatment tank for holding dirty water installed with the aim of trying to make effective the purification and decomposition/disinfection systems;
 - hh) “Project engineer” shall mean a ship construction engineer, a ship construction and ship engines engineer, a ship construction and marine engineer or a marine technology engineer who is a marine engineer registered to the Chamber of Turkish Naval Architects and Marine Engineers;
 - ii) “Operating area” shall mean the areas of sea where ships and vessels may go according to their technical state and their various fittings;
 - jj) “Black water” shall mean any dirty water from any human or animal source coming from any toilet;
 - kk) “SOLAS” shall mean the International Convention for the Safety of Life at Sea to which Turkey is a party by way of Decision no. 8/522 of the Committee of Ministers dated 6/3/1980;
 - ll) “Survey” shall mean any check carried out regarding the ship or vessel’s seaworthiness included in legislation and/or international agreements;
 - mm) “Vessel” shall mean any type of vehicle or structure other than a ship able to navigate at sea and used for the purpose for which it was designed;
 - nn) “Modification” shall mean any structural change causing a change of one or several of the three main dimensions of a ship or vessel and of at least one of its gross or net tonnage, or transformation of a ship including into a passenger ship or a carrier of dangerous goods;
 - oo) “Full height” shall mean the full height defined in the Regulation on Measuring the Tonnage of Ships and Vessels;
 - pp) “Tanker” shall mean a commercial ship which has been specially constructed to carry liquid;
 - qq) “Scheduled voyage” shall mean voyages carried out in the scope of any schedule approved by any public body/institution;
 - rr) “Register length” shall mean the length of the ship from the foreside of the head of the stern to the aft side of the head of the stern post or, in the case of a ship not having a stern post, to the foreside of the rudder stock or the freeboard length scheduled in the International Convention on Load Lines;
 - ss) “Commercial ship” shall mean any ship used on the sea with the intention of making a profit;
 - tt) “Commercial yacht” shall mean a ship enjoyed for travel or sport as commerce and which is not a cargo, passenger or fishing ship;

- uu) “Turkish straits” shall mean the Turkish Straits defined in the Turkish Straits Sea Traffic Rules which were brought into effect by Decision no. 98/11860 of the Committee of Ministers dated 8/10/1998;
- vv) “The International Convention on Load Lines” shall mean the 1966 International Convention on Load Lines and amendments ratified by Decision no. 6/10027 of the Committee of Ministers dated 18/5/1968 and published in Official Gazette 12936 dated 28/6/1968;
- ww) “Y valve” shall mean the valve ensuring that the black water and grey water flow has only one outlet;
- xx) “Living areas” shall mean cabins, toilets, offices, communal rooms; games and hobby salons and non-waste producing snack bars;
- yy) “New ship” shall mean a ship whose keel is laid or which is at a similar stage of construction on or after the date of the entry into force of these Regulations;
- zz) “Authorised institution” shall mean the institution authorised according to the Regulations on the Selection and Authorisation of Institutions to Act on Behalf of the Flag State on Turkish Flagged Ships published in Official Gazette no. 25246 dated 1/10/2003;
- aaa) “Passenger” shall mean people other than the captain, seafarers, and those on the ship to work, staff in service to equip and operate the ship and their wives and children, people travelling for business, representatives and civil servants, shepherds transporting animals, anyone taken onto the ship due to force majeure or the captain’s duty to protect life at sea and everyone with or without freight other than children less than one year old;
- bbb) “Passenger ship” shall mean a commercial ship carrying more than twelve passengers;
- ccc) “High risk service areas” shall mean kitchens, waste-producing snackbars, paintworks and lamp rooms, areas which have no partitions from engines, and enclosed areas where there are LPG cylinders and saunas.

PART TWO

Certification, Surveys, Load Lines, Exemptions and Equivalent Practices

Certificate of seaworthiness and certificate of vessel fitness

ARTICLE 5 – (1) Ships, according to their purpose, type and operating area, shall at specific intervals be tested by the Administration according to the provisions of these Regulations from the point of view of the craft, engine, general fittings, their position as regards rescue, fire prevention and fire extinguishing, navigation equipment and communication systems, health conditions, load and passenger carrying capacity, equipment to prevent sea pollution and other navigational safety matters.

(2) Ships deemed to meet the provisions of these Regulations as a result of tests carried out shall be given a “Certificate of Seaworthiness”, and vessels shall be given a “Certificate of Vessel Fitness”. In cases where ships making international voyages have been certificated according to international agreements, the certificate of seaworthiness to be issued for the ships in question shall be harmonized with the anniversary dates of the existing legal certificates and thus valid until the expiry date of the safety certificates issued within the scope of SOLAS. The form of the Certificate of Seaworthiness has been set out in Annex 1. The Certificate of Vessel Fitness, the form of which has been set out in Annex 2, shall be given to vessels of a total length of 15 metres and more. Vessels of a total length of less than 15 metres

shall be given a “Certificate of Vessel Fitness” upon request. Unless otherwise specified on the certificate, a “Certificate of Seaworthiness” or a “Certificate of Vessel Fitness” shall be issued for a five-year period from the date of the land survey that is the basis of the initial survey to be carried out upon request. Ships and vessels suspected to have lost their Certificate during the period of validity may be tested again in the same period. The Certificate of Seaworthiness must be kept aboard the ship.

(3) Surveys shall be carried out within the following framework:

- a) The initial survey for the purpose of issuing the Certificate of Seaworthiness shall be carried out as a land and sea survey of whether or not the ship is fit for purpose. This survey shall be the basis of the initial issue of a five-year certificate or if there is an existing certificate the issue of a new five year certificate pursuant to tests on the ship’s hull, the adequacy of the ship’s structure, its watertight partitioning and balance, its durability and water tightness, the fitness of its engine and fittings, the fitness of its freeboard and load lines, its structural fire safety and the fitness of its fire compartments, the fitness of its walkways and guardrails and its systems for discharging liquid into the sea, its fitness for preventing pollution of the marine environment, the fitness of the ship’s sheltered places and living areas, the fitness of its auxiliary engines, rudder fittings, electrical installation and systems, fire protection, fire detection and extinguishing systems, the fitness of life saving apparatus and equipment for installing it on board ship and launching it, its navigation equipment, navigation lights and indicators, the fitness of its communication equipment, the fitness of the ship’s equipment for anchoring and mooring, the fitness of its loading equipment, the publication of its emergency procedures and the fitness of its handbooks and instructions.
- b) An annual survey shall be carried out three months before the anniversary of the existing certificate and at 3-month intervals as regards continuation of the Certificate of Seaworthiness and the ship’s fitness for purpose. The annual survey shall be a survey at sea and underwater survey or just a survey at sea directed towards the ship’s ongoing fitness for the matters written on its certificate such as the craft, engine, general equipment, rescue, fire prevention and fire extinguishing, navigation equipment and communications systems, health conditions, load and passenger carrying capacity, equipment for preventing marine pollution and other navigational safety.
- c) The anniversary dates for the annual survey shall correspond to twelve months after the date of the land survey that was the basis of the initial survey.
- d) Underwater surveys and surveys at sea shall be carried out at the intervals specified below:
 - 1) The underwater survey that is the basis of the initial survey for renewing the Certificate of Seaworthiness shall be carried out on land.
 - 2) The annual survey of passenger ships shall be carried out every year as a survey at sea and an underwater survey. For passenger ships at least one of the underwater surveys on the second or third anniversary in the 5-year period shall be carried out on land.
 - 3) For ships other than passenger ships, as regards the annual survey, the survey at sea shall be carried out every year but the underwater survey may be carried out every 2 years. For these ships there may not be an interval of more than 36 months between two land surveys.

- 4) Other than the land surveys specified in paragraphs (1), (2) and (3) above, underwater surveys may be carried out by way of a camera.
 - 5) In cases where underwater camera surveys detect improprieties an underwater survey shall be carried out on land.
 - 6) Vessels up to 5 years old shall be issued with a 5-year Certificate of Vessel Fitness without being subject to approval. A 5-year Certificate of Vessel Fitness for vessels aged 5 years and older shall be valid upon underwater survey by camera on the second or third anniversary in the five year period.
- e) When all surveys that will be a basis for the Certificate of Seaworthiness are carried out by authorised institutions, upon request a new 5-year certificate shall be issued according to the survey type or ships with a 5-year certificate requiring annual approval shall be annually approved or in cases where a certificate cannot be presented to the Administration a new certificate, which shall not surpass the period of validity of the existing Certificate of Seaworthiness, shall be issued by the Administration.
 - f) In cases where the annual survey cannot be carried out at annual intervals, the Certificate of Seaworthiness shall be invalid. A new certificate shall in every case be issued upon an underwater and survey at sea being carried out as the initial survey. A new Certificate of Seaworthiness shall be issued by the expiry date of the old certificate.
 - g) Authorised institutions shall carry out initial and annual surveys pursuant to their own rules without being bound by the survey dates and practices set out above. The last date determining the date limits for five-year surveys that are set out in status reports on class surveys published by these institutions shall be taken as the expiry date of the Certificate of Seaworthiness and in these situations no attention shall be paid to the five-year limit of validity on the certificate. When issuing a Certificate of Seaworthiness, the presence of requisite documents on the ship, the class survey situation and the Administration's surveys shall be taken into account. In this case, in order for a new certificate to be issued or an annual approval to be carried out, it shall be accepted that the requisite documents and class survey dates are valid regardless of the period.
- (4) Annual approval of Certificates of Seaworthiness, pursuant to the completion of the tests outlined in paragraph (3), shall be given by an authorised signatory or a testing expert who performs surveys. Approval shall occur when, as specified by the Administration, the testing expert enters the survey place and date into the approval section and signs it.
 - (5) For ships in possession of a legal certificate given by authorised institutions, a certificate of seaworthiness shall be issued for the period and function written on the certificate without separate tests. Testing the parts omitted from the testing rules of the authorised institution shall however be carried out by the Administration according to the provisions of these Regulations. Except in cases where the ship is abroad the survey at sea forming the basis of the Certificate of Seaworthiness shall in each case be carried out by the Administration.
 - (6) For ships that do not have a Certificate of Seaworthiness or whose certificate has expired, the certificate of a ship which no longer complies with the criteria specified in these Regulations for whatever reason, and which shall not be permitted to set sail except in the circumstances set out in paragraph 9 (a), shall be cancelled by the body responsible for issuing the Certificate of Seaworthiness.

(7) A ship which comes loaded from abroad to a Turkish port and whose Certificate of Seaworthiness has expired on the way may empty its load in a port or several ports and on condition it returns to the port to be tested may perform its commercial operations such as exist in its Certificate of Seaworthiness. A new Certificate of Seaworthiness shall not be given to these ships until the port where they are to be tested and, as long as there is no suspicion or information regarding security, no additional test shall be carried out.

(8) A commercial ship which for whatever reason has become incompliant with these Regulations during a voyage, within the period of its Certificate's validity, may continue its voyage as far as the port where its commercial operations are to be completed if the necessary safety measures are taken by the captain and if the situation is communicated to the Administration. A commercial ship may therefore go from the port where it completed its journey without any commercial transaction to the nearest port where it may be repaired. The nearest port where it may be repaired shall be the port deemed suitable by the Administration considering the ship's safety and where it may achieve seaworthiness.

(9) Going beyond the operating area specified on the Certificate of Seaworthiness is possible in the following circumstances:

- a) A ship with a Certificate of Seaworthiness, where the Certificate of Seaworthiness has expired or is valid, and resorting to passage to a port outside the operating area specified in the certificate for maintenance-repair, may go to the port with written permission given by the regional authority or port authority. No Certificate of Seaworthiness shall apply for this voyage. It is essential that after the maintenance-repair has been completed the necessary surveys are carried out in the port of maintenance-repair and a Certificate of Seaworthiness granted, but the regional authority or port authority may give permission for the surveys and certification to take place in another port if safety measures are put in place according to the existing conditions regarding the matter. A ship making voyages within the scope of this subparagraph may not engage in any commercial procedures.
- b) Ships with a valid Certificate of Seaworthiness seeking to go to a port outside the operating area specified in the certificate may go to the port by special permission given by the Administration without a new Certificate of Seaworthiness for the navigational zone on the condition that the purpose of these journeys is not commercial. These ships shall continue to work with their existing Certificate of Seaworthiness in the port they go to.

(10) The principles relating to Certificate of Seaworthiness surveys and authority to issue shall be as follows:

- a) The Certificate of Seaworthiness survey for ships of a full length of 24 metres and above must be carried out by the regional authority. The Certificate of Seaworthiness issued shall be signed by the Head of the Regional Authority.
- b) Certificate of Seaworthiness procedures where there are Port Authorities in the same place as regional authorities shall be carried out by the regional authority.
- c) Certificate of Seaworthiness testing for ships which are within their own port authority's jurisdiction and are up to a full length of 24 metres may be carried out by an authorised port administrator trained in testing, and ships that are up to a full length of 15 metres may be tested by authorised staff trained on the topic of Certificate of Seaworthiness testing. If there is a qualified testing

expert in the port authority these tests shall be primarily carried out by the testing expert.

(11) A ship may be restricted to its own operating area as specified below by the regional authority or the port authority taking into account its technical state or exemption conditions, the weather and sea conditions, physical and geographical conditions, whether it is night or day and other particular factors such as its distance from the coast. The areas of sea indicating operating areas on a ship's Certificate of Seaworthiness have been set out below:

- a) Port voyages shall be divided into administrative port voyages and port voyages of up to 100 miles:
 - a. Administrative port voyages are made in areas of sea within the administrative limits of the port authority;
 - b. Port voyages of up to 100 miles are made not more than 10 miles from the closest shore and not more than 100 miles from the departure port.
- b) Cabotage voyages are made between Turkish ports beyond the limits of the port voyage area.
- c) Short voyages exceed cabotage voyages and are made to sea areas in the Black Sea, the Aegean, the Red Sea and as far as the frontier of Spain and France and sea areas to the east of the line joining the coast of Cape Finisterre to the north and the Mauritanian [sic] port of Dakhla to the south.
- d) Long voyages exceed short voyages and are without limits.

Load line certificates and load limits and fixing deadweight

ARTICLE 6 - (1) Ships with a freeboard length of 24 metres and above going beyond cabotage voyages and making international voyages and within the scope the International Convention of Load Lines shall be given an International Load Line Certificate of the form in the convention, and passenger or load carrying ships and vessels with a freeboard length of 24 metres and above not making international voyages shall be given a National Load Line Certificate (Annex 3). The method of freeboard marking shall be indicated on the Load Line Certificate.

(2) The Load Line Certificate shall last for five years from the initial survey. However the certificate remaining valid until the end of this period shall be conditional on annual surveys. The certificate shall be endorsed every time an annual survey is carried out.

3) The initial survey shall check that matters such as the compliance of the freeboard calculations with the ship's form and superstructure, the load being adequately balanced, the aperture cover safety fittings, portholes, doors and waterproof parts, the hatch and hatch covers, guardrails, water and load openings, scupper holes, ventilation arrangements, and entry doors to the superstructure comply with the International Convention on Load Lines and the articles of these Regulations.

(4) The annual survey for the continuation of the Load Line Certificate and the fitness for purpose of the ship shall be carried out between 3 months before and 3 months after the end of the 12-month period starting from the date of validity of the existing certificate.

(5) In cases where the annual survey cannot be carried out, the Load Line Certificate shall be invalid. A new certificate shall in each case be issued by the expiry date of the old certificate when a freeboard survey is carried out in the scope of the initial survey. Further, in situations where there is a change affecting the freeboard calculation on the ship, the Load Line Certificate shall be cancelled.

(6) The marking of load lines on ships and vessels of a freeboard length of 24 metres and above on the freeboard showing these limits shall be carried out under the supervision of the regional authority testing experts. The freeboard mark, the form of which is specified in the Load Line Certificate, must be marked on the ship. The load line certificate that results from surveys carried out by regional authority testing experts shall be signed by the head of the regional authority. After annual surveys are carried out at the anniversary interval on load line certificates they shall be signed by an authorised signatory or by the testing expert carrying out the survey. Approval shall occur when, as specified by the Administration, the testing expert enters the survey place and date into the approval section and signs it.

(7) Load lines and where requested deadweight tonnage for ships and vessels of a full length of 15 metres and above but with a freeboard length of less than 24 metres shall be set by the regional authority or port authority. The regional authority or port authority shall carry out the necessary surveys and record on the Certificate of Seaworthiness the load line and deadweight tonnage of ships for which they will issue Certificates of Seaworthiness.

(8) The position and form of the load mark to be placed on both sides and under the deck line of ships with a freeboard length of 24 metres and above in the scope of the International Convention on Load Lines or these Regulations shall be specified according to the International Convention on Load Lines.

(9) The load line mark shall be marked indelibly in the middle of the register length of the ship or vessel and on both sides of the ship or vessel. These indicators shall be embossed on metal boats, and painted on wooden boats and defined in a light colour on a dark background or a dark colour on a light background.

(10) For every metre of register length the minimum load line distance of ships with a freeboard length of less than 24 metres carrying loads or passengers shall be calculated as 2 centimetres on passenger ships and 1 centimetre on cargo ships.

(11) The deck line and load line for ships of a full length of 15 metres and above but with a freeboard length of less than 24 metres carrying loads or passengers shall be marked in the middle of the register length for ships and vessels and on both sides of ships and vessels indelibly with two lines, 300 millimetres high and 25 millimetres wide.

(12) The value of the load limit calculated may be raised by a testing expert or authorised institution taking into account the ship's operating area, structure and stability.

(13) From the point of view of load limits for ships with a freeboard length of 24 metres and above not making international voyages, the winter season shall be accepted as 16 December until and including 15 March and the summer season shall be accepted as 15 March up to and including 15 December.

(14) Ships and vessels with a full length of less than 15 metres shall not be required to have deck and load limit lines.

(15) If the deadweight tonnage of ships and vessels with a freeboard length of less than 24 metres is requested in writing by the fitter or captain, the following principles shall apply:

- a) If the weights such as passengers, load, fuel, provisions and water which may take the ship or vessel to the load line which has been marked on both sides, are certified or fixed, the ship or vessel's fitter or captain shall, by application to the regional authority or port authority authorised for the survey, request that the deadweight tonnage be fixed and recorded on the Certificate of Seaworthiness.

- b) After the person responsible for the survey examines the status of the load and load limit and related documents and sees that the water level is within the load limit on both sides, (s)he shall in this case record on the Certificate of Seaworthiness the fixed amount and total weight on ships and vessels such as passengers, load, fuel, provisions and water as deadweight tonnage. Reports prepared on this matter shall be kept in the ship's survey file.

(16) The load limit lines on ships must at no point be submerged in water before the ship leaves port, during the voyage or when it arrives in port.

(17) No changes shall be made in the ship's structure, fittings, equipment and apparatus without the knowledge and approval of the Administration.

Port Departure Certificate

ARTICLE 7 – (1) The departure from port of every commercial ship making a journey beyond the port administrative borders regardless of its flag shall be subject to permission to be given by the port authority. This permission shall be given by way of a Port Departure Certificate. The form of the Port Departure Certificate has been set out in Annex 4.

(2) The Port Departure Certificate for seaworthy ships requiring one shall be issued if as a result of tests carried out by the port authority it is established that the ship complies with its certificate as regards the matters of

- a) Seafarers and equipment,
- b) Number of passengers and type of cargo,
- c) Load.

If it appears in any way that a ship is not seaworthy or if any other information preventing the ship's departure from port comes before the port authority, port departure permission shall not be given.

(3) A Port Departure Certificate shall be prepared by the head of the port authority or staff authorised by the head of the port authority. Ships verified or certificated as complying with these Regulations including the matters set out in paragraph 2 or with other relevant legislation shall be issued a Port Departure Certificate by the port authority. However if any suspicion, hint or any information whatsoever relating to security reaches the port authority regarding specific periods or the ship, tests on the ship for the purpose of a Port Departure Certificate shall be carried out as a priority, and if as a result of this testing it is found to be compliant, a Port Departure Certificate shall be issued.

(4) A Port Departure Certificate valid for 60 days shall be issued for the following ships holding a valid Certificate of Seaworthiness:

- a) Ships with permission to travel in the region of the Turkish straits and ships voyaging in regions to the east of the line which runs between Karaburun and Foça in the Gulf of Izmir,
- b) Ships and vessels used to put in post essential staff of the Coastguard Directorate,
- c) Small marine vehicles,
- d) Those on voyages in adjacent ports,
- e) Passenger ships, service ships and ships with other route permission making scheduled journeys in Turkish waters to a distance of 25 miles from their departure port,
- f) Touring/excursion ships,
- g) Fishing ships,
- h) Ships providing services using the port areas most suitable for facilities located in areas far from the shore such as marine drilling platforms,

- i) In the Sea of Marmara, oil, fuel and water tankers and supply ships carrying provisions.
- (5) In cases of emergency such as rescues, fire at sea or intervention in marine pollution, regardless of the operating areas on the Certificate of Seaworthiness, on the basis of Administration instructions or the captain's responsibilities arising from the duty to protect life at sea, port departure certificates for ships to travel may not be issued.
- (6) A port departure certificate shall be issued by the port authority at the port of departure for ships loading gravel in the scope of Mining Law no. 3213 dated 4/6/1985 from sites in the sea specified by coordinates from the competent authority. Ships shall return to the unloading port with the existing certificate without getting further port departure permission for the return from the port authority where the loading area is located.
- (7) Ships making journeys as set out in Article 5 paragraph 9 may, with the written permission set out in the same article and required from the Regional Authority or Port Authority, go to the port specified in the written permission without seeking a Certificate of Seaworthiness or regardless of the operating area in any existing Certificate of Seaworthiness.

Underwater survey

- ARTICLE 8** – (1) Underwater surveys shall be carried out on land or on camera.
- (2) When a 5-year certificate of seaworthiness is given to ships the bottom of the boat shall be surveyed on land.
- (3) Underwater surveys by camera shall be carried out in accordance with the following points:
- a) Underwater surveys carried out on camera shall be carried out under the responsibility of the Administration or the authorised institution. Underwater surveys carried out on camera shall be carried out on camera by people authorised on the matter by the Administration or authorised institution.
 - b) Underwater surveys carried out on camera must be of a character that provides information obtained from land surveys.
 - c) The lines investigated on parts of the deck that remain underwater shall be marked for reference.
 - d) Underwater surveys carried out on camera shall be performed as specified under the supervision and by agreement with the Administration or experts of the authorised institution in a geographical location where the ship is in sheltered waters and low tides and currents. Underwater visibility must be high and the hull clean. The Administration or authorised institution experts must confirm that the images relayed on closed circuit television are the favourable method of presentation. Two-way communication with divers must be satisfactory.
 - e) Before an underwater survey on camera begins, the Administration, authorised institution, ship fitters or observers and diving company representatives must be in agreement on the subjects of equipment and procedure.
- (4) In order for a ship's land survey consisting of tests and checks carried out on land or in a dry dock to be carried out, ships must be brought onto land or to the dry dock and they must be at a sufficient height from the floor to provide for a detailed inspection of the keel and underwater surfaces.
- (5) The land survey shall assess:
- a) Inlet and discharge connections, valves and scuttles, freeing ports,

- b) That the weathertightness, sealing and opening and closing systems on doors, windows and portholes are in working order,
- c) Faults and deterioration in guard rails and walkways,
- d) Anchor, chains, winch and connecting equipment and their connection to the hull,
- e) Deterioration and faults in ventilation, plumbing, air conditioning and charging circuits and all pipe connections and circuits,
- f) Propellers and blades,
- g) Equipment fixing the main and auxiliary engines,
- h) Rudder and fan bearings and mounts,
- i) Visual check on whether there are faults in structural parts and elements such as the ship's external coverings, timber, deck beams, longitudinal frames, decks, bulkheads, hull floor, renovation of places suspected to be weak, priming and painting or varnishing of wooden boats after caulking, cleaning of external covers on fibreboard boats and for all ships applying the necessary zinc by painting the underwater parts with paint that protects against marine life.
- j) Measurements of steel plate thickness in accordance with the provisions of Article 9.

Steel plate thickness measurements

ARTICLE 9 - (1) The thickness of structural elements of metal ships shall be measured when the ship is one year old and thereafter periodically every 5 years. Steel thickness measurements shall be carried out by people or institutions authorised by the Administration on condition they have a certificate of at least level 1 in ultrasound inspection. Ultrasound inspections must in all cases be carried out with at least a level 1 certificate. When areas of suspicion are noticed in terms of thickness measurements, visible corrosion or condition, the following shall be performed:

- a) The minimum thickness measurements for ships over 10 years old shall be carried out on all components in three transverse sections, all external covering steel, and the fore peak tank bulkhead and its components, hatchway coaming and hatch covers and at least three main girders of the main deck,
- b) The minimum thickness measurements for ships over 15 years old shall be carried out on all external covering steel, all deckhouses and decks, all watertight bulkheads, fore and aft peak components, coaming and hatch covers, double bottom steel and structural elements and cargo hold/tank timber,
- c) Thickness measurements shall be made on all steel plates and on at least four to include at least one of the corners of the plate, and at least one of the components such as the transverse and longitudinal beams, deck beams and longitudinal girders.
- d) The person performing the measurements shall write a report setting out the results of the thickness measurements. Components on ships working in port operating zones that have lost 30% of their original thickness and components on ships working outside ports that have lost 25% of their original thickness shall be replaced. A testing expert testing steel measurements that are close to their limit may request that steel measurements that cause concern about the ship or its condition be measured again.

Propeller and shaft survey

ARTICLE 10 (1) Shafts shall be removed and checked every 5 years. The removed shafts shall be checked and, after they have been disconnected from the propeller, the

coupling and mounts shall be opened and checks for cracking shall be made on the propeller and coupling tapers, the keyed socket and the liner surface and the flange ends. Further a visual check of the internal surface of the stern tube shall be carried out. The propeller blades shall be checked for defects and cavitation cracks and the propeller's internal taper keyed socket and bolts shall be checked for wear. The rudder fan shall be checked for cracks and the shaft and mount checked. Other propulsive systems shall be checked once every five years.

(2) If the gap of a propeller shaft of 100 mm diameter is more than 2 mm or if the gap of a shaft of any diameter is more than 2.5% of the diameter, the stern tube lining shall be replaced.

Checks on the anchor and chains

ARTICLE 11 - (1) The weight of the anchor may reduce by not more than 15% in checks to be carried out at ten years of age and thereafter at 5-yearly intervals. After all the chains have dripped dry their general condition shall be checked. Thickness measurements shall be taken of at least 3 single chains in every detent including chains that are suspicious when the ship is 10 years old and thereafter at 5-yearly intervals. The permitted reduction in thickness is up to 15% of the thickness specified on the fitting number. After the thickness measurements a report shall be prepared by the person who performed the measurements setting them out.

Survey at sea

ARTICLE 12 – (1) The survey at sea shall comprise tests and checks carried out at sea to check that ships' structure, engines and fittings are compliant in terms of the required safety, environment, health, and safety of life and property. The survey at sea shall include tests on:

- a) Main and auxiliary engines,
- b) Fittings on the ship such as doors, windows, and portholes,
- c) That the fixed fire extinguishing systems are periodically tested and test on alarms,
- d) Pipe circuits and connections,
- e) Power supply,
- f) Electrical systems and lighting,
- g) Ventilation systems,
- h) Steering machinery fit for docking and emergency steering equipment,
- i) Mooring ropes,
- j) Windlass,
- k) Communication and navigation devices,
- l) Navigation lights,
- m) Whether medical supplies and drugs are sufficient and their shelf life,
- n) Portable fire extinguishers,
- o) Fire pumps,
- p) Dirty water systems,
- q) Fuel tanks,
- r) Freeboard markings,
- s) Personal life saving vessels and equipment,
- t) That the required marine documents for the navigation zone and maps are up to date,
- u) Lifesaving vessels such as service boats, rescue boats, life rafts and life boats,
- v) That notices specifying passenger capacity in that area are hung in suitable places in passenger salons and that capacities are correct,
- w) Fire detection and alarm systems,

- x) That on ships with petrol engines there is a warning notice up that the ventilation fans function three minutes before the motor,
- y) That fire and safety plans are suitable for the ship,
- z) The physical state of and health conditions in living and working quarters.

Checks and controls carried out prior to certification

ARTICLE 13 - (1) Applications to the regional authority or the port authority to initiate testing activities must meet the following conditions:

- a) The application shall be made by interested persons or their representatives,
- b) In applications, test activities requested and the purpose of this request shall be clearly set out and data on the applicant and the ship shall be presented,
- c) The Administration shall not be responsible for damage or delay if it is not carried out during the application period.

(2) If the ship's testing expert is on land or at sea or cannot reach the location where the testing activities will be carried out for operational or security reasons the ship fitter or captain must ensure that his/her reaching the ship and leaving it safely are facilitated as required.

(3) If the testing activities necessitate large parts being detached, immobilising the ship or other operations with similarly high potential risks or if the tests pose a danger to the testing expert, the tests shall be performed after security conditions have been adequately met.

(4) The party applying for the test activity shall supply the necessary apparatus and equipment in order to provide in all circumstances for the activity to take place in safe conditions.

Certification and general provisions

ARTICLE 14 – (1) Only documents required by national law shall be given to ships making domestic voyages. Documents complying with international agreements shall be given to ships making international voyages as a priority, irrespective of these Regulations.

(2) On matters that are not covered in these Regulations ships must meet the requirements of an equivalent standard accepted by the Administration through institutions authorised by the Administration or national legislation or international agreements.

(3) According to the Regulations on the Selection and Authorisation of Institutions to Act on Behalf of the Flag State on Turkish Flagged Ships, on ships whose classification certificate has been issued by an institution authorised by the Administration, if a classification survey report is to be given by the authorised institution according to the provision in Article 5 of the Law on the Protection of Life and Property at Sea, the notation of the ship type in the classification survey report must be harmonised with the type in the ship's tonnage certificate. The Classification Survey Report form is set out in Annex 5.

(4) Valid international documents which have been received in an authorised manner by commercial ships and vessels from abroad are valid for one month for voyages between Turkish ports starting from the ship or vessel's arrival in the first Turkish port. It is not a requirement of these Regulations that they acquire a Certificate of Seaworthiness by the end of this period.

(5) A ship's fitter and captain must ensure that the ship complies with legislation as long as it is in service and its documents are valid, for the sake of safety of life at sea, navigational safety, to meet health and safety conditions and not to cause marine pollution.

(6) Ships whose operating area has, in their certificate of seaworthiness, been specified as the administrative port may also work in adjacent port areas and it is sufficient for them to meet the requirements for administrative port voyage without additional equipment.

(7) International laws shall apply to ships making international voyages.

(8) Administrative officials who are not test experts but who are graduates of faculties relevant to maritime affairs and who have duties on the administrative staff may carry out surveys and tests.

Exemptions

ARTICLE 15 - (1) Where exemptions are requested, the Administration may, by way of special permission given additionally on a case-by-case basis and on condition that the requirements for protecting the safety of life and property at sea and preventing marine pollution are guaranteed in the alternative provisions, make exemptions:

- a) From Part Three apart from articles 18, 29, 30, 32, 34, 40, 41 and 48, due to the nature of the voyage and the prevailing sea conditions;
- b) From Part Four apart from articles 50, 53, 61 and 62, in situations with particular operational conditions such as limited journey duration or rescue services and due to the nature of the voyage and the prevailing conditions;
- c) From Part Five apart from articles 63, 67, 68, 69, 72, 73, 74, where voyaging in sheltered waters or suitable climatic or weather conditions, in situations with particular operational conditions such as limited journey duration or rescue services and due to the nature of the voyage and the prevailing conditions;
- d) From other articles in Parts 6, 7, 8, 9, 10 and 11 apart from articles 77, 81, 83, 104 and 105.

(2) The Administration may exempt from the specific provisions in these Regulations ships which, due to new features, it considers meet the provisions in these Regulations and which are significant for research regarding the development of new features and their application on the ship, provided they are limited to a research topic. Such a ship shall, however, comply with the requirements found to be sufficient by the Administration for it to be fit for purpose and which ensure the ship's general safety.

(3) Ships constructed in a specific way by historically traditional procedures able to carry up to 36 people in cabins and which are commercial yachts may work in nearby operating areas including on the principle of reciprocity with other country's ships in the same class which work in the same navigational area, seasonal sea and weather conditions, same type of journey, and proximity or brevity of voyage.

(4) Voyages made from the port on Marmara island between the ports of Bandırma, Erdek and Karabiga, from the port of Çannakale between the ports of Bozcaada, Gökçeada and Gallipoli, and from Gökçeada to the port of Bozcaada shall count as voyages between adjacent ports. Ships may make voyages in adjacent ports by being equipped just as for administrative port voyages.

Equivalentents

ARTICLE 16 – (1) If a ship requires a particular piece of equipment, apparatus, fitting, appliance or to be equipped with something similar to those set out in these Regulations, the Administration may consider a substitute equivalent piece of equipment, apparatus, fitting or appliance suitable.

Ships' survey lists

ARTICLE 17 (1) Tests carried out on ships regarding documentation, equipment and fittings within the scope of these Regulations shall use:

- a) the Fishing Ships Checklist in Annex 6 for fishing ships,

- b) the Passenger Ships in the Administrative Port Area/ Motorised Touring/Excursion Ships Checklist in Annex 7 for passengers ships/motorised touring/excursion ships,
- c) the Roll-on Roll-off Passenger Ships in the Administrative Port Area Checklist in Annex 8 for roll-on roll-off passenger ships,
- d) the Commercial Yachts Checklist in Annex 9 for commercial yachts,
- e) the Commercial Speed Boats used for Sport and Leisure Checklist in Annex 10 for commercial speed boats used for sport and leisure,
- f) the Domestic Cargo and Service Ships Checklist in Annex 11 for cargo and service ships making domestic voyages,
- g) the International Cargo and Service Ships under 500 GT Checklist in Annex 12 for cargo and service ships under 500 GT making international voyages,
- h) the Service Boats Checklist in Annex 13 for service boats,
- i) the Vessels Checklist in Annex 14 for vessels.

PART THREE

Construction, Balance, Partitioning, Stability, Passenger Capacity Fixing, Engine and Electrical Equipment

General rules regarding design and construction

ARTICLE 18 – (1) Ships shall be designed, constructed and maintained according to the structural, mechanical and electrical requirements of institutions authorised by the Administration or included in these Regulations, domestic legislation and international agreements.

Construction and modification requirements

ARTICLE 19 – (1) The building and fitting materials and equipment used must meet the fundamental conditions in domestic or international legislation and rules. Compliance with domestic or international standards shall indicate that fundamental conditions are being guaranteed. The Administration, where it considers it necessary, may request certificates or test results prepared by an authorised institution regarding the materials and equipment guaranteeing the fundamental conditions.

(2) Openings in the hull, decks or superstructure must not impede the ship's structural integrity. Decks susceptible to the sea shall be watertight and all openings shall be impermeable to water, comply with standards and be equipped with fixed closing equipment, and if these openings are used to pass through to the living/passenger areas they shall have closing equipment which may be controlled from both sides.

(3) This article shall only apply to new ships.

Materials to be used in ship construction

ARTICLE 20 – (1) Wooden materials used in ship construction must be as follows:

- a) Tree materials used in hull building must be weather- and water resistant and have mechanical properties suited to their intended use.
- b) It may be acceptable for tree materials used in parts which are not exposed to the weather and which do not operate in the water to be less resistant.
- c) Tree material shall be cut at the root, with long fibres, without bark, not cracked and where possible without knots. The tree must have been well dried.
- d) Where plywood has been used it must be installed in layers of at least three sheets crosswise. Its installation must be seamless.
- e) Wooden elements used in the hull's main endurance components shall be chosen from the most resistant materials.

- f) The type, colour and dappling of tree in outer layers constituted from covering planks joined together must match one another.
 - g) In ship building there must be no colour differences, tree materials prone to breaking or prominent faults that reduce durability.
- (2) Fibre reinforced plastic (FRP) material used for ship construction must be as follows:
- a) It shall consist of resin that has been hardened at high temperatures (thermoset) and reinforcing material inserted as fibres and must be heterogeneous.
 - b) The thin layer of resin to be used shall protect the surface of the laminate from mechanical damage and the effects of the environment. The hardened resin shall have minimum absorption capacity for fuel, sea (salt water), fresh water and erosion.
 - c) The resin must also be compatible with additional materials. There must be no discernible negative effect of the filler materials on the resin.
 - d) Setting, attaching and glazing materials and procedures on the surface of the fibre must protect the materials subject to the effect of the environment and must be compatible with the resin.
 - e) FRP materials and their components used in craft construction shall be stored and processed under the conditions set out by their manufacturer.
- (3) Metallic materials used for ship construction must be as follows:
- a) All metallic materials used in craft construction must have the required mechanical and chemical properties for their place and purpose of use, comply with standards and be free from impurities.
 - b) Corrective procedures may be carried out on insignificant superficial flaws that do not reduce the products' dimensional tolerance. Sourced metallic materials to be used in construction must be easy to source.
 - c) Metal materials must meet the mechanical-chemical characteristics required by the recognised authorised institutions, and must prove this through test result reports or certificates.
 - d) Sample dimensional controls of materials to be used may be carried out on ships to be constructed of no administrative category.
 - e) Aluminium compounds used in craft construction must be suited to the marine environment and provide sufficient resistance to it.
- (4) If a special material other than the materials above is used, it must be sought out to be compliant with relevant standards.
- (5) This article shall only apply to new ships.

Seawater connections, freeing ports and scupper holes

ARTICLE 21 – (1) Freeing ports shall be kept to a minimum and as far as possible shall be above the deepest loaded water line.

(2) Closing valves shall be installed on all sea openings below the deepest water line and up to 300 mm above it.

(3) Seacocks belonging to the engine cooling system shall be equipped with a seawater filter that is a grill placed after the closing valve and connected to the external cover as a local reinforcement. The seawater filter shall be sturdy and made from corrosion resistant material, and must be able to be opened easily.

(4) On decks exposed to the weather where water may collect, and in the same way on closed impermeable superstructures and freeboard decks in deckhouses, there shall be scupper holes sufficient in number and size to ensure water is efficiently discharged. In cases where walkways on the freeboard deck or superstructure in parts exposed to

the weather are repositories sufficient arrangements shall be made to provide for expeditious discharge of water from the decks.

Doors

ARTICLE 22 - (1) Superstructure doors in bulkheads exposed to the weather must be sheltered against the sea and weather conditions.

(2) These doors must be able to be opened from both sides and the threshold must be at a height of at least 100 mm on doors that directly access areas below deck on open craft making port voyages, or there must be a safe alternative system to this. Ships making voyages other than port voyages must be equipped according to the Convention on Load Lines.

(3) In the Marmara Sea and the Istanbul and Çanakkale straits: roll-on roll-off ships and roll-on roll-off passenger ships and in certain areas ferries that do not allow for vehicles to manoeuvre on the ship shall, for the safe embarkation and disembarkation of wheeled vehicles from ferries making scheduled voyages, have two planks/ ramps, one fore and one aft, to ensure the safe embarkation and disembarkation onto/off the ship for passengers and vehicles and the safe loading and emptying of loads.

Stairs

ARTICLE 23 – (1) Stairs accepted as escape routes must be at a suitable incline and stairs less than 800 mm wide must have a handle on one side and stairs of 800 mm or more in width must have handles on both sides. On stairs apart other than those in the engine room or emergency escape stairs the incline may not be more than 45 degrees from the floor and the stairs shall not exceed 3.5 m in length. The minimum depth of steps on stairs must be 240 mm. Stairs exceeding 3.5 m in length must have one or more landings.

(2) The width of a staircase measured from the internal part of the stairs must be at least 800 mm in rooms or places designed for 50 people or fewer, at least 900 mm in rooms or places designed for 50 – 100 people and at least 1000 mm for rooms or spaces designed for more than 100 people.

(3) The top surface of the steps must be made non-slip.

(4) The underside of steps on board must be closed off and while in use must be equipped with a safety net preventing falls from the stairs.

(5) This article shall only apply to new ships.

Windows and portholes

ARTICLE 24 – (1) All portholes, windows and associated equipment must meet the requirements of maximum resistance to waves and wind conditions and integrity according to the ship's operating area and the ship's location.

(2) The bottom edge of portholes shall be at least 500 mm above the water line. Porthole glass must be at least 6 mm nominal thickness. Glass used in portholes must not break up in a way that could create a danger to passengers or crew on shattering.

(3) On ships the view on the bridge must be designed in such a way as to protect from the damaging glare of the sea and the sun. According to geographical conditions windows must be designed to be protected against ice. In the same way windows shall be equipped with a mechanical wiping system to ensure safe visibility in rain and snow.

(4) Windows and portholes in ships' control rooms shall be positioned in such a way so as to ensure adequate views for safe navigation in every type of working condition and must be of suitable dimensions.

Walkways and guardrails

ARTICLE 25 – (1) Walkways and guardrails shall be provided on open decks. Walkways shall be sturdily constructed and reinforced to a sufficient degree.

Walkways must have openings to discharge water in larger amounts than can accumulate on deck.

(2) The height of guardrails on ships shall be according to the following dimensions:

<u>Ship's total length (m)</u>	<u>Guardrail height (mm)</u>
Under 15	800
15-24	850
Over 24	900

(3) The lowest opening in the guardrail system may not be lower than 230 mm, and the highest may not be higher than 380 mm. For the safety of children gaps in guardrails on daily excursion craft and commercial yachts shall be smaller or similar provisions shall be made such as their being covered with a net.

(4) For ships manufactured in standard style, the height of walkways and guardrails shall be set by the Administration taking into consideration regional requirements.

(5) On ships where a pilot is to be taken on board the guardrails and walkways shall open and close in at least one place in a way that facilitates the pilot disembarking the ship from port or starboard. These openings shall be painted as necessary in a different colour. Connection places must be suitable for safe usage in pilot transfer.

Anchor and mooring equipment

ARTICLE 26 – (1) All ships shall be equipped with sufficiently durable equipment in order to be able to carry out anchoring, mooring, and towing procedures safely. On ships of a full length of more than 24 m, the anchoring and mooring equipment shall be selected according to the equipment number assigned under the relevant rules of the authorised institutions.

(2) In order that mooring ropes may wind, mooring equipment such as bitts, fairleads and cleats shall be mounted on ships on a suitable place on the deck. Bitts, hawseholes, fairleads and cleats must prevent the ropes wearing down excessively.

(3) On ships of a full length of 15 metres and above, the anchoring equipment shall be designed in a way so as to keep the anchor over the ship in a safe way with materials of the minimum weight and there shall be at least one bower anchor.

(4) Instead of anchor chains, wire ropes or synthetic fibre ropes, which have a lower breaking weight than chains, may be used on ships. In this case a chain at least 2 metres long or equal in length to the distance between the position of the anchor and the windlass shall be used between the wire rope or the synthetic fibre rope and the anchor. Hawsehole openings near the windlass shall be adequately reinforced. On ships of a full length of 24 metres and above there must be at least one windlass.

(5) Mooring ropes shall be made from wire, natural fibres, synthetic fibres or a mixture of fibres. If steel fibre ropes are used, these ropes must be the elastic type.

(6) Eyebolts to drop the anchor at moments of danger must be easily accessible. The chain locker, where possible, shall be of dimensions suitable for stowage of the chain and shall have a watertight and adequate drain.

Systems to prevent damaging fouling

ARTICLE 27 (1) On underwater parts of ships and vessels' hull and bottom, systems containing tin to prevent damaging fouling by marine life clinging to the surfaces may not be used because of the serious damage they do to the environment, plants by way of the food chain, and animal and human health. The provision in this article shall cover new ships and vessels from the date of publication of these Regulations and existing ships and vessels coming for their first land/dry dock survey. The implementing principles of this article shall be specified by the Administration.

Basic requirements of protective covering

ARTICLE 28 – (1) Sea water ballast tanks on all new ships of 500 GT and above and new liquid cargo ships of a full length of 150 metres and above shall comply with basic protective covering requirements by having double walls. The implementing principles of this article shall be specified by the Administration.

Adequacy of balance

ARTICLE 29 – (1) Calculation of ships' stability shall be carried out according to the following:

- a) Ships with a full length of less than 15 metres and which carry more than 12 passengers must meet the balance criteria in Annex 15.
- b) Ships with a full length of 15-24 metres and which have a passenger capacity of 13-36 must meet the balance criteria in Annex 16.
- c) Ships with a full length of less than 24 metres with a passenger capacity of 37-150 must meet the balance criteria in Annex 17.
- d) Designated passenger numbers must meet the relevant SOLAS and IMO criteria, or else passenger numbers meeting these criteria shall be taken as a basis.
- e) The maximum number of passengers a ship may carry shall be calculated in a stability audit to be carried out.

(2) Tilt tests for the balance criteria set out in paragraphs 1 (a), (b) and (c) shall be carried out by an engineer recognised as a test engineer or project engineer under the supervision of staff recognised as expert in the Regulation on Measuring the Tonnage of Ships and Vessels. The tilt test for the balance criteria set out in paragraph 1 (a) for existing ships with a full length of less than 15 metres and carrying more than 12 passengers may be carried out by staff recognised as expert in the Regulation on Measuring the Tonnage of Ships and Vessels. Tilt test reports shall be endorsed by the Administration.

Partitioning

ARTICLE 30 - (1) All ships of 15 metres and above and all passenger ships regardless of length shall have a collision bulkhead. In general the watertight collision bulkhead shall be positioned at an alignment of between 5% and 10% of the water line length along the water line.

(2) On all ships of a full length of 24 metres and above, there shall be an aft peak bulkhead in addition to other bulkheads, and it shall be positioned against the bulkhead deck in a watertight way. On ships with engine rooms a watertight bulkhead shall be installed afore the engine room.

(3) Watertight bulkheads shall be made in a way so as to be able to resist water at its highest point if the ship is damaged.

(4) Openings in the watertight bulkhead shall be kept to a minimum and sufficient apparatus shall be provided for these openings to be covered.

(5) Where water pipes, scupper holes, electric cables and similar pass through the watertight bulkhead, arrangements shall be made to maintain the watertight integrity of the bulkhead.

Stability booklet

ARTICLE 31 – (1) On boats of a freeboard length of 24 metres and above the stability requirements shall be assessed according to the relevant SOLAS and IMO criteria.

(2) Ships of any length which have a passenger capacity of over 150 and ships of a freeboard length of 24 metres and above shall request a stability booklet from floating docks and an endorsed booklet must be located on the ship/vessel.

(3) Until the stability booklet is approved, a temporary provisional stability booklet shall be located on the ship.

(4) Stability booklets issued must contain:

- a) A general introduction to the ship,
- b) Instructions relating to the use of the stability booklet,
- c) General plans showing the watertight partitions, covers, openings, seacocks, permanent ballast, deck load allowances and load limit diagrams,
- d) Hydrostatic curves or tables and cross stability curves that have been calculated on specific displacement and trims according to normal working conditions,
- e) Capacity plan,
- f) Stability data according to departure and arrival load when the ship is empty, with ballast and fully loaded,
- g) Information relating to weight limits such as maximum KG or minimum GM curves or tables showing that the necessary stability criteria are met by the ship,
- h) Necessary information for the ship to work safely in normal and emergency situations,
- i) The tilt test reports belonging to the ship.

Passenger capacity

ARTICLE 32 – (1) Passenger capacity for ships within the scope of these Regulations shall be defined according to the following criteria:

a) Passenger capacity on passenger ships shall be defined as follows:

- 1) Seating areas for passengers shall be fixed on craft. There is no obligation to have seating areas for passengers in floating and touring restaurants.
- 2) The sitting width for breadth and length of seats or seating groups must be at least 500 mm for each person and the depth must be 420 mm.
- 3) Where seating groups are facing each other the distance between the two seats must be at least 800 mm. Where there is a table/coffee table, the top of the table/coffee table shall be at a distance of at least 300 mm from the chair. The width of corridors and passing places must be at least 900 mm.
- 4) Where seating groups are in a row the net distance between two seats shall be 400 mm; where there are more than four fixed starting from a place where people pass each other the distance shall increase as set out below:

n	4	5	6	7	8
Chairs in a row L (mm)	400	450	500	550	600
Chairs facing each other L1 (mm)	800	850	900	950	1000

L, L1: net space between two seats

n: number of people in the seating group

- 5) On ships carrying parties of passengers on regular routes, the capacity of the spaces between seats and of areas excluding corridors as

- specified in subparagraphs (2), (3) and (4) below [sic] may be increased to a number obtained by dividing by a factor of 0.55.
- 6) The height of passenger areas may not be less than 2000 millimetres from the floor to the lowest point of the ceiling. In areas not often used by passengers, a lower height may be permitted for technical reasons.
 - 7) There must be sufficient escape possibilities from passenger areas to evacuation decks. The escape possibilities from the same part and areas shall be placed at a suitable distance from one another to prevent back-to-back blockages. Passenger salons shall have at least two exits.
 - 8) On passenger ships that operate in the winter season, closed areas for passengers sheltered against the weather shall be provided. The number of passengers in the winter season shall be limited by the closed area capacity. On ships carrying parties of passengers on regular routes within administrative port operating areas, passenger capacity shall be up to a number obtained by dividing by a factor of 0.55 the closed areas where passengers are. Areas covered by canvas or translucent material shall be counted as closed areas taking into consideration the regional weather conditions.
 - 9) In fixing passenger numbers the rules set out in subparagraphs (5) and (8) below [sic] shall be taken into account and the safe number of passengers shall be reflected in stability calculations, the lowest of these shall be set as the ship's passenger number.
- b) Passenger capacity on commercial yachts shall be fixed according to the following criteria:
- 1) Commercial yachts, outside of port voyages, shall have a passenger capacity up to the number of beds in cabins.
 - 2) On commercial yachts the passenger number shall not exceed 36.
- c) Opened deck small boat-type passenger motor launches, on condition that those operating at sea are on a specific route, not to be beyond 5 miles in sheltered waters from their operating area, or beyond 1 mile from the closest shore, and that they meet other safety criteria and their limits are written in their Certificate of Seaworthiness, shall have a capacity of 2 passengers per metre taking into account their full length, up to 36 passengers.
- d) On touring/excursion craft the passenger capacity shall be fixed according to the criteria below:
- 1) The nearest whole number multiplying the ship's full length by its breadth shall be divided by a coefficient corresponding to those in the annexes. The closest whole number to the value obtained shall be the passenger capacity.

$$\text{Passenger capacity} = \frac{\text{full length} \times \text{breadth}}{\text{coefficient}}$$
 - 2) In the specification of coefficients single deck ships shall apply the values in Annex 18 and ships with more than one deck shall apply the values in Annex 19 for each deck. Safe passenger numbers in the stability calculation shall be compared with the passenger number that emerges. The lowest of these shall be the passenger number.
- e) On other ships the testing and certification through evaluation of existing conditions and features of the ship for the winter and summer capacities for ships carrying 12 passengers or fewer shall be specified by the competent authority.

Certification of passenger capacity

ARTICLE 33 – (1) The passenger capacity determined in accordance with the provisions of these Regulations shall be set out in the Certificate of Seaworthiness.

General rules relating to mechanics and electrics

ARTICLE 34 – (1) On ships of a full length of 24 metres and above specimen documents of all drawings, plans and production firms used relating to mechanical and electrical fittings and equipment including repair and maintenance manuals shall be located on the ship. On ships where watch is kept in the engine room logs shall be kept.

(2) On ships of a full length of 24 metres and above, the main propulsion, controls, air pipes, fuel, compressed air, electrical and cooling systems, auxiliary engines, boilers and other pressurised containers, pipe and pump fittings, steering equipment and gears, shafts and coupling for the transmission of power shall be planned appropriately, constructed, tested, fitted and maintained. Matters relating to periodical tests have been set out in Annex 20.

(3) This article shall only apply to new ships

Engine location

ARTICLE 35 – (1) Engines must in all circumstances be able to function without any assistance other than the engine system.

(2) Main engines subject to dangerous internal pressure or high pressure shall possess a safety system that ensures protection against high pressure on auxiliary engines.

(3) All gear boxes and shaft coupling used in the transfer of power connected to the main engine shall be designed so as to withstand maximum working tension in service conditions for the safety of the ship and crew.

(4) Ships of a full length of 24 metres and above shall give an alarm if their oil pressure falls and if their oil and cooling water exceed their temperature limits, which may cause a fault in the main and auxiliary engines.

(5) Engine cooling systems or other auxiliary units on ships of a full length of 24 metres and above shall have at least two seacocks including on port and starboard, and ships of a full length of less than 24 metres shall have one.

(6) All engines installed inside the ship shall be placed in a location separate to the living quarters and shall be installed in a way that minimises the spread of fire or fire risk as well as the risks of smoke, heat, noise and vibration. The engine section shall be set up so as not to be used for any other purpose.

(7) If the engine has not been isolated with a cover or special casing, the exposed moving or hot parts of the engine which could lead to crew being harmed or injured shall be effectively closed off or protected.

(8) Ships' engine rooms may not have any openings such as windows and portholes for light or ventilation.

(9) The shaft system must be wrought steel or suitable rolled steel manufactured for the purpose or an equivalent material.

(10) Propellers must comply with the following:

- a) Propellers shall be made from normal or special bronze or cast steel or cast iron or an equivalent material.
- b) On fishing ships which have an engine attached to the stern permanent special measures shall be put in place to prevent the net getting tangled up in the propeller.

(11) The bilge level alarms that must be on a ship and the number and capacity of bilge pumps have been set out in Annex 21 according to the size of the ship.

(12) Except subparagraphs (1), (7), (8) and (11) the other subparagraphs shall not apply to existing ships.

Engine control

ARTICLE 36 – (1) The effective operation and control of the main and auxiliary engines necessary for the ship's propulsive power and safety shall be ensured.

(2) Arrangements shall be made in design, construction and installation so that the vibrations caused by the main engine and auxiliary engines under normal working conditions do not cause strain.

(3) This article shall only apply to new ships.

Main engines controlled from outside the engine room

ARTICLE 37 – (1) On ships where the main engine is controlled from the bridge and the engine room must be continuously manned:

- a) In all navigational conditions including manoeuvres the propeller rotation and propeller pitch, if any, must be fully controllable from the engine room and the bridge.
- b) An emergency stop button independent of the command system shall be installed on the bridge in order that the main engine may be stopped from the bridge in case of emergency.
- c) Commands given from the bridge must be visible from the engine control room or from the manoeuvre platform above the engine.
- d) Indicators shall be installed on the bridge to show:
 - 1) The propeller's direction and speed on fixed pitch propellers,
 - 2) The propeller's direction, speed and angle on pitch controlled propellers.

(2) There may be spaces other than the bridge where the main engine may be remote controlled but the remote control of the main engine shall be designed in such a way that it may only happen from one place at the same moment and control faults appearing in one the control areas must not affect the other areas.

(3) The necessary arrangements shall be made for the main and auxiliary engines to be continuously controlled from the engine area or the engine control room whilst operating in all types of conditions.

(4) Generally automatic operation and control systems shall contain systems ensuring that automatic control deactivates to manual. Any fault in the system shall not prevent the cancellation of automatic control to manual.

(5) This article shall only apply to new ships.

Engine rooms that are commanded from the bridge and do not require the engine room to be manned continuously

ARTICLE 38 – (1) Ships with engine rooms that need to be periodically not continuously manned shall comply with the relevant SOLAS provisions.

(2) For ships that have an engine room that needs to be periodically not continuously manned, where in all types of sea conditions including manoeuvres safety of life is guaranteed as much as on equivalent ships requiring their engine room to be continually manned and this is proved by documentation, the Administration may accept the application of other provisions equivalent to those set out in subparagraph 1.

(3) On ships not making domestic voyages that are controlled from the bridge, the engine oil pressure and temperature and the cooling water temperature must be visible from the bridge. It must be possible to start and stop the engine from the bridge.

(4) This article shall only apply to new ships.

Compressed air systems

ARTICLE 39 – (1) In compressed air systems, arrangements shall be made to reduce high pressure in the air compressor and the air cylinders and to be able to drain water and oil in the system.

(2) On ships whose propulsive power is provided by internal combustion engine apparatus, the air apparatus shall be suitably equipped against backfiring and starting air pipe explosions.

(3) The filling cycle for air compressors shall be directly connected to the air cylinders and shall go by separate cycles from the air cylinders to the main and auxiliary engines and service line.

(4) In systems where the main and auxiliary engines are provided for with starting air, if the main compressors are out of the cycle there shall be a compressor stimulated by hand or fed by an independent power supply that can be put into the cycle in case of emergency.

(5) In every pressurised cycle system there shall be at least two safety valves. If the compressor stops automatically when it reaches its pressure limit, it may be exempt from having one of these valves.

(6) This article shall only apply to new ships.

Ship manoeuvres

ARTICLE 40 – (1) On ships of a full length of 24 metres and above, before the ship enters service, its stopping distance and the ability of the propeller to change direction while the ship is travelling at its full service speed shall be tested and the results shall be recorded according to a procedure to be specified.

(2) On ships of a full length of 24 metres and above and which have more than one propeller, the stopping periods, route and stopping distances shall be established during tests carried out to determine the ship's navigation and manoeuvrability when one or more of its propellers is disabled and the records of the test results shall be located on the ship so as to be able to benefit the captain or specific staff.

(3) If a ship has been equipped with supporting apparatus for manoeuvres or stopping, the effectiveness of this apparatus shall be tested as in paragraphs 1 and 2 and the results recorded.

(4) On ships with turning gear, if the turning gear is fitted to the flywheel ring gear, arrangements shall be made to prevent way being given to the engine.

(5) This article shall only apply to new ships.

Steering equipment

ARTICLE 41 – (1) New ships of a full length of 24 metres and above shall be equipped with main steering equipment and auxiliary steering equipment. The main and auxiliary steering equipment shall be set out in such a way that if one is faulty the other need not be out of the circuit. On ships with dual propulsive systems there is no need for auxiliary steering equipment.

(2) In places where the main steering equipment is made up of two or more power units, where one of the power units is unable to function, if the steering equipment is able to work as it meets the requirements set out in paragraph 9 no auxiliary engine is required. Each control unit shall be controlled by a separate system.

(3) The main steering equipment shall have an indicator on the bridge showing the rudder angle. The rudder's indicator gauge shall be independent of the steering equipment control system and the rudder's angle position shall be clearly visible in the steering room. If propelled or administered from the swallows, for manoeuvre safety here too there must be a rudder indicator gauge.

(4) If the steering power unit on ships is faulty in any way an alarm shall sound and be visible on the bridge.

- (5) On ships of 24 metres and above all indicators belonging to all the electric and electro-hydraulic equipment of the engine shall be installed on the bridge.
- (6) The main steering equipment and rudder stock shall be sufficiently durable and have the capacity to manoeuvre the ship at its maximum operating speed and shall be designed in a way so as not to be damaged at maximum backward rotation and during manoeuvres.
- (7) The main steering equipment and rudder stock shall have the capacity to turn the rudder sharply at 35 degrees at the ship's highest service gauge and at its highest service speed, and the time for it to turn 35 degrees starboard or port under the same conditions shall not exceed 28 seconds.
- (8) The main steering equipment, if there is a power cut in its power unit shall be designed in such a way so that its system can regain function automatically or manually in an emergency.
- (9) The auxiliary steering equipment shall be sufficiently durable and shall have the capacity to control the ship at speed and to move it to an emergency position quickly in case of emergency.
- (10) The auxiliary steering equipment shall have the capacity to move the rudder from starboard 15 degrees and from port 15 degrees in under 60 seconds at maximum service speed or at a speed of 7 knots at the deepest navigation gauge. Further the auxiliary steering equipment shall function as a power source that is able to perform the conditions discussed.
- (11) If there is another system other than a fan for steering, this system shall also have the capacity to move the rudder from one side to the other side in under 30 seconds.
- (12) Instructions showing the procedures for making the auxiliary steering equipment work and for installing the rudder shall be hung in an easily visible place in the rudder room or by the side of the rudder tiller. The controls shall be clearly marked on the steering equipment.
- (13) The rudder fan shall be made of material that is resistant to seawater.
- (14) This article shall only apply to new ships.

Communication between the bridge and the engine room

ARTICLE 42 – (1) On ships of a full length of 24 metres and above there shall be a mechanism providing for communication from the bridge to the engine room or to the control room where the engines are controlled.

(2) There shall be appropriate communication apparatus to ensure the necessary communication with other areas from where the engines may be controlled.

(3) There shall be communication apparatus to ensure effective communication between the bridge and the steering room in cases of emergency.

(4) This article shall only apply to new ships.

Tanks' filling and sounding pipes

ARTICLE 43 – (1) Tanks' filling and sounding pipes must so far as possible be in a straight line. The filling pipe shall extend straight to the bottom inside the tank to a thickness distance equal to 1.5 times its diameter. The sounding pipe shall extend to the base of the tank and there shall be a striking plate under the pipe. The pipes' upper ends shall extend to the open air, thus they shall prevent seeping fuel or vapour entering inside the ship and these ends shall be fitted with permanent caps or closing valves. They shall be painted a suitable and distinctive colour.

(2) The necessary arrangements shall be made around the fuelling and oil stations to prevent the risk of fuel overflow or fire.

Fuel and oil tanks' air vent pipes

ARTICLE 44 – (1) Air vent pipes shall be placed on the tank at its highest point. The internal diameter may not be less than 1.25 times the diameter of the filling pipe.

(2) The end of the pipe must be located far from sources of combustible fresh air or heat or from the ship's openings, must prevent water getting inside and on its end there must be a flame retardant wire cage made from a corrosion resistant material.

(3) The air vent pipes shall be arranged in such a way as to prevent them constituting a risk of fuel overflow or fire.

Fuel pipe circuits

ARTICLE 45 – (1) Fuel pipe circuits shall be made from metallic seamless tubing of sufficient thickness and with as few connections as possible. In places requiring steel pipes, flexible fuel hoses of a suitable standard may be used.

(2) Fuel pipe circuits shall be arranged to be as far as possible from hot areas, electric cables and electrical fittings and shall pass through watertight bulkheads with watertight transitions.

(3) Fuel pipe circuits must be made from stainless materials resistant to corrosion, temperature, salt, vibrations and wear. Aluminium pipes may only be used in diesel circuits and on aluminium ships. In places requiring flexibility, flexible hoses with the same qualities may be used.

(4) Fuel circuits shall be installed against every type of wear and vibration and shall be fixed in such a way as to be visible in tests.

Safety measures relating to electrical equipment

ARTICLE 46 – (1) Electrical equipment must be of a quality that provides the necessary electrical energy for the ship's fittings in all normal operational and calm conditions and regardless of the electrical power source in times of emergency, and the electrical energy necessary for the ships safety in situations of emergency, and that protects the ship and its crew from electrical damage.

(2) The Administration may require additional measures for the use of portable electrical equipment in closed areas where there is a particular risk from the point of view of conductivity.

(3) The main and auxiliary distribution boards shall be set up in such a way for the necessary apparatus and equipment to be easily accessible without putting staff in danger. The sides, back and if necessary front of distribution boards shall be protected. If considered necessary a non-conductive mat or grill shall be placed on the front and side of the distribution board.

(4) Except in cases where the Administration has given permission the electricity of all metal casing and edging that may cover cables shall be unbroken and earthed.

(5) All external electrical cables and wires on equipment shall be fire retardant and shall be installed in a way so as not to destroy their original features.

(6) The cables and wires necessary for emergency power supplies, lighting, immediate communication or indicators shall be laid as far as possible from kitchens, laundries, the engine room's main quarters and hatch and other areas with a heightened fire risk. If cables connecting fire pumps to the emergency distribution board pass through areas at a heightened risk of fire, they shall be fire resistant. All these cables, if applicable, shall be laid so that they cannot stop working due to heat on the bulkheads caused by fire in a neighbouring area.

(7) Cables and wires shall be laid in a way which protects them from heat and other damage and shall be clad and supported.

(8) The end parts of all controls and joining connections shall be made in a way that protects the cable's original electrical, mechanical, fire retardant and if necessary fire resistant features.

(9) Except for electrical circuits on steering equipment where the Administration has given permission to the contrary, all circuits shall be protected against short-circuiting and overloading.

(10) Lighting equipment shall be arranged so as to prevent temperature increase that could damage cables and wires and overheating of the surrounding materials.

(11) Apart from batteries adapted especially for lighting, no storage batteries shall be located in cabins.

(12) No electrical equipment which has not been found by the Administration to be adequate regarding the matters set out below shall be put in tanks carrying combustible matter or on barges or in compartments allocated to storage batteries, in paintworks, in acetylene depots or in similar areas where combustible mixtures may be gathered:

- a) The importance of the operational goal,
- b) In a way that will not ignite the aforementioned mixtures,
- c) Suited to the area,
- d) Being documented for how powder, vapour or gas may be safely used.

(13) Light conductors shall be installed on masts and mastheads that are not conductors. If the ship was built from non-conductive material, the light conductors shall be connected to copper plates installed on parts of the ship so as to work well under the water line.

(14) Cable tracts shall as far as possible be straight, far from heat sources so as not to subject them to mechanical damage, far from bilge and must be protected particularly against drops of fuel and raindrops and shall be easy to check.

(15) Electrical cables shall as far as possible not be laid close to navigational appliances and shall be installed in a way that prevents them establishing a magnetic field that will destroy the appliances.

(16) On engines that are run on fuel with an ignition temperature of 55°C, the engine and tank room or partition lamps must be flame proof or waterproof and the keys for these places must be located in a place outside the area or in a flameproof place.

(17) The bulbs in the lighting lamps must be protected so that they do not break.

(18) Apart from paragraph 1, 2, 3, 11, 12 and 17, these paragraphs shall not apply to existing ships.

Main electrical power supply

ARTICLE 47 – (1) The main electrical power supply shall ensure adequate electrical energy for the ship's fittings in all normal operational conditions where there is no emergency situation.

(2) On ships of a full length of 24 metres and above the main electrical power supply shall consist of at least one generator.

(3) The main lighting system shall be run off the main electrical power supply and shall be lit sufficiently for all areas to be normally accessible for passengers and staff.

(4) In case of fire or other accidental emergency in areas including the main electrical power supply, the transformer if there is one, the emergency electrical distribution board or the main lighting distribution board, the main electrical lighting system shall be arranged so as not to disable the emergency lighting system set out in Article 48 paragraph 7.

(5) There shall be apparatus to prevent generators falling into reverse current.

(6) This article shall only apply to new ships.

Emergency electrical power supply

ARTICLE 48 – (1) The electrical power supply shall be able to meet the ship's electrical energy needs in emergency situations.

(2) The emergency electrical power supply shall be a generator driven by a rechargeable accumulator battery electrically charged for emergency use or by an independently functioning fuel engine.

(3) Where the emergency power supply is an accumulator battery, batteries may be automatically connected to the emergency distribution board in case of a fault with the main power supply. Where it is not possible for them to be connected automatically to the emergency distribution board they shall be manually connected.

(4) In a situation where the emergency power supply is a generator, the generator shall be automatically connected to the emergency distribution board within 45 seconds following a fault in the main power supply. This generator shall be run by a suitable diesel engine, which uses fuel that has an ignition point not lower than 43°C and is independently stored. Where a battery supplies emergency lighting to ensure that the emergency generator may be taken on to a manual circuit there is no need for the emergency generators to operate automatically.

(5) Where possible the emergency distribution board of the emergency electrical power supply and the emergency lighting distribution board shall be placed on the upper deck. This shut-off must be accessible from the open deck. Under no circumstances shall these be placed forward of the collision bulkhead.

(6) On condition that suitable steps are taken to protect independent emergency procedures the emergency generator may be used to provide energy to circuits where there is no emergency provided that this is occasionally and for a short time and it is formally logged.

(7) Electric power obtained shall be in an amount sufficient for the necessary systems to function simultaneously to ensure safety in an emergency situation. The emergency electrical power supply capacity shall be sufficient for the services outlined below, taking account of the current drawn in the apparatus's starter movements and the provisional nature of the specific electrical load and, if these services are dependent on electrical energy, to function simultaneously for the periods specified below.

- a) Emergency cluster points and exit stations and the sides of the ship must be able to be lit in an emergency for a 3-hour period.
- b) The following places are places that are to be lit for a 12-hour period in an emergency:
 - 1) Corridors, stairs, exits and escape routes in all service and living areas,
 - 2) Main generator stations including in the engine rooms and control places,
 - 3) All control stations, the engine control room and every main emergency distribution board,
 - 4) All areas reserved for fire-fighters,
 - 5) The rudder room,
 - 6) All fire pumps, emergency bilge pumps and areas accessing their starting engines.
- c) The necessary energy must be provided for the navigation lights required according to the current International Regulation for Preventing Collisions at Sea and for other lights to work for a 12-hour period.
- d) The following equipment and systems must be supplied for a 12-hour period in an emergency:
 - 1) Devices for sending emergency messages, all direct communication equipment necessary in an emergency and the ship's whistle,
 - 2) Fire warnings and fire alarm systems,
 - 3) Fire pumps, if electric.

- e) If in the opinion of the Administration the ship is not at a security risk because the journey is short, periods shorter than the 12 hours mentioned above may be accepted. This period may however never be less than one hour.
- (8) Apart from paragraphs 1, 2 and 3 the other paragraphs shall not apply to existing ships.

Accumulators

ARTICLE 49 – (1) Accumulator batteries shall be of a type without electrolyte overflow up to a tilt of 40 degrees. Accumulators for engine function shall be situated in a place close to the engines wherever possible.

(2) There shall be a special rechargeable accumulator that supplies the communications system and that can provide emergency lighting, to be installed in suitable places for that system.

(3) These accumulators shall be placed on the highest deck possible and shall be separate from the craft's electrical equipment.

(4) Accumulator mounts shall, depending on their type, be fibre or lead covered and shall be situated in a place that is protected against the effects of the weather and anything falling on top of them and at a suitable distance from the bilge.

(5) Areas where accumulators are located must have sufficient ventilation equipment to evacuate the gases produced.

PART FOUR

Fire protection, fire warnings and fire extinguishing

General rules regarding fire safety and fire fighting operations on ships

ARTICLE 50 – (1) Ships shall be equipped with fire protection, fire detection and fire extinguishing systems to the most suitable effective extent taking into consideration the type of ship and the likely fire risk.

(2) In general the ship's plan and the type of equipment installed shall be arranged to take into account fire and the scope of the fire spreading. Measures shall be put in place against all fire risks, with particular consideration of areas with apparatus with an open flame, heat, engines, auxiliary engines, oil and fuel tanks and unprotected or exposed oil and fuel pipes and avoiding electrical equipment on the hot surfaces of engines.

(3) Passenger ships of a full length of 24 metres and above and on other ships of a full length of 24 metres and above excluding those on administrative port voyages must have a fire safety plan and documents on fire control. The fire safety plan and documents on fire control that they have shall be available for the benefit of all the ship's staff and a copy shall be located in the staff messes. The fire plan and the fire control document shall reflect the ship's daily reality and changes shall be processed when they emerge. The fire safety plan and the fire control document shall contain at least the following:

a) The Fire Safety Plan:

- 1) Fire extinguishing apparatus and equipment systems that the ship must have according to the ship's operating area, type and size,
- 2) The location and number of the apparatus and equipment,
- 3) Signage in a language that the staff understand.

b) The Fire Control document:

- 1) General introduction to the fire fighting apparatus and systems,
- 2) Usage instructions,
- 3) Training and practical instructions and papers.

(4) The fitting, storage, testing and certification of fire fighting apparatus and systems shall be carried out by service providers authorised by the Administration.

Structural fire protection measures

ARTICLE 51 – (1) Class A spaces on the bulkheads and decks must comply with the conditions set out below:

- a) They shall be made from steel or other equivalent material,
- b) They shall be suitably reinforced,
- c) They shall be able to prevent the spread of smoke and flames until the end of a 1-hour standard fire test.
- d) They shall be insulated with an accepted non-flammable material, not to rise above 139°C from the original temperature on surfaces not subjected to flame and not more than 180°C on surfaces that are subject to flames and on external places in the periods set out below.
 - 1) Class A-30 30 minutes
 - 2) Class A-0 0 minutes

(2) Class B spaces must comply with the following conditions:

- a) They shall be built in a way which can prevent the spread of smoke and flames until the end of a half-hour standard fire test.
- b) They shall be insulated not to get hotter than 139°C of the original temperature on surfaces not subjected to flames and 225°C for any point including external places in the time specified below.
 - 1) Class B-15 15 minutes
 - 2) Class B-0 0 minutes

(3) On ships of a full length of 24 metres and above on international voyages, but less than 500 gross tons and made from plate metal or equivalent material, the fire integrity on the bulkheads and decks must be as in the tables below.

a) Fire integrity of bulkheads separating neighbouring areas from one another

Areas	1	2	3	4	5	6	7
1-Control stations	-	A-0	A-30	A-0	A-30	A-30	A-0
2 - Corridors			B-0	A-0	A-30	A-0	B-15
3 – Living areas				B-0	A-30	A-0	B-15
4 - Stairs					A-30	A-0	B-15
5 – Engine room						A-30	A-30
6 – Service areas (high risk)							A-0
7 – Service areas (low risk)							

b) Fire integrity of decks separating neighbouring areas from one another

Areas	1	2	3	4	5	6	7
1-Control stations	-	A-0	A-30	A-0	A-30	A-30	A-0
2 - Corridors			A-0	A-0	A-30	A-0	A-0
3 – Living areas				A-0	A-30	A-0	A-0
4 - Stairs					A-30	A-0	A-0
5 – Engine room						A-30	A-0
6 – Service areas							A-0

(high risk)							
7 – Service areas (low risk)							

(4) This article shall only apply to new ships.

Preventing the spread of fire

ARTICLE 52 – (1) The following steps shall be taken in order to avoid flammable material and prevent contact with vapour and parts reaching high temperatures:

- a) Arrangements shall be made on the ship to prevent flames or sparks escaping from funnels and kitchen chimneys.
- b) The necessary steps shall be taken for high temperatures to be permissible from cargo areas, fuel stations, control stations, living areas, boilers, funnels, kitchen chimneys and other places.
- c) Kitchen ventilation shafts shall be installed so as to be easy to clean and resist the effects of fire and may not constrict the airflow diameter.
- d) In closed roll-on roll-off cargo areas where there are motorised vehicles carrying their own fuel tanks, the controls for mechanical ventilation must be in an easily accessible place outside of the roll-on roll-off area.
- e) Closed cargo areas and engine room ventilation shafts’ upper outlets shall be equipped with a non-flammable cover.
- f) Other apertures in the engine room must be closable from the outside.

Engine room ventilation

ARTICLE 53 – (1) The main areas of the engine room, engines, boiler and pump rooms shall be equipped so to provide mandatory ventilation in sufficient amounts for staff comfort and the safe operation of the engine in all weather conditions including severe weather conditions and when operating at all power levels. On ships with a full length of less than 24 metres, the Administration may give permission that natural ventilation is sufficient.

(2) Engine room ventilation shall be such as to prevent the collection of hydrocarbon vapours in normal conditions.

(3) Ventilation of the main parts of the engine room shall where possible be equipped by suction or pressure, the ventilation shall be closable by dampers in emergency situations and the dampers shall have open and closed positions.

(4) Ventilation fans must be stoppable from outside the engine room.

(5) The other paragraphs except for 1 and 2 shall not apply to existing ships.

Rules on fuel tanks

ARTICLE 54 – (1) Petrol or liquid fuel tanks with a flash point under 55°C shall be installed separately from the ship’s structure. These tanks must be made out of steel or equivalent material that is fire and impact resistant.

(2) Diesel fuel tanks may be integrated on the ship only if the ship’s construction material is aluminium, steel or fibre reinforced plastic. Fuel tanks must withstand leakage and working pressure.

(3) Fuel tanks shall be well secured and where possible placed close to the engine room. They shall be separated from the living space by a gas impermeable bulkhead and the areas in which they are located shall be sufficiently ventilated.

(4) There shall be no access at all to fuel tank areas from passenger areas.

(5) Fuel tanks shall be equipped with a suitable closure valve and their cover and surface indicators made from heat and pressure resistant material. Fuel tanks with a capacity of 500 litres or more placed in an area above the double bottom shall be

closable from a place outside the tank area and shall be equipped with a valve placed directly onto the tank.

(6) Portable containers and fuel systems may only be used on outboard motors and portable engines.

(7) Apart from paragraphs 1 and 2 the other articles shall not apply to existing ships.

Exhaust cycles

ARTICLE 55 – (1) Exhaust pipes shall be designed and installed so as to be entirely leak proof and as untwisted and unbent as possible and shall not allow seawater to re-enter or rain water to enter the engine. Exhaust pipes shall be set up in the most accessible way possible. On ships with more than one propulsive engine, each engine shall have an independent exhaust cycle.

(2) Exhaust pipes shall be protected by way of isolation coating or suitable covering at all points which may come into contact with other materials or may be open to contact with people. Exhaust cycles shall have expanding connections that can withstand thermal expansion.

Fire protection and fire extinguishing

ARTICLE 56 – (1) The following conditions for fire protection and fire extinguishing must be complied with:

- a) Any type of material that poses a fire risk must be designed in a way that makes it easily compatible with the aims of fire control.
- b) Fire detection and fire alarm systems must always be ready to function and the crew must be able to operate them. Ships of a full length of 24 metres and above shall be equipped with an adequate number of fire alarm buttons.
- c) All fire systems and equipment shall be marked with international symbols and placed in specified locations on the ship.
- d) Ships of 500 GT and above shall have an international shore connection flange.
- e) Materials that ignite easily and when alight give off excessive flames or dangerous vapours may not be used in the engine room, kitchens or generally in places that have a high fire risk.

Apparatus and equipment for fire protection and fire extinguishing

ARTICLE 57 – (1) On new ships of a full length of 15 metres and above which use fuel which ignites under 55°C or on new ships whose total main engine power is 736 kw or more and new passenger ships which carry more than 36 passengers, the areas where the ship's engines are located shall be protected with a fixed fire extinguishing system including water systems. These areas shall be equipped with a fire detection system which gives an alarm that can be seen and heard from the bridge and has a heat or smoke detector.

(2) Cylinders containing extinguishing material in fixed fire extinguishing systems shall be situated so as to perform their function in a fire that breaks out in the protected area. The control system for activating the fixed fire extinguishing system and the control system to close simultaneously the systems providing ventilation for the area must be outside the protected area. Before extinguishing material is sprayed an alarm shall be sounded and alarm light illuminated. Areas where fixed fire extinguishing cylinders are located shall be effectively ventilated.

(3) Ships of a full length of 15 metres and above and ships carrying more than 36 passengers must have fixed fire pumps and it must be possible to turn these on by way of an independent or propulsive engine.

(4) The emergency pump shall have the same capacity as the pump in paragraph 3. The emergency pump must not be situated in the engine room, in front of the fore

collision bulkhead or behind the aft collision bulkhead and a fire breaking out in a section must not have an immediate effect on either the fixed or emergency fire pumps.

(5) On roll-on roll-off ships the vehicle area shall be protected against fire with a rain water system. This system's opening valve must be outside the vehicle area and there must be water discharge points on the vehicle deck for water discharge.

(6) On yachts of a full length of 15 metres and above making international voyages, and passenger ships carrying more than 36 passengers the engine room shall be isolated from the living area/passenger salon by heat resistant bulkheads/decks. The minimum criteria for the fire isolation materials to be used on these ships have been set out in Annex 22.

(7) New tankers of 150 GT and above but less than 500 GT making international voyages must have a fixed foam system on deck to protect cargo tankers. In fixed foam systems foam applicator equipment shall also be provided. The capacity of the applicator used may not be less than 400 litres/ minute with a spraying range of not less than 15 metres.

Fire hydrants, hoses and nozzles

ARTICLE 58 – (1) Fire hydrants shall be placed close to the entrances of the protected area. Fire hydrants and fire hoses must be in places that can be easily connected to one another. On ships that can carry a load on deck, fire hydrant locations shall be easily accessible. Pipes must not be exposed to damage by the load and must be protected against any danger of collision. Hoses shall be made from suitable material.

(2) Every fire hose shall be fitted with a valve to prevent the fire hose coming off when the fire pump is in use. If the ship has an emergency fire pump the separator valves installed to separate the main fire pump on the main fire circuit in the engine room or the parts including the pump from the remaining system parts shall be installed in a suitable, easily accessible place outside the engine area.

(3) Fire hoses must be at a suitable distance adequate for water to spray into the areas where their use may be required. Every hose shall be supplied with a cap and the necessary grips. There shall be fire hoses of a size and number deemed suitable by the Administration according to the ship's size, type and operating area.

(4) Nozzles on ships carrying hazardous loads and in engine areas must be dual purpose.

Tests on portable and fixed fire extinguishing systems

ARTICLE 59 – (1) Tests on portable and fixed fire extinguishing systems shall be carried out by service providers authorised by the Administration at the periods set out below. A test document showing that the fire extinguishing systems have passed periodic tests shall be issued by the service providers.

(2) Tests on portable fire extinguishers and respiration cylinders shall be carried out as follows:

- a) Portable fire extinguishers shall be tested at service stations for fullness once every two years and for hydrostatic pressure once every ten years.
- b) All respiration cylinders shall undergo a test for fullness once every two years and a hydrostatic test once every ten years.

(3) Fixed CO₂ fire extinguishers shall be tested for fullness, leakages and functionality of the fixed system once every two years and shall undergo hydrostatic tests once every ten years.

(4) The foam in fixed foam fire extinguishing situations shall be quality controlled once every two years.

(5) The control valves on fixed fire extinguishing systems shall be checked internally and externally once every two years.

(6) Fixed extinguishing systems other than fixed CO₂ and foam fire extinguishing systems may be checked at intervals specified by their manufacturer.

Fire fighting equipment

ARTICLE 60 – (1) Fire fighting equipment and staff gear shall be arranged so as to be ready for use at any moment and easily accessible. If there is more than one set of fire fighting equipment or staff gear these shall be distributed at regular distances.

(2) As regards staff gear on the ship: there shall be a protective shirt made from material that protects the skin against heat spreading from the fire, from burning and from being scalded by vapours, rubber or non-electrical conducting gloves and boots, a helmet that provides effective protection against impact, a torch that lasts for at least three hours and an axe.

(3) As regards respiration equipment on the ship: the minimum free air capacity shall be respiration equipment with 1200 litres of compressed air or respiration equipment that can function for at least 30 minutes, and the respiration equipment used shall have a sufficient reserve cylinder or cylinders. Every piece of respiration equipment shall be provided with a lifeline that shall be sufficiently long and be made from non-flammable durable material.

Escape provisions

ARTICLE 61 – (1) Escape routes shall be provided for everyone on board the ship to access the lifeboat vessels safely. To this end escape routes must be free of all types of obstacles.

(2) Ships of a full length of 24 metres and above or passenger ships regardless of size shall have at least two escape routes that provide for escape from every part or group of parts for passenger and crew areas that are to be as far away from each other as possible.

(3) Doors and hatches on escape routes shall operable from both sides and shall be structured so as not to need a key to open locks on doors and hatches. Doors and hatches must be open in the course of an escape. Escape route floors shall be equipped with non-slip material.

(4) It shall not be permitted to leave by any corridor that is more than 7 metres long.

(5) In areas other than living areas and the engine room just one exit is sufficient.

(6) On passenger ships, escapes shall be arranged in the way specified below:

a) For every vertical main section or every section or sections similarly defined there shall be two escape routes, at least one of which opens on to stairs constituting a vertical escape route.

b) There must be sufficient escape possibilities from passenger areas to evacuation decks. Escape possibilities from the same section and areas shall be placed at a suitable distance from each other so as to prevent back-to-back blockages. Passenger salons shall have at least two exits; passenger salons that hold more than 200 people shall have at least three exit possibilities.

c) All stairs, exits and escape routes including corners and junctions shall be lit or marked at each point with a phosphorescent mark no higher than 300 mm from the deck.

d) Roll-on roll-off ships must have corridors of a width of at least 600 mm on either side of the vehicle ramps, suitable for passengers to walk along.

(7) Cargo ships, fishing ships, service ships and commercial yachts shall have escape routes as for ships of a full length of 24 metres and more.

- a) In living areas, on every floor for every restricted area or group of areas there shall be at least two escape routes at a sufficient distance from each other.
 - b) On ships carrying hazardous loads a catwalk made of steel shall be constructed on the cargo area. The catwalk floor shall be designed to be sturdy and non-slip. There shall be escape routes along both sides of the catwalk.
- (8) Escape routes from the engine room shall comply with the following provisions:
- a) Ships of 1000 GT and above must have at least two escape routes.
 - b) On boats constructed from metal plate materials all stairs and corridors in the engine section shall be made from steel or equivalent material.
 - c) On those that have an engine control room, there must be two escape routes including one that protects against flames up to a secure point outside the engine section.
- (9) Escape routes in cargo sections shall be equipped with surrounds on vertical staircases over 9 metres to prevent staff falling.
- (10) This article shall only apply to new ships.

Rules relating to kitchen gas (LPG) used on ships

ARTICLE 62 – (1) Gas cylinders shall be placed in a section outside of living areas, on the deck protected from bad weather and the sun's rays. This area shall be ventilated and shall have an opening in the bottom part to let out gas in case of leakage, and the gas shall be in a location that prevents it from getting into other parts of the ship. Every cylinder or group of cylinders shall be equipped with an immediate closure valve and a pressure reducer suitable for the apparatus used. If cylinders are inside the ship the LPG content of each cylinder of less than 3 Kg LPG may be put in the kitchen on condition that it is connected with a direct or short and rigid metal pipe compliant with standards.

(2) If cylinders are in closed areas or inside the craft, adequate ventilation shall be provided and there shall be gas alarm apparatus. Cookers using LPG cylinders in closed areas shall have an automatic shutdown system if there is a gas leak.

PART FIVE

Lifesaving vessels and equipment

General rules on life saving vessels

ARTICLE 63 – (1) Lifesaving equipment may not be used in the ship's normal daily work. Equipment used for the ship's daily operations shall be distinctly separate from lifesaving equipment. Lifesaving equipment and equipment used daily shall be marked so as not to be confused with one another.

(2) All plans, drawings and documents relating to life saving and communications equipment must be present on every ship in the Turkish language. These plans, drawings and documents shall be in Turkish and English on ships making international voyages.

Life buoys

ARTICLE 64 – (1) Life buoys shall be located in places that people on the ship may comfortably reach and where possible shall be distributed in equal numbers on both sides of the ship and shall be in positions where they can be quickly thrown into the sea. Life buoys may not be permanently attached in any way whatsoever.

(2) Life buoys shall have floating lights on them in the number specified on the checklists in the annexes to these Regulations. At least one life buoy on each side of the ship shall be equipped with a floating messenger line not to be shorter than twice

the distance from the area where the life buoy is situated to the water line when unloaded or 30 metres, whichever is the longer.

(3) While the ship is in port or anchored there shall always be a life buoy with a line next to the gangway.

(4) Every life buoy shall be marked permanently with the name of the ship and its port of registry in capital letters.

(5) There shall be a life buoy next to the guardrail and walkway openings set out in Article 25 paragraph 5.

Life jackets

ARTICLE 65 - (1) Every ship shall have a sufficient number of life jackets for the people on board. The number of life jackets to be found on board a ship has been set out in the checklists in the annexes to these Regulations.

(2) Children's life jackets shall be stored so as not to get mixed up with adult life jackets and in an easily accessible separate place.

(3) Life jackets shall be stowed on the ship in an easily accessible way and their location and quantity in that location shall be marked in a clearly visible way.

(4) Life jackets shall be made and designed not to affect boarding and disembarking the ship's lifesaving vessels.

(5) Life jackets shall have reflective bands, lights and whistles.

(6) Suitable instructions and methods as to where the life jackets are on the ship and how to put them on shall be displayed in open places and easily visible for the use of the ship's crew and passengers.

Lifesaving vessels, launching equipment, embarking the vessels and assembly points

ARTICLE 66 – (1) Lifesaving vessels shall consist of life rafts, lifeboats, rescue boats and service boats.

(2) Every lifesaving vessel shall be clearly marked in permanent capital letters showing its ship, port of registry and the vessel's approved passenger capacity.

(3) Lifesaving vessels shall to the safest suitable extent be placed close to the water level and living areas. The access routes to life saving vessels shall in all cases be suitable. If the distance from the deck to the water is not suitable for embarkation, suitable appropriate transfer arrangements shall be made for embarkation onto and disembarkation from lifesaving vessels.

(4) While entering or exiting the water, lifesaving vessels shall be positioned in such a way so as not to interfere with the preparation of other lifesaving vessels, not to go around them, not to cause confusion and not to be affected by the ship's components or propeller while abandoning ship.

(5) Lifesaving vessels shall be constantly ready for any situation to be faced and shall be prepared by two staff members and in the sea within a period of not more than 5 minutes.

(6) Life rafts shall be stowed on the ship with hydrostatic or automatic release units. These types of life rafts shall also be manually releasable.

(7) Usage and launch instructions shall be clear and colourful and not susceptible to water and weather conditions, and shall be displayed next to the lifesaving vessels in a way that is clearly visible even in emergency lighting conditions.

(8) Assembly points must be close to embarkation points. Each assembly point must have a space big enough to take the people allotted to gather in it. Assembly and embarkation points shall be in places that are easily accessible from living and working areas. Assembly and embarkation points shall be adequately lit. Narrow passages, gangways and exits leading to assembly and embarkation points shall be lit.

Lighting must therefore be set up so as to run both on the main and the emergency power supply.

Repair, maintenance and checks of lifesaving vessels

ARTICLE 67 – (1) Before leaving port and during the voyage lifesaving equipment shall always be kept in a functioning condition and ready for immediate use. Lifesaving equipment repair instructions must be kept on the ship and repairs must be carried out according to these.

(2) At the ship's weekly check the lifesaving vessels and equipment to launch them shall be checked visually and must be manifestly ready for use.

(3) At the ship's monthly check all the lifesaving equipment including the lifeboat fittings shall be checked and it shall be seen that they are complete and in good condition.

Initial tests on lifeboats to be installed on ships

ARTICLE 68 – (1) Before being put to use, free falling lifeboats and davit-launched lifeboats to be installed on a ship for the first time shall be tested from the point of view of the lifeboat's compatibility with the drop in free falling boats and the suitability of the davit on other boats. In the course of these tests all necessary steps shall be taken by the facility authorities. Lifeboats shall first be tested when empty (without people inside). After this test, the lifeboat shall be re-tested using weights of up to 110% of its capacity. After these tests, if there is no problem with the drop, the davit or the boat, the final test shall be carried out having taken all safety measures with the minimum number of trained ship's staff and equivalent systems. These tests shall be carried out by the manufacturers or authorised providers under the supervision of the Administration or authorised institution.

Periodical testing of life rafts and lifesaving vessel launch equipment

ARTICLE 69 – (1) Periodical testing of life rafts and equipment to launch lifesaving vessels shall be carried out by service providers authorised by the Administration at the intervals specified below. A test document showing that the lifesaving vessels have complied with the periodical testing shall be issued by the service providers.

(2) Life rafts and free-fall equipment shall be periodically repaired at service stations once every 17 months. Life raft brands that do not have authorised service providers in our country shall be periodically repaired by any service provider authorised by the Administration under the supervision of a testing expert.

(3) Dynamic tests on life saving vessel launch equipment shall be carried out once every five years with a proof load of 1.1 times the total weight and tests on empty vessels shall be carried out every year by authorised service providers under the supervision of the Administration or authorised institution.

(4) Mandatory marine evacuation systems on ships that have them shall be tested every five years at a service station.

Reflective bands for life saving equipment

ARTICLE 70 – (1) All rescue boats, lifeboats, life rafts, diving gear, life jackets and life buoys on ships shall be equipped in compliance with IMO recommendations and with reflective bands that are accepted by the Administration.

Pyrotechnic materials, line throwing appliances and wireless equipment

ARTICLE 71 – (1) Pyrotechnic materials meeting the requirements of these Regulations, line throwing appliances, radar reflectors and wireless equipment on ships shall be kept in the command area so as to be easy to access and use, and in suitable conditions to protect against water and weather conditions. Places where this equipment is located shall be marked with a suitable symbol. The quantity of this

equipment has been set out in the checklists in the annexes to these Regulations according to ships' type and operating area.

Statement of roles and instructions in case of emergency

ARTICLE 72 – (1) Statements of roles shall be hung in prominent places along the ship including the bridge, engine room and crew living quarters. The general actions for crew and passengers on the sounding of the emergency alarm shall be set out in the statement of roles. The statement of roles shall set out how the order to abandon ship is to be given. Officers with responsibility for the use of life saving and fire equipment in emergency situations shall be set out in the statement of roles. After the statement of roles has been prepared, if, because of crew changes the statement of roles requires amendments, the captain shall amend the list of roles or prepare a new list.

Education and training

ARTICLE 73 – (1) The training periods and principles for abandoning ship, fire, lifeboat embarkation, emergency steering, man overboard, collision, running aground, search and rescue, and marine pollution have been set out in Annex 23 according to the ship's type, operating area, size, gross tonnage and equipment.

(2) All staff on ships must know what is to be done in emergency situations. New staff joining the ship shall be given familiarisation training on the ship within 3 days at most. Passengers on passenger ships shall be informed by visual or written instructions what should be done in an emergency situation.

(3) Training papers shall be recorded in the log.

Public address systems, emergency announcements and the general alarm

ARTICLE 74 (1) Passenger ships of a full length of 24 metres and above shall have a public address system that runs off both the main power supply and the emergency power supply and can be heard from every part of the ship. An equivalent system may be used instead of this.

(2) Ships of 300 GT and above must have fixed or two portable units of equipment to provide two-way emergency communication between the emergency cluster stations and other important points on the ship. Existing equipment on the ship may be used for this purpose.

(3) Ships of a full length of 24 metres and above shall have a general alarm system that runs off the emergency power source, is controlled from the command room and can be heard from all living quarters and all areas open for use by staff and passengers if there are any.

PART SIX

Wireless Communications

Communication equipment, navigation equipment, broadcasts, signals and provisions for these

ARTICLE 75 – (1) Ships shall be equipped with wireless communications equipment suitable for their operating area.

(2) Ships shall be equipped with navigation equipment that is suitable for their operating area, ensures audio and visual signalling and communication from ship to shore and ship to ship, shows the course the ship is following, enables safe passage when the ship has limited visibility including in narrow and shallow waters, can establish the ship's location, shows the ship's manoeuvre possibilities and provides internal communication on the ship.

(3) The equipment in paragraphs 1 and 2 has been set out in the checklists in the annexes to these Regulations.

(4) Ships shall have the most recently revised maps and marine publications appropriate for their operating area. On ships making domestic voyages electronic systems equivalent to these publications may be used.

(5) There shall be the audio and visual signals required according to the Regulations on Preventing Collisions at Sea brought into force by Committee of Ministers' Decision no. 7/14561 dated 12/12/1997.

Wireless station requirements on board

ARTICLE 76 – (1) Wireless stations, wireless equipment and other equipment shall be installed so as not to interfere with one another.

(2) They shall be installed in the way that provides the maximum possible safety and operational possibilities.

(3) They must be protected from the damaging effects of water, excessive temperature changes and other negative environmental conditions.

(4) They shall be securely, effectively and robustly installed and equipped with sufficient lighting.

(5) They shall be marked with the ship's call sign and other identifying signs in a way that is clearly visible.

(6) For navigational security there may be no VHF equipment in the command room.

Maintenance and repair of communications equipment

ARTICLE 77 – (1) Communications equipment for ships must be repaired and maintained in a way that is suitable for it to meet operational requirements fully and to meet performance standards for this type of equipment.

PART SEVEN

Navigational Safety

General rules relating to navigational safety

ARTICLE 78 – (1) Ships shall carry the fittings, equipment and publications specified in the checklists set out in the annexes to these Regulations.

Magnetic compass

ARTICLE 79 – (1) According to these Regulations every compass carried shall be situated on the ship in the most appropriate way for its purpose.

Signals to prevent collisions

ARTICLE 80 – (1) Ships shall carry the visible and audio signs, markings and lights required for ships of their type and size according to the rules on preventing collisions at sea. All Aldis lamps and audio signals shall be of an approved type. All visual and audio signals on the ship must be compliant with the rules on preventing collisions at sea.

(2) The electrical visual signals discussed in paragraph 1 shall run off two separate power supplies, where necessary the reserves shall be used in cases of emergency. These reserves are only necessary for the white navigation lights on the ship's mast, side and stern.

(3) On ships of a full length of 24 metres and above the electronic visual signals shall be controlled from a panel in the ship's command area; for every signal there shall be a key and display light as well as an audio alarm.

(4) The deployment of the ship's whistle towards the prow may not impede any of the ship's structure. If the ship's whistle is controlled by an automatic appliance this

automatic control appliance must be of a type that can be taken out of the circuit whenever required.

Bridge viewing distance

ARTICLE 81 – (1) The viewing distance from the bridge must not have any negative effect on the ship’s safe navigation.

Provisions on pilot transfer

ARTICLE 82 – (1) Ships’ provisions on pilot embarkation and disembarkation shall comply with the SOLAS requirements.

PART EIGHT

Provisions regarding the load

General rules relating to provisions regarding the load

ARTICLE 83 – (1) All information considered necessary from the point of view of the load being suitably stowed and safely transportable shall be imparted to the ship’s captain or his agent by the load owner with adequate notice.

(2) When the load carried is stowed on or below deck, for safety, all steps shall be taken so that it shall not damage or pose a threat to the ship itself or anyone on the ship during the entire voyage.

(3) No explosive material in the category of dangerous goods may be carried as a load on passenger ships.

General requirements for ships carrying dangerous loads

ARTICLE 84 – (1) Ships that will carry dangerous loads shall be suitably designed, constructed and equipped for the requirements of a dangerous load or loads, the transportation of which shall have been planned at the ship’s design and construction stages.

(2) Documents and certificates stating that it is suitable to carry dangerous loads shall be located on the ship. The transportation by that ship of loads of a type and classification not in the ship’s existing certificate and its annexes shall not be permitted.

(3) The certificate setting out the characteristics of the dangerous load or loads being carried and the load list shall be located on the ship throughout the voyage.

(4) For dangerous loads, the necessary steps shall be taken so that during loading and unloading, storage and voyage, no damage of any kind is done to the load, the ship or staff.

(5) This article shall apply to ships used in the transportation of dangerous loads. Dangerous loads have been categorised in SOLAS Section VII. The requirements in this part shall not apply to materials and equipment stored for the ship’s own needs.

The transportation of dangerous loads in packages

ARTICLE 85 – (1) Dangerous loads to be transported in packages shall have a signed document showing that they have been packed, signed for, labelled or posted suitably for transportation.

(2) In compliance with categorisations in national and international rules every ship carrying dangerous materials shall have a list or manifest setting out the type and location of dangerous materials on the ship. A detailed loading plan specifying all dangerous materials may be used instead of the special list or manifest referred to here.

(3) In cases where dangerous loads are lost or fall into the sea, this shall be reported immediately by the ship’s captain detailing the incident to the Administration or the closest shore state.

Transportation of dangerous spillable loads

ARTICLE 86 – (1) Dangerous spillable loads other than liquids or gas that are loaded into load compartments directly from other containers as powder, granules or large particles specified in SOLAS Section VII shall be accepted.

(2) In accordance with categorisations in national and international rules every ship carrying dangerous materials shall have a list or manifest setting out the type and location of dangerous materials on the ship. A loading plan specifying the location of all dangerous materials may be used instead of the special list or manifest referred to here.

(3) Dangerous spillable loads shall be loaded under special procedures selected according to the load's characteristics, stowed and made secure. Loads that must not be put side by side shall be separated from each other.

(4) The necessary steps shall be taken to ventilate spillable dangerous loads liable to heat up, ignite or vaporize spontaneously.

(5) In cases where dangerous loads are lost or fall into the sea, this shall be reported immediately by the ship's captain detailing the incident to the Administration or the closest shore state.

Additional measures for ships carrying liquid loads

ARTICLE 87 – (1) A loading plan calculating the effects of the liquid load on the ship's balance and resistance shall be drawn up in advance by the ship's captain.

(2) Ships carrying loads that may give off toxic or flammable gases or which may cause the compression of oxygen in the cargo areas shall have on board equipment that measures gas and oxygen concentration in the air. Staff shall be trained in the use of this equipment.

(3) Before the loading or unloading procedures of liquid loads, in order not to exceed the ship's permissible strength and momentum, a plan containing the order and the amounts and emptying rates shall be made by the ship's captain and the terminal staff and this plan shall be complied with throughout the load operation.

Additional safety measures for tankers carrying petrol

ARTICLE 88 – (1) Load tanks on tankers shall be equipped with flame arrester vents. The design and use of these vents shall be equipped with relief valves in order to ensure the ship's operational and navigational safety.

(2) All electrical fittings and cables in areas where there are dangerous loads and in the pump room shall be equipped so as not to emit sparks.

(3) The pump room shall be equipped with a bilge level alarm.

(4) The cargo pump room shall be equipped with a vapour detector and the equipment for immediate evacuation in an emergency shall be located outside the pump room.

(5) Living areas may not be located above the pump room or tank area.

Additional provisions for container ships

ARTICLE 89 – (1) Containers loaded onto decks or hatch covers shall in no circumstances be stowed so as to impede the view from the bridge.

(2) The direct passage of staff from starboard to port and prow to stern on deck shall in no way be impeded.

(3) In areas where containers loaded onto decks or hatch covers are located, these must not constitute stress that compromises safety.

(4) Containers loaded on top of each other shall be secured by a suitable locking device.

(5) Containers loaded on deck must not overhang the ship's sides.

(6) All containers must be effectively tied down to avoid them overturning or slipping.

(7) Containers loaded onto decks or hatch covers may not under any circumstances impede sight of the ship's navigational lights.

Additional provisions for roll-on roll-off ships

ARTICLE 90 – (1) Measures shall be put in place to prevent the covers of opening and closing equipment being opened separately after they have been closed.

(2) There shall be suitable space on the ship for passengers and vehicles to embark and disembark the ship safely.

(3) For vehicles carried on deck, the maximum axle load shall be located at entry places to the cargo section.

(4) In order to ensure passage between vehicles, the distance between vehicles may not be less than 500 mm. The distance between the front end and back end of a vehicle and the front end or back end of another vehicle may not be less than 500 mm. The distance from vehicles to the ship's sides and lengthwise and crosswise to the bulkheads may not be less than 600 mm.

Unloading equipment

ARTICLE 91 – (1) If ships have the potential to carry out their own loading and unloading procedures, they shall be equipped with provisions such as a crane, winch, and boom, and these must be fit for purpose.

(2) The initial static and dynamic tests of all fixed and moving parts of this equipment shall be carried out and recorded by a service provider under the supervision of the Administration or authorised institution.

(3) This equipment shall be dynamically tested at intervals of at most five years by service providers under the supervision of the Administration or authorised institution. The test results and papers shall be kept as one document on the ship.

(4) The safe working load of the equipment shall be specified and marked in an easily visible way on the equipment.

PART NINE

Marine pollution prevention

Dirty water system and equipment

ARTICLE 92 – (1) In the collection tank and equipment, the collection tank shall be suitable for both black and grey water.

a) Fixed collection tanks and equipment shall comply with the provisions set out below:

- 1) Black and grey water may only be stored together on ships and vessels equipped with fixed dirty water tanks and equipment.
- 2) If used together with the decomposition/disinfection system, black water and grey water shall be stored separately.
- 3) On ships and vessels equipped with purification systems, if black or grey water are not purified the non-purified water types shall be kept in a separate tank.

b) Crafts less than 8 metres long may be equipped with portable collection tanks. This equipment shall comply with ISO Standard 8099.

(2) Disinfection and decomposition systems and equipment shall only be for black water. The ship or vessel shall be equipped with a disinfection and decomposition system accepted as suitable by the Administration. Requirements relating to disinfection and decomposition systems shall be set out by the Administration.

(3) Dirty water purification systems and equipment shall be for both black water and grey water. Ships and vessels equipped with a purification system shall have a

preliminary holding tank of sufficient capacity to prevent the system malfunctioning for any reason.

- a) On ships and vessels the purification equipment to be used for black water must be equipment that has an approval document according to the IMO's published test procedure relating to black water purification equipment. There is no requirement for ships or vessels that have black water purification systems to have a black water collection tank.
- b) There is no requirement for ships or vessels that have a grey water purification system to have a grey water collection tank.

(4) Ships and vessels shall be equipped with at least one of the system options in paragraphs 1, 2 and 3.

Calculating dirty water collection tank capacity

ARTICLE 93 – (1) The necessary capacity for a black water collection tank shall be calculated by the formula $VS = [(P \times Ap) + (Y \times Ay)] \times G$.

(2) The necessary capacity for a grey water collection tank shall be calculated by the formula $Vg = [(P \times Ap) + (Y \times Ay)] \times G$.

(3) The values to be used in the calculations have been explained below:

- a) VS: Black water tank capacity
- b) Vg: Grey water tank capacity
- c) P: Maximum number of staff that may be on the ship or vessel
- d) Y: Maximum number of passengers that may be on the ship or vessel
- e) Ap: Daily amount of waste per member of staff, which is in Annex 24
- f) Ay: Daily amount of waste per passenger, which is in Annex 24
- g) G: The duration of the voyage to be made by the ship or vessel.

(4) The value of G shall be taken as at least the number of days set out in Annex 24.

(5) If the capacity specified for grey water is more than the freshwater tank capacity, the freshwater tank capacity value shall be accepted as sufficient for the dirty water collection tank capacity for grey water. In black water systems, if seawater is not used as cleaning water the fresh water tank capacity shall be sufficient for the dirty water tank capacity.

(6) In the grey water calculation, for ships and vessels that do not have a bathroom the capacity shall be calculated according only to washroom waste.

(7) Structures such as showers located on deck shall not be considered in the capacity calculation if they are not used as bathrooms.

(8) When carrying out the calculation for ships and vessels that have more than one toilet, the calculation shall be made taking into consideration the toilet producing the most waste.

(9) The testing official for passenger ships making scheduled voyages and ships and vehicles of a full length of less than 24 metres, where the necessary dirty water tank capacity for the purposes of the calculation in this article is not deemed applicable because of structural problems on the ship or vessel, shall specify this in the report and shall suggest to the Administration that a dirty water tank with a suitably greater capacity be installed. The sufficient capacity for ships and vessels under this provision shall be determined by the Administration.

(10) Every dirty water discharge circuit shall have at least one non-return valve.

Dirty water system plan

ARTICLE 94 – (1) A dirty water system plan shall be prepared on the basis of the provisions in paragraphs 2 and 3 according to the dirty water system option with which the new ship or vessel is equipped.

(2) Dirty water system plans on ships and vessels equipped with collection tanks shall contain at least information relating to the system configuration, operation and maintenance, a list of necessary components for its correct operation, how many people it was designed for, the maximum voyage duration used in the capacity calculation, and the dirty water tank capacities calculated for black and grey water.

(3) Dirty water system plans on ships equipped with decomposition and disinfection systems shall have a general schematic diagram including at least the system configuration, system operation and system maintenance, a list of necessary components for the system's proper operation, how many people the system was designed for, test results of the dirty water discharge system declared by the manufacturer, which types of dirty water are purified by the system, which water is used for cleaning, the required duration for the system to carry out purification, the required preliminary dirty water tank capacity for the system, organic or chemical materials used in the functioning of the system, if any, and diagrams of flow and electricity showing the system's mechanisms and functions.

Standards, markings, dirty water discharge connections, records

ARTICLE 95 – (1) On ships or vessels, the deck discharge connections shall be marked with a symbol compliant with ISO 8099a visibly on or next to the connection, and the tank's name and volume shall be marked on every dirty water tank.

(2) On ships and vessels the electrical and valve equipment used in both the black water and grey water systems must comply with the standards ISO 9093-1, ISO 10133 and ISO 13297. Should these standards be repealed by the ISO, this provision shall be valid for the standards that replace them.

(3) On new ships and vessels of a full length of less than 36 metres, the parts of the black and grey water systems used must comply with the TSE 7787 Small Craft – Toilet Waste Retention provisions.

(4) On ships or vessels with a moulded depth of 5 metres or more, the International Organisation for Standardisation (ISO) Standards on Sewage Disposal Pipes in Annex 25 and on ships or vessels with a moulded depth of less than 5 metres the International Maritime Organisation Standards on Sewage Discharge Connections in Annexes 25 and 26 shall be used for dirty water deck discharge connections. The discharge connections must be installed in a way that is easily accessible, will minimise the possibility of pollution arising from an accident and will not cause operational difficulties taking into account they go into the clean water and fuel depots.

(5) On ships and vessels of a full length of less than 15 metres, the dirty water discharge connection shall be on the side above the central point of the weighted freeboard.

(6) On ships and vessels with portable dirty water tanks only, no discharge connection shall be required on deck.

(7) Dirty water discharge from ships and vessels shall be logged. The requirements of the record shall be specified by the Administration.

(8) This article shall only apply to new ships and vessels.

Prevention of marine pollution by petrol

ARTICLE 96 – (1) Ships of a full length of 24 metres and above outside port operating areas shall have a collection tank made of steel or equivalent material to collect bilge water, oil and fuel waste. The collection tank shall not be connected to the sea.

(2) The waste collected in the collection tank must be deposited on land or into the ship or vessel's cycle. The specifications of the connecting flange used shall be as follows:

External diameter	215 mm
Internal diameter	According to the pipe's external diameter
Bolt chamber diameter	183 mm
Flange slots	6 slots of 22 mm diameter
Flange thickness	20 mm
Amount/diameter of nuts and bolts	6 of each of 20 mm diameter, suitably spaced

(3) It shall be possible to fix the tank level.

(4) On tankers smaller than 150 GT and other ships smaller than 400 GT the collection tank capacity shall be at least 3% of the ship's fuel tank capacity or 1m³, whichever is smaller.

(5) On tankers larger than 150 GT and other ships larger than 400 GT the MARPOL 73/78 provisions shall apply.

(6) It shall be possible to ensure that oily water collected in the engine bilge is pressed from the connecting flange specified in subparagraph 2.

Oil and load record books

ARTICLE 97 – (1) Every petrol tanker of 150 GT and above shall keep an Oil Record Book. The oil record book shall be filled in without delay on every operation and all records regarding the task must be completed accordingly. Every task filled in shall be signed by the officer or officers responsible for that task. All entries in the oil record book shall be in Turkish, but on ships that have an international Petrol Pollution Prevention Certificate the records shall be written in English. The oil record book shall be kept in a logical place for audit and shall be located on board, including on ships on tow where there are no staff on board. Notebooks shall be kept for three years from the date of the last entry.

Garbage plan and garbage record book

ARTICLE 98 – (1) Ships of a full length of 12 metres and above shall have posters and notices to inform crew and passengers on the ship about garbage disposal. These notices must be in Turkish but shall additionally be in English on ships making international voyages.

(2) All ships of 400 GT and above making international voyages and carrying 15 staff or more shall have on the ship a garbage management plan to be followed by the officer ensuring methods regarding garbage disposal, storage and collection.

(3) Every disposal procedure or incineration shall when finished be recorded in the garbage record book and the date of the disposal or incineration shall be written and signed by the officer responsible for disposal. Every completed page of the garbage record book shall be signed by the ship's captain. The garbage record book shall be located in an easily accessible place on the ship for checking. This document shall be kept for a period of two years after the last entry.

PART TEN

Living and Working Areas

Rules relating to places where crew are to be accommodated

ARTICLE 99 – (1) Places where crew are to be accommodated, their position in relation to other areas, their access routes, construction and lay-out shall be adequately safe and they shall be protected against bad weather and the sea and

insulated against heat, cold, and objectionable noises and smells and leakages emanating from other parts of the ship.

(2) There shall be no direct access to cabins from the ship's load or engine areas or kitchens, paint rooms or engine room, decks or other storage areas, drying rooms or general washing areas or toilets.

(3) All cabin and corridor areas adjacent to external areas likely to be caused increased temperature due to kitchens or areas producing heat shall be adequately insulated. In the same way protection shall be provided against vapour and hot water pipes.

(4) Cabins, dining halls, recreation rooms and crew living areas and corridors shall be arranged in a way so as not to be cramped or excessively hot.

(5) Exhaust pipes shall be adequately insulated and these shall not go past crew living areas and it shall be ensured where possible that these shall not go past corridors leading to these areas.

(6) Panelling and coverings shall be made of materials with a surface that may easily be kept clean. No tongue and grooved furnishings or building materials carrying the risk of harbouring vermin shall be used.

(7) The internal walls and ceilings of cabins and dining areas shall be maintained in a way that is easy to keep clean.

(8) In all places where crew need to walk around freely, head height may not be less than 1.98 metres.

(9) If furnishings are not made of a single piece, the places where their edges meet shall be rounded off in a way so as not to leave any gaps.

(10) Wet areas shall have sufficient drainage.

Ventilation and heating

ARTICLE 100 – (1) The ventilation system shall keep the air in cabins and dining halls at required conditions and shall provide adequate airflow in all types of weather and climatic conditions.

(2) The heating system shall be provided on every ship by steam, hot water, hot air or electricity.

(3) The heating system shall be adjusted in the normal weather and climate conditions encountered during the course of the ship's voyage to keep the temperature in places accommodating crew and passengers at an adequate level.

(4) Radiators and other heating appliances shall be installed so as to prevent the risk of fire and not to be a source of danger or discomfort.

Lighting

ARTICLE 101 – (1) Depending on the special provisions which may apply on passenger ships, cabins and dining halls shall be completely lit with natural light and adequate artificial light.

(2) All areas used by crew shall be naturally and adequately lit.

(3) On all ships the places that accommodate crew shall be electrically lit.

Cabin location and minimum area

ARTICLE 102 – (1) Cabins shall be above the loaded water line amidships or at the stern.

(2) If all types of positioning are unsuitable or impracticable because of the ship's type, dimensions or the service it has been allocated to, the Administration may in particular cases authorise cabins to be placed to the fore or under the water line, provided they are not further forward than the collision bulkhead.

- (3) On passenger ships, on condition that cabins are not immediately below corridors and sufficient steps have been taken to light and ventilate them, permission may be given for them to be placed under the loaded water line.
- (4) The area of each cabin separated off for crew may not be less than:
- 2.5 square metres on ships smaller than 1000 GT,
 - 3.75 square metres on ships over 1000 GT and under 3000 GT,
 - 4.25 square metres on ships over 3000 GT and under 10,000 GT,
 - 4.75 square metres on ships of 10,000 GT and above.
- (5) The area of each cabin separated off for two crew members may not be less than the following for each crew member:
- 2.25 square metres for ships smaller than 1000 GT,
 - 2.75 square metres for ships over 1000 GT and under 3000 GT,
 - 3.25 square metres for ships over 3000 GT and under 10,000 GT,
 - 3.75 square metres on ships of 10,000 GT and above.
- (6) On passenger ships the area of each cabin separated off for crew may not be less than
- 2 square metres on ships smaller than 1000 GT,
 - 2.35 square metres on ships over 1000 GT and under 3000 GT,
 - On ships of 3000 GT and above as follows:
 - 3.75 square metres for single person cabins,
 - 6 square metres for 2-person cabins,
 - 9 square metres for 3-person cabins,
 - 12 square metres for 4-person cabins.
- (7) Areas covered by berths, wardrobes, bedside tables and armchairs shall be included in the calculation of floor space. Narrow and awkward spaces that do not in fact amount to areas used to move about and places where furniture cannot even be put shall not be included in this calculation.
- (8) Berths shall not be placed alongside one another in a way that makes it necessary to go over one to access another.
- (9) No more than two berths shall be put on top of one another. In cases where two berths are placed against the wall, only one of the berths may be over a porthole.
- (10) On two storey bunks the lower berth may not be less than 30 centimetres from the floor. The top berth shall be positioned in a place that is approximately in the middle between the bottom bed and the ceiling rafters.
- (11) The minimum internal dimensions of a berth are 1.98 metres by 0.8 metres.
- (12) Cabins shall be arranged and equipped in a way that ensures a decent level of comfort for the users and facilitates cleanliness.
- (13) As regards furniture there shall be a wardrobe for each person.
- (14) Portholes in cabins shall have curtains.
- (15) Cabins shall have a mirror, a small cupboard for toiletries, a bookshelf and sufficient hanging hooks.

Dining halls and recreation salons

ARTICLE 103 – (1) Ships shall have dining halls.

- Dining halls shall be equipped with fixed or moveable table and chair units to be used by the crew.
- Dining halls shall be as far as possible from bedrooms and as close as possible to the kitchen.
- Upper surfaces of tables and chairs shall be made of a waterproof, non-scratched and easily cleanable material.
- Utensils and rubbish bins may not be plastic.

- (6) Cooker hoods shall be equipped with a grease filter.
- (7) Ships shall have refrigerators for staff use.
- (8) Recreation spaces suitable for officers and crew and that meet their needs shall be provided. If these kinds of spaces cannot be separated from dining halls, the dining halls shall be planned, arranged and furnished to include this purpose.
- (9) This article shall apply to ships working outside of port voyages.

Sinks, bathrooms and showers

ARTICLE 104 – (1) On every ship, the places taken up by sinks, bathrooms or showers shall be located in clean places and these places shall be provided with the possibility of hot water.

(2) Ships shall have sufficient numbers of toilets to meet the needs of people on board. On ships that have two or more toilets, at least one of them shall be a Turkish-style toilet.

(3) For all categories of crew, wash places shall be provided for all crew who are not in cabins with their own wash place in accordance with the following:

- a) For eight people or fewer one bathroom or shower,
- b) For six people or fewer one sink.

(4) Ships of a full length of 24 metres and above shall have a washing machine.

(5) This article shall apply to ships working outside port voyages. Passenger ships working in port voyages shall have toilet facilities that meet the needs of the passengers.

Infirmary

ARTICLE 105 – (1) Every ship working outside cabotage voyages with 15 or more crew and setting sail for a period of more than 3 days shall have an infirmary with beds.

(2) The infirmary shall be in a place that is easily accessible, can comfortably accommodate those who stay in it, give the necessary treatment in all types of weather conditions and be in the closest place to the exits to deck.

(3) The entrance, berths, lighting, ventilation, temperature and plumbing shall ensure the comfort of those staying there and shall be set up in a way that facilitates their treatment.

(4) There shall be a toilet in the infirmary specifically for the use of those staying in the infirmary.

(5) The infirmary shall not be used for any purpose other than medical.

(6) Every ship that does not have a doctor on board shall have a medicine cabinet with easily comprehensible usage instructions.

PART ELEVEN

Movement around Passenger Ships

Additional Safety Requirements for People with Limited Mobility

General rules relating to additional security requirements for those with limited mobility on passenger ships

ARTICLE 106 – (1) The provisions in this part shall only apply to new passenger ships of a full length of 24 metres and above that carry more than 150 passengers.

Access to the ship

ARTICLE 107 – (1) Ships shall be equipped with ramps and lifts and built in a way that enables the easy and safe boarding and disembarkation of wheel chair users and other disabled people and enables them to move between decks without assistance. The maximum slope of ramps for wheelchair users shall be 1:20. Ships shall have at

least one entrance suitable for disabled people and wheelchair users. Entrances shall be step free and shall be marked with the international symbols for disability. Signs showing the other entrances and these entrances to necessary places on the ship shall be installed.

Car parking on deck

ARTICLE 108 – (1) Roll on roll off ships shall have special parking places enabling people with wheelchairs to board their vehicles. Parking places may be used for other disabled people apart from wheelchair users. Access from parking spaces for wheelchair users to the passenger cabins shall be free of obstacles.

Lifts

ARTICLE 109 – (1) There shall be at least one lift from the vehicle deck to the passenger decks giving unimpeded access to passenger areas, cabins and toilets. The lift floor shall be at least 110 cm wide and 140 cm deep. Lifts must have automatically opening doors that are at least 90 cm wide. There shall be a handrail around all 3 sides at a height of 90-110 cm. The controls shall be at a height of 90-120 cm from the ground and 50 cm from the edges and there shall be a handle next to the controls. The controls shall be in a place that is accessible from a seated position. The lift floor shall be at the same level as the deck outside. The area in front of the lift must be flat and at least 150 cm x 150 cm. Stairs may not be used instead of the lift.

(2) The control buttons shall be 2 cm in diameter and internally lit. The colour of the buttons shall contrast with the back panel. The buttons used for emergency situations and for the alarm signals shall be a different colour from the lift's other buttons. The emergency stop button shall be red; the alarm signal shall be yellow. The buttons shall be marked in large embossed letters.

Accommodation

ARTICLE 110 – (1) Doors must have an opening of at least 80 cm that allows for wheelchair users to pass through unimpeded. Doors must open automatically or so as not contravene safety requirements. Coaming may not constitute an obstacle and shall be set up with suitable ramps or reverse access systems. Any coaming installed as a safety measure shall not be removed. The ramp and coaming shall be indicated in bright colours.

(2) For every 100 passengers the ship is to carry there shall be an area that allows at least one wheelchair user to travel sitting together with other passengers.

(3) Wheelchairs must be able to be positioned safely. At least 4% of the ship's passenger seats shall be suitable for use by disabled people. These seats must have sufficient space and handles for disabled passengers to support themselves whilst sitting and getting up. Handles shall be indicated in contrasting colours. If the area where they are located is not enough for someone to cross their knees, the seats in front must be removable. If the seats are arranged in a row, chair arms which may create difficulties for disabled people must be foldable. Separate seating for elderly and disabled people shall be close to the emergency exits and toilets.

Stairs and banisters

ARTICLE 111 – (1) Stairs shall be designed in a way that they are easy for elderly and disabled people to exit from. Staircases must not be steep and must be designed with enclosed steps. The steps shall be such as to provide the utmost safety from the point of view of height, depth, colour, lighting and risk of slipping. For elderly people and those with impaired sight approximately 25 mm at the edge of the steps vertically and horizontally shall be in a bright contrasting colour. Banisters must be of a diameter of 45-50 mm, easy to grasp and in a contrasting colour, and must be fixed on both sides 850 mm above the steps. Banisters in corridors shall be 90 cm above the

ground and preferably on both sides of the corridor. These banisters must be 3.5 – 5 cm in diameter and rounded.

Corridors and doors

ARTICLE 112 – (1) There must be sufficient space for elderly and disabled people to be able to move around, particularly on long voyages. Corridors must be wide enough for wheel chairs to be able to pass other people.

Decks and floor

ARTICLE 113 – (1) Decks and floor must be flat and covered with non-slip material. If it is a necessary to install a step, steps shall not be higher than 3 cm and shall be supported by a ramp and handles.

Cabins

ARTICLE 114 – (1) Ships with cabins shall have separate cabins for wheelchair users. Elderly and disabled people shall be placed in cabins close to the evacuation deck to ensure that in cases of emergency they are able to evacuate quickly and easily. The free area in front of sleeping or recreation areas shall be at least 140 cm wide. In order that disabled people may get dressed sitting down a bed shall be preferable to a berth. If bunks are to be used the lower bed must have a gap above of 110 cm. Beds shall be 50 cm above the ground. Reading lamps above the bed shall be at a distance that is reachable from the wheel chair or bed. Electricity points shall be in easily reachable places 90 cm above the ground. Beds shall have handles. If there is not enough space for the door to open inwards, the cabin door shall open outwards or slide. The door opening shall be at least 90 cm. The cabin shall have the necessary equipment to call for assistance.

(2) Cabins and toilets suitable for wheelchairs shall be in open places amongst passenger areas. Automatic doors shall be preferable. The total width of a corridor and a door standing open at 90° to the corridor or another corridor must be 220 cm. Corridors in the cabin areas shall be 90 cm wide. Problems created for wheelchair users by doors and toilet doors must be minimised with sliding doors that open to 100 cm, where doors are not automatic.

Washrooms

ARTICLE 115 – (1) On each deck there shall be toilets suitable for use by wheelchairs in numbers specified according to the ship's size and purpose. These toilets may be useable separately from others and by both sexes. Signs shall be hung on doors of toilets that are not suitable for use by people with wheelchairs. Doors must open outwards or sideways and must be able to be opened from the outside with a key including if they have an “engaged” sign in case of emergency. There shall be a space from in front of the toilets to the other wall of at least 110 cm and at the side of the toilets of 90 cm. The seat shall be 45-48 cm above the ground. Toilets shall have supports on both sides that can be folded or pushed to the side. The sink must be reachable from the toilet and not be higher than 80 cm from the ground. The structure of the sink must be resilient to the extent that it can be used as a support. The mirror shall be put at a suitable height: the bottom edge shall be 90 cm from the ground and the top edge 190 cm. The gap under the sink must be 70-75 cm and it must be possible for a wheelchair to pull up under the sink. Soap, towels and similar items shall be 90-100 cm above the ground. It must be possible to call for assistance from every toilet.

Signs

ARTICLE 116 – (1) Signs used to assist passengers must be designed in a way that can be easily accessed and read by people with limited mobility and learning difficulties, and placed at key points.

Alarms

ARTICLE 117 – (1) Alarm systems and buttons shall be located in places that can warn all disabled people including those with learning difficulties and disabilities and that are easily accessible to them.

PART TWELVE
Miscellaneous and Final Provisions

Regulations being repealed

ARTICLE 118 – (1) The Regulations on Load Lines or Cargo Limits of Commercial Ships smaller than 150 Gross Tons Carrying Passengers or Cargo, dated 3/5/1967 and published in Official Gazette 12568 and The Regulations on Operating Areas dated 10/4/2007 and published in Official Gazette 26489 shall be repealed.

Interim Sewage Discharge Connections

PROVISIONAL ARTICLE 1 – (1) Structures with discharge connections directly into the sea from one of the waste pipes of the toilet, washrooms or kitchen on existing ships or vessels shall be connected to the dirty water tank within one year of the date that these Regulations come into force.

(2) On ships and vessels that have freeing ports, are a full length of 5 metres or more and do not have permission to voyage outside Turkish waters and are equipped only with a dirty water tank, arrangements shall be made so that discharging dirty water from freeing ports will cease within a year of the date that these Regulations come into force.

Date of issue for the first five-year certificate of seaworthiness

PROVISIONAL ARTICLE 2 – (1) The Certificate of Seaworthiness to be issued for a five-year period of validity within the scope of these Regulations shall be issued after the ship's first underwater survey. For ships that have an existing Certificate of Seaworthiness valid before the date of the underwater survey a provisional Certificate of Seaworthiness shall be issued until the underwater survey.

Entry into force

ARTICLE 119 - (1) These Regulations shall come into force two months after the date of their publication.

Enforcement

ARTICLE 120 – (1) The Minister attached to the Undersecretariat for Maritime Affairs shall enforce the provisions of these Regulations.