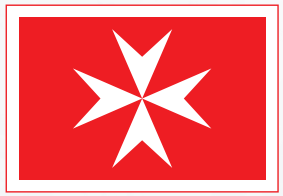
Merchant Shipping
Directorate

Transport Malta



COMMERCIAL YACHT CODE
2010

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SECTION 1

FOREWORD

1. FOREWORD

1.1 This Second edition of the Commercial Yacht Code has been drawn up by the Merchant Shipping Directorate, within the Authority for Transport in Malta.

1.2 This Code is drawn up for yachts which do not carry cargo and do not carry more than 12 passengers and are operated by the owner or the body corporate owning the vessel for commercial use. The following classes of yachts will be considered for registration under the Malta flag:

- Yachts in commercial use of not less than 15 metres in length and not more than 24 metres in length.
- Yachts in commercial use of more than 24 metres in length and less than 500 GT.
- Yachts in commercial use of more than 24 metres in length and 500 GT and over but less than 3000 GT.

1.3 Yachts complying with this Code are required to comply with the other relevant regulations of the Administration

1.4 The Administration has notified the International Maritime Organisation of this Code and its application to pleasure craft engaged in trade as an equivalent arrangement under the provisions of Article 8 of the International Convention on Load Lines, 1966 and Regulation I-5 of the International Convention of Safety of Life at Sea.

Reference is to be made to IMO LL.3/Circ.172 of 7 November 2007 and IMO SLS.14/Circ.298 of 8 November 2007.

The Code sets the required standards of safety and pollution prevention which are appropriate for the type and size of yacht. The standards applied are set by relevant International Conventions, EU norms or equivalent standards.

1.5 A yacht complying with the standards (or equivalent) set out in this Code will entitle a yacht to be issued with the relevant certification upon the satisfactory completion of the designated surveys and inspections.

1.6 Due attention should be paid to the requirements of the Marine Equipment Directive, EU Directive 1996/98/EC.

1.7 For yachts entitled to fly the flag of a Member State of the European Union, provided satisfactory on board evaluation, the Commission of the European Communities' general mutual recognition clause should be accepted. The clause states:

> Any requirement for goods or materials to comply with a specified standard should be satisfied by compliance with:
>
> **1.** a relevant standard or Code of practice of a national standards body or equivalent body of a Member State of the European Community; or
>
> **2.** any relevant international standard recognised for use in any Member State of the European Community; or
>
> **3.** a relevant specification acknowledged for use as a standard by a public authority of any Member State of the European Community; or
>
> **4.** traditional procedures of manufacture of a Member State of the European Community where these are the subject of a written technical description sufficiently detailed to permit assessment of the goods or materials for the use specified; or
>
> **5.** a specification sufficiently detailed to permit assessment of goods or materials of an innovative nature (or subject to innovative processes of manufacture such that they cannot comply with a recognised standard or specification) and which fulfil the purpose provided by the specified standard provided that the proposed standard, Code of practice, specification or technical description equivalent levels of safety, suitability and fitness for the proposed use.

1.8 The Administration will revise this Code in light of experience gained in its application.

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SECTION 2

DEFINITIONS

2. DEFINITIONS

(Note – where a definition is not provided within this Code, guidance should be taken from meanings given within International Conventions) -

Accommodation Spaces are those spaces used for public spaces, corridors, lavatories, cabins, offices, hospitals, cinemas, game and hobby rooms, barber shops, pantries containing no cooking appliances and similar spaces. For the purposes of section 11 of this Code, 'corridors' are defined separately and are not considered as 'accommodation spaces';

Administration shall, for the purpose of this Code, mean the Registrar-General.

Approved in respect to materials or equipment means approved by the Administration or approved by an Administration or Organisation which is formally recognised by the Administration;

Approved Authority is any organisation or person, authorised by the Administration to act on its behalf for the purposes of this Code;

Authorised Surveyor means a person approved as a surveyor of ships in terms of Article 367 of the Merchant Shipping Act 1973 as amended.

Authority for Transport in Malta as established by Act XV of 2009;

Bareboat Charter means a charter for which the charterer provides a Master and crew;

Buoyant lifeline means a line complying with the requirements of the IMO International Life-Saving Appliance Code;

Cargo means an item(s) of value that is carried from one place and discharged at another place and for which either a charge or no charge is made and is not for use exclusively onboard the vessel;

Charter means an agreement between the Owner/Managing Agent and another party, which allows the other party to operate. The "Charterer" is that other party;

Commercial Yacht is a yacht engaged in lawful trade having a length of not less than 15 metres and which is certified under the provisions of this Code and which is in commercial use for sport or pleasure, does not carry cargo and does not carry more than 12 passengers;

Control stations are those spaces in which the ship's radio or main navigating equipment or the emergency source of power are located or where the fire recording or fire control equipment is centralised. The wheelhouse, chartroom and the control room for propulsion machinery (when located outside the machinery space) are 'control stations';

Corridors include corridors and lobbies;

Efficient in relation to a fitting, item of equipment or material means that all reasonable and practicable measures have been taken to ensure that it is suitable for the purpose for which it is intended to be used;

Embarkation ladder means a ladder complying with the requirements of the IMO International Life-Saving Appliances Code;

Emergency source of electrical power is a source of electrical power, intended to supply the emergency switchboard in the event of failure of the supply from the main source of electrical power. Such a source is located and controlled outside the engine room;

Emergency switchboard is a switchboard which in the event of failure of the main electrical power supply system is directly supplied by the emergency source of electrical power and is intended to distribute electrical energy to the emergency services;

EPIRB means a satellite emergency position-indicating radio beacon, being on earth station in the mobile-satellite service, the emissions of which are intended to facilitate search and rescue operations, complying with performance standards adopted from time to time by the IMO, and is capable of :-

a. floating free and automatically activating if the ship sinks;
b. being manually activated, and;
c. being carried by one person;

Existing vessel means any vessel, the keel of which was laid or the construction was started before coming into force of this Code;

Float-free launching means that method of launching a liferaft whereby the liferaft is automatically released from a sinking ship and is ready for use, complying with the requirements of the IMO International Life-Saving Appliances Code;

Freeboard has the meaning given in Annex I of consolidated text of the International Convention on Load Line, 1966 as modified by the protocol of 1988 relating thereto, as amended. The freeboard assigned is the distance measured vertically downwards amidships from the upper edge of the deck line to the upper edge of the related load line;

Freeboard deck has the meaning given in Annex I of consolidated text of the International Convention on Load Line, 1966 as modified by the protocol of 1988 relating thereto, as amended. The freeboard deck is normally the uppermost complete deck exposed to the weather and sea, which has permanent means of closing all openings in the weather part thereof, and below which all openings in the sides of the ship are fitted with permanent means of watertight closing;

In a ship having a discontinuous freeboard deck, the lowest line of the exposed deck and the continuation of that line parallel to the upper part of the deck is taken as the freeboard deck;

At the option of the Owner and subject to the approval of the Administration, a lower deck may be designated as the freeboard deck provided it is a complete and permanent deck continuous in a fore and aft direction at least between the machinery space and peak bulkheads and continuous athwartships;

When a lower deck is designated as the freeboard deck, that part of the hull which extends above the freeboard deck is treated as a superstructure so far as concerns the application of the conditions of assignment and the calculation of freeboard. It is from this deck that the freeboard is calculated;

Garbage means all kinds of victual, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the vessel and liable to be disposed of continuously or periodically except sewage originating from vessels;

GT (Gross Tonnage) means the measure of the overall size of a ship determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969 for yachts over 24 metres in length and for yachts under 24 metres in length determined in accordance with the **Merchant Shipping (Tonnage)Regulations 2002;**

Hazardous space means a space or compartment in which combustible or explosive gases or vapours are liable to accumulate in dangerous concentrations;

Length means 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 foreside of the stem to the axis of the rudder stock on that waterline, if that be greater. Where the stem contour is concave above the waterline at 85% of the least moulded depth, both the forward terminal of the total length and the fore side of the stem respectively shall be taken at the vertical projection to that waterline of the aftermost point of the stem contour (above that waterline). In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline;

International Convention on Load Line (ICLL) means the International Convention on Load Lines, 1966, as amended;

IMO means the International Maritime Organisation;

Inflatable lifejacket means a lifejacket complying with the requirements of the IMO International Life-Saving Appliances Code;

Instructions for on-board maintenance means the instructions complying with the requirements of SOLAS III/Part B – Life-Saving Appliances and Arrangements, Regulation 36;

Launching appliance means a provision complying with the requirements of the IMO International Life-Saving Appliances Code for safely transferring a lifeboat, rescue boat, or liferaft respectively, from its stowed position to the water and recovery where applicable;

Length overall means the length referred to in the Merchant Shipping (Tonnage) Regulations, 2002;

Lifeboat means a lifeboat complying with the requirements of the IMO International Life-Saving Appliances Code;

Lifebuoy means a lifebuoy complying with the requirements of the IMO International Life-Saving Appliances Code;

Lifejacket means a lifejacket complying with the requirements of the IMO International Life-Saving Appliances Code;

Liferaft means a liferaft complying with the requirements of the IMO International Life Saving Appliances Code;

Line throwing appliance means an appliance complying with the requirements of the IMO International Life-Saving Appliances Code;

L.S.A code means the International Life saving Appliance (LSA) code in it's up to date version;

Low Flame Spread means that the surface thus described will adequately restrict the spread of flame, this being determined as per Part 5 of the IMO Fire Test Procedures Code or by an alternative established procedure to the satisfaction of the Administration;

Machinery spaces are all machinery spaces of category A and all other spaces containing propelling machinery, boilers, oil fuel units, steam and internal combustion engines, generators and major electrical machinery, oil filling stations, refrigerating, stabilising, ventilation and air conditioning machinery, and similar spaces, and trunks to such spaces;

Machinery spaces of Category A are those spaces and trunks to such spaces which contain:-

a. internal combustion machinery used for main propulsion, or;
b. internal combustion machinery used for purposes other than main propulsion where such machinery has in the aggregate a total power output of not less than 375Kw, or;
c. any oil fired boiler or oil fuel unit;

Main source of electrical power is a source intended to supply electrical power to the main switchboard for distribution to all services necessary for maintaining the ship in normal operation and habitable condition;

Main steering gear is the machinery, rudder, activators, steering power units and ancillary equipment and the means of applying the necessary torque to the rudder, necessary for effecting movement of the rudder;

Main switchboard is a switchboard which is directly supplied by the main source of electrical power and is intended to distribute electrical energy to the ship's services;

Main vertical zone means those sections into which the hull, superstructure and deckhouses are divided by A class divisions, the mean length of which on any deck does not normally exceed 40 metres;

Major Alteration means a refit or alteration which results in either a change in the lightship weight of 2% and above and/or a shift in the longitudinal centre of gravity of 1% and above (measured from the aft perpendicular) and/or the calculated vertical gravity rises by 0.25% and above (measured from the keel). A vessel with previously approved stability information which undergoes a major refit or alterations should be subjected to a complete reassessment of stability and provided with newly approved stability information;

MARPOL means the International Convention for the Prevention of Pollution from Ships, 1973, as amended;

Mile means an international nautical mile that is to say a distance of 1852 metres;

Motor vessel means a vessel which is described in the register and on the certificate of registry as such, and which has a sole means of propulsion either one or more power units;

Multihull vessel means any vessel which in any normally achievable operating trim or heel angle, has a rigid hull structure which penetrates the surface of the sea over more than one separate or discrete area;

New vessel means a vessel to which this Code applies, the keel of which was laid or the construction or lay up was started on or after the coming into force of this Code;

Not readily ignitable means that the surface thus described will not continue to burn for more than 20 seconds after removal of a suitable impinging test flame;

Notified Body means an approved organisation which certifies yachts to the Recreational Craft Directive 94/25/EC and the Marine Equipment Directive 96/98/EC as amended;

Open decks include open deck spaces, enclosed promenades and Air spaces (the space outside superstructures and deckhouses) having no fire risk;

Owner(s)/Managing Agent(s) means the registered owner(s) or the owner(s) or the managing agent(s) of the registered owner(s) or the owner(s) or owner(s) ipso facto, as the case may be;

Passenger means any person carried in a ship except:-

a. a person employed or engaged in any capacity on board the ship on the business of the ship;
b. a person board the ship either in pursuance of the obligation laid upon the master to carry shipwrecked, distressed or other persons, or by reason of any circumstances that neither the master nor the owner nor the charterer (if any) could have prevented, and;
c. a child under one year of age;

Passenger ship means a ship carrying more than 12 passengers;

Person means a person over the age of one year;

Pleasure Yacht means a yacht which is not a commercial yacht. Unless specifically stated otherwise, the term 'yacht' within this Code refers to commercial yachts;

Position 1 means upon exposed freeboard and raised quarter decks and upon exposed superstructure decks situated forward of a point located a quarter of the ship's length from the forward perpendicular;

Position 2 means upon exposed superstructure decks situated abaft a quarter of the ship's length from the forward perpendicular;

Radar Reflector means a device installed on board a yacht not built of metal to give a good target on a radar screen;

Radar Transponder means a radar transponder for use in survival craft to facilitate location of survival craft and rescue operations;

Recess means an indentation or depression in a deck and which is surrounded by the deck and has no boundary common with the shell of the vessel;

Recreational Craft Directive is the EC Directive 94/25/EC in it's up to date version;

Registrar-General means the "Registrar-General of Shipping and Seamen" as established in the Merchant Shipping Act,(CAP.234);

Rescue Boat means a boat complying with the requirements of the IMO International Life-Saving Appliances Code and designed to rescue persons in distress and for marshalling liferafts;

Retro-reflective materials means a material which reflects in the opposite direction a beam of light directed on it;

Rocket parachute flare means a pyrotechnic signal complying with the requirements of the IMO International Life-Saving Appliances Code;

Recognised Organisation means a classification society recognised in accordance with Article 367 of the Merchant Shipping Act, 1973 as amended for the conduct of statutory functions and certification services, for and on it's behalf;

Safe haven means a harbour or shelter of any kind which affords entry, subject to prudence in the weather conditions, prevailing and protection from the force of the weather;

Sail training vessel means a sailing vessel, which at the time, is being used either:-

a. to provide instruction in the principles of responsibility, resourcefulness, loyalty and team endeavour and to advance education in the art of seamanship, or;
b. to provide instruction in navigation and seamanship for yachtsmen;

Sailing vessel means a vessel designed to carry sail, whether as a sole means of propulsion or as a supplementary means;

Sea area A1 means an area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available;

Sea area A2 means an area, excluding sea area A1, within the radiotelephone coverage of at least one MF coast station in which continuous DSC alerting is available;

Sea area A3 means an area, excluding sea areas A1 and A2, within the coverage of an Inmarsat geostationary satellite in which continuous alerting is available;

Sea area A4 means an area outside sea areas A1, A2 and A3;

Self-activating smoke signal means a signal complying with the requirements of the IMO International Life Saving Appliances Code;

Self-igniting light means a light complying with the requirements of the IMO International Life-Saving Appliances Code;

Service spaces (high risk) Galleys, pantries containing cooking appliances, saunas, paint lockers and storage spaces having areas of 4 m^2 or more, spaces for the storage of flammable liquids, workshops other than those forming part of the machinery spaces and spaces for the storage of jet skis or tender operated with gasoline fuel;

Service spaces (low risk) Lockers and store-rooms not having provisions for the storage of flammable liquids and having area less than 4 m^2, drying rooms.

In terms of the requirements of section 11 of this Code, a galley may be assumed to fall under low risk service space category if:-

Coffee machines, toasters, dish washers, microwave ovens, water heaters and similar appliances, each have a maximum power rating not exceeding 5kW and electric cookers and electric hotplates, each having a maximum power rating of 2kW and a surface temperature not exceeding 150 degrees Celcius.

Appliances such as deep frying equipment and open flame cooking appliances qualify the galley as a high risk service space;

Short Range Yacht means any yacht restricted to operate within 60 nautical miles of a safe haven. The Administration may, on a case-by-case basis, extend short range operation on specified routes. The Administration may accept requests for Short Range Yachts wishing to undertake transfer voyages exceeding the restrictions imposed, subject to no passengers being carried on board and conditions/ precautions as deemed necessary;

SOLAS means the International Convention of Safety of Life at Sea, 1974, as amended;

SOLAS A Pack means a liferaft emergency pack complying with the requirements of the IMO International Life-Saving Appliances Code;

SOLAS B Pack means a liferaft emergency pack complying with the requirements of the IMO International Life Saving Appliances Code;

Stairways Interior stairways, lifts, totally enclosed emergency escape trunks, and escalators other than (those wholly contained within the machinery spaces) and enclosures thereto.
In this connection, a stairway which is enclosed only at one level shall be regarded as part of the space from which it is not separated by a fire door;

Standard Fire Test means a test in which specimens of the relevant bulkheads, decks or other constructions are exposed in a test furnace by a specified test method in accordance with the IMO Fire Test Procedures Code;

STCW means the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended;

Superstructure has the meaning given in Annex I to ICLL;

Survival Craft means a craft capable of sustaining the lives of persons in distress from the time of abandoning ship;

Tender means one or more inflatable or rigid rafts which are not liferafts, stowed in a position providing for easy side-to-side transfer which may not engage in separate commercial activities from that of the mother yacht;

Technical Spaces are those spaces, other than Category A Machinery Spaces, that contain mechanical and/or electrical equipment with heat dissipating characteristics;

Training manual with regard to live-saving appliances means a manual complying with the requirements of SOLAS III/Part B – Life-Saving Appliances and Arrangements, Regulation 35;

Two-way VHF Radiotelephone set means a portable or a fixed portable two-way VHF radiotelephone apparatus used for on-scene communications and conforming to IMO performances standard A.809 (19) as may be amended, Annex I or Annex 2, as applicable;

Unrestricted Yacht is a yacht which is not a short range yacht and may operate within any limits specified within the Certificate of Compliance;

Voyage includes an excursion;

Watertight means capable of preventing the passage of water in any direction;

Weather deck means the uppermost complete weathertight deck fitted as an integral part of the vessel's structure and which is exposed to the sea and weather;

Weathertight has the meaning given in Annex I of ICLL. Weathertight means that in any sea conditions water will not penetrate into the ship;

Wheelhouse means the control position occupied by the officer of the watch who is responsible for the safe navigation of the vessel;

Window means a ship's window, being any window, regardless of shape, suitable for installation aboard ships.

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SECTION 3

APPLICATION AND INTERPETATION

3. APPLICATION AND INTERPRETATION

3.1 Application

3.1.1 This Code applies to commercially operated motor or sailing yachts which do not carry cargo and which do not carry more than 12 passengers.

The Code applies to:-

- Yachts in commercial use of not less than 15 metres in length and not more than 24 metres in length;
- Yachts in commercial use of more than 24 metres in length and less than 500 GT;
- Yachts in commercial use of more than 24 metres in length and 500 GT and over but less than 3000 GT.

3.1.2 All applicable provisions of the Code shall be deemed to be a requirement.

3.2 Area of Operation

3.2.1 The requirements given in the Code are based on unrestricted geographical operation. However, where considered appropriate, standards for yachts operating as Short Range Yachts are included in this Code.

3.2.2 In particular, yachts having a length below 24 metres and which have been built under the Recreational Craft Directive, would have to comply with the requirements of their relevant category (Categories A, B or C).

3.2.3 Existing yachts under 24 metres in length will be considered for operation up to 60 miles from safe haven.

Any such existing yacht which is required to be operated in an "unrestricted area of operation" will have to be checked against the Code for its suitability.

Subject to compliance with the applicable sections of this Code being verified by survey.

3.2.4 Yachts built to Design Category A of the Recreational Craft Directive may be assigned an 'unrestricted' area of operation subject to its compliance with all relevant requirements of the Code.

3.2.5 Yachts built to Design Category B of the Recreational Craft Directive may be assigned a "permitted area of operation" of 60 miles from safe haven subject to their compliance with all relevant requirements of the Code.

3.2.6 Yachts built to Design Category C of the Recreational Craft Directive would not be normally considered suitable for registration under this Code.

In exceptional cases a particular yacht may be considered for compliance and certification for restricted operation up to 12 miles from safe haven in restricted weather conditions.

3.3 Weather Conditions

3.3.1 In all cases, each yacht has to comply with all relevant sections of this Code.

3.4 Number of Passengers to be carried

3.4.1 The number of passengers that can be safely carried is to be clearly stated.

In the case of yachts having a length below 24 metres and which have been built under the Recreational Craft Directive, then the number of persons that are carried on board (passengers and crew) cannot exceed the number shown in the "Declaration of Conformity" issued by the Builder.

3.5 Equivalent Standards and Exemptions

3.5.1 Proposals for the application of alternative standards which are to be considered to be at least equivalent to the requirements of the Code are to be submitted to the Administration.

Any proposal should include details to prove that the overall level of safety has been retained.

3.5.2 Application for any exemptions are to be made to the Administration. Exemptions can only be

granted by the Administration.

An application for any exemption has to be supported with the necessary justification for the request/s.

3.6 Existing Yachts

3.6.1 In case of existing yachts which may not comply with certain sections of the Code, the Administration may give a consideration to proposals made by the Owners / Managers to phase in the necessary requirements within a timescale not exceeding 12 months.

3.6.2 When an existing yacht does not comply with any item of the safety standards as set in this Code, proposals for alternative arrangements are to be submitted to the Administration for approval.

The Administration, when considering individual cases, will take into consideration the service history and any other factors relating to the particular yacht. The main aim will be that the minimum safety standards as set out in the Code are achieved.

When an existing yacht cannot prove that its design and construction strength comply with the requirements set out in the Code, proposals for alternative methods to prove that the yacht is of adequate strength are to be submitted to the Administration for consideration.

The Administration when considering individual yachts will take into consideration the service history and any other factors relating to the particular yacht.

3.6.3 Repairs, alterations and refurbishments are to comply with standards applicable to a new yacht.

In case of major alterations and refurbishments, then the whole yacht would require to be upgraded to the standards applicable to a new yacht. The yacht would be required to be re-surveyed before commencement of commercial activity.

3.7 Yachts Marking

All yachts shall be marked in accordance with the requirements of Section 15 of the Merchant Shipping Act, 1973, as amended.

Transport Malta

SECTION 4

HULL

4. HULL

4.1 Construction and Strength

4.1.1 The objective of the section is to ensure that all yachts are constructed to a consistent standard in respect of strength and watertight integrity. New yachts over 24 metres in length are to be built to the requirements and standards of any of the Recognised Organisations authorised to issue statuary certificates on behalf of the government of Malta.

New yachts having a length below 24 metres may be built to Class Rules or to the Recreational Craft Directive. Certifications in accordance to the Recreational Craft Directive by a Notified Body under either of the Modules B+C, B+D, B+E, B+F, G or H will be considered as compliant to this section subject to satisfactory outcome of the condition survey for compliance with the Code.

4.1.2 Existing yachts not built to Classification Society Rules or a Notified Body (under 24m) would be dealt with individually. Yachts which have been in service for at least 5 years and have been proven in service may be considered subject to satisfactory outcome of a full structural survey.

4.1.3 Existing yachts over 24 metres in length not built to Classification Society Rules and which have not been in service for 5 years will be requested to submit a full set of drawings and specifications to an Approved Authority which will evaluate the constructional strength of these yachts.

4.1.4 All yachts over 500 GT are to maintain valid classification with one of the approved Recognised Organisations authorised to issue statutory certificates on behalf of the government of Malta.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.1.5	**Decks**		
4.1.5.1	All yachts should have a watertight weather deck which extends for the whole length. The deck is to be of adequate strength to withstand the environmental conditions likely to be encountered in the area of operation. Any recesses in the deck should be of watertight construction and should have draining facilities.		
4.1.6	**Structural Strength**		
4.1.6.1	New yachts must be built to Classification Society rules or to the Recreational Craft Directive.	New yachts must be built to Classification Society Rules.	New yachts must be built to Classification Society Rules and maintained by class.
4.1.6.2	Any solid ballast used would be required to be properly supported to take in consideration the hull strength.	Any solid ballast used would be required to be properly supported to take in consideration the hull strength.	Any solid ballast used would be required to be properly supported to take in consideration the hull strength. If ballast tanks are used on these larger yachts then the global hull strength is to be taken in consideration not to place the yacht under undue stress in any ballasted condition.
4.1.7	**Bulkheads**		
4.1.7.1	Watertight bulkheads should be so arranged that a minor damage which results in the free flooding of any one compartment will not cause the yacht to float at a waterline which is less than 75mm below the weather deck at any point.	Watertight bulkheads, their penetrations, watertight integrity of the divisions should be in line with the requirements of any one of the Recognised Organisations.	
4.1.7.2	Any bulkhead penetrations should be of an approved type.	Any bulkhead penetrations should be of an approved type.	Any bulkhead penetrations should be of an approved type.
4.1.7.3		Openings in watertight bulkheads should comply with the standards required for cargo vessels.	
4.1.7.4	Approved hinged doors may be used on transverse watertight bulkheads. Such doors are to be spring loaded so that they are kept closed at all times. Notices are to be affixed on the doors clearly indicating that these doors are to be kept closed.	Approved hinged doors may be used for openings in infrequent use. If such doors are used then audible and visual alarms are to be installed in the navigation stand that will clearly indicate the status of these doors. In case of yachts below 500 GT hinged doors will be approved for other opening subject that they are equipped with audible and visual alarms in the navigation stand which will clearly indicate the status of these doors. These doors are to be clearly marked that they are to be kept closed at all times.	

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.1.7.5	Frequently used doors are to be of an approved sliding type which can be operated both locally and from the navigation stand.	
4.1.7.6	Any enclosed compartments within the hull and below the freeboard deck which have an access through the hull should be bounded by a watertight boundary which shall have no openings. An approved type watertight door may be allowed.	
4.1.7.7	Any hull opening below the freeboard deck should comply with SOLAS Reg II-1/25-10. All such openings should be able to be manually closed and locked under all circumstances. Such openings should be watertight and have sufficient strength for the proposed use.	

4.2 Watertight Integrity

The yachts should be designed and constructed in a manner which will prevent ingress of sea water and maintain the watertight integrity.

As far as practicable the ICLL is to be followed.

New yachts are to comply to the rules for watertight integrity as stated in the Classification Society rules.

An existing yacht's arrangements that provide an equivalent level of safety in respect of risks of downflooding and swamping by green seas may be considered.

Reference is to be made to the definition at the "Freeboard Deck".

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.2.1	**Position of Freeboard Deck / Superstructure Height**		
4.2.1.1		Where the actual freeboard to the weather deck exceeds that required by ICLL by one superstructure height, openings on that deck aft of the forward ¼ deck may be assumed to be position 2. This is to be considered, unless otherwise stated, as defined in ICLL. For yachts up to 75m length the standard superstructure heights are to be taken as 1.8 metres. For yachts over 125 m length the superstructure height is to be taken as 2.3 metres. Intermediate sizes are calculated by interpolation.	
4.2.2	**Hatchways, Skylights and Hatches**		
4.2.2.1	A hatchway which gives access to spaces below the weatherdeck should be of efficient construction and be efficient for watertight closure.	A hatchway which gives access to spaces below deck and which cannot be closed watertight must be enclosed within the superstructure or weathertight deck house as per ICLL.	
4.2.2.2	The cover of a hatchway should be permanently secured, hinged or sliding. The cover should be provided with sufficient locking devices to enable it to be positively secured in the closed position.	All exposed hatchways which give access from position 1 and position 2 are to be of a weather tight construction and approved for use. Weathertight hatch covers should be permanently attached to the yacht and provided with adequate arrangements for securing the hatch in the closed position.	
4.2.2.3	A hatchway with a hinged cover which is located at position 1 of the yacht should have the hinges fitted on the forward end.	A hatchway with a hinged cover which is located at position 1 of the yacht should have the hinges fitted on the forward end.	A hatchway with a hinged cover which is located at position 1 of the yacht should have the hinges fitted on the forward end.
4.2.2.4	A proximity switch with alarm fitted in the bridge may be accepted for yachts not complying with 4.2.2.3.		
4.2.2.5	Any hatches that have to remain open at sea should:- - not exceed the area of 1m² at the top of the coaming; - be located as close as possible to the centre line; - fitted with an access opening at least 300mm above the top of the weather deck.	Any hatches which may be kept open for access at sea should:- - not exceed an area of 1m² at the top of the coaming; - fitted as close as possible to the centre line (in case of sailing yachts, this is to be strictly adhered to); - fitted with an access opening at least 300mm above the top of the deck in both positions 1 and 2.	
4.2.2.6	Hatches that are designated for escape purposes are to be equipped with covers which can be opened from both sides and the handles are to be of a permanent or removable type. In case of removable type, such handles are to be stowed in a location close to the hatch and the location must be clearly marked. The escape hatch should be readily identified and a notice to this effect to be fitted. Access to the escape hatch to be made readily available in the vicinity of each hatch.		

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.2.3	**Doorways and Companionways**		
4.2.3.1	A doorway located at the main deck level which gives access to spaces below main deck should be provided with a weathertight door. Such a door should always open outwards and should have an efficient means to secure it in the closed position and which can be operated from both sides.	Doorways in superstructures that give access to spaces below deck are to be weathertight. Each doorway should have coamings heights as follows:- - doors located ¼ forward length and used at sea : 600mm for unrestricted service, 300mm for short range service; - forward facing location aft of ¼ forward length: 300mm for unrestricted service, 150mm for short range service; - protected location anywhere other than above and at 1st deck above main deck: 150mm for unrestricted service, 75mm for short range service.	
4.2.3.2	The doorway should be located as close as possible to the centre line. In case of hinged doors the door should be hinged at the forward end.	Doors should be hinged at the forward end.	Doors should be hinged at the forward end.
4.2.3.3	A door which is fitted on the forward side or on the sides of the superstructure at the main deck level should have a coaming of at least 300mm above the weather deck. Such a coaming may be portable but it has to be able to be secured in place.		
4.2.3.4	Access doors leading directly from the deck to the engine room should be fitted aft of the ¼ length from forward and should be fitted with a coaming of at least 450mm in height.	Access doors leading directly from the weather deck to the engine rooms should be fitted aft of the ¼ length from forward. These doors should be fitted with coamings having a height of:- - 600mm for yachts having unrestricted service; - 450mm for yachts on Short Range Service. Doors located above the main / weather deck are to have a coaming height of 380mm.	
4.2.4	**Companionway Hatch Openings**		
4.2.4.1	The companion hatch opening from the cockpit to the spaces should:- - not exceed 1 metre in width; - be fitted with a coaming at least 300mm above the sole or recess of the cockpit.	The companion hatch opening from the cockpit to the spaces should:- - not exceed 1 metre in width; - be fitted with a coaming at least 300mm above the sole or recess of the cockpit.	The companion hatch opening from the cockpit to the spaces should:- - not exceed 1 metre in width; - be fitted with a coaming at least 300mm above the sole or recess of the cockpit.
4.2.4.2	When washboards are used to close the vertical opening they should be so arranged that they will not get loose or be dislodged.	When washboards are used to close the vertical opening they should be so arranged that they will not get loose or be dislodged.	When washboards are used to close the vertical opening they should be so arranged that they will not get loose or be dislodged.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.2.5	**Skylights**		
4.2.5.1	Skylights should be of an efficient weather tight construction and should be located on the centre line or as near to the centre line as possible.	Skylights should be of an efficient weather tight construction and should be located on the centre line or as near to the centre line as possible.	Skylights should be of an efficient weather tight construction and should be located on the centre line or as near to the centre line as possible.
4.2.5.2	Skylights of the opening type should be provided with efficient means whereby they can be secured in the closed position.	Skylights of the opening type should be provided with efficient means whereby they can be secured in the closed position.	Skylights of the opening type should be provided with efficient means whereby they can be secured in the closed position.
4.2.5.3	Skylights which are designated as a means of escape should be able to be opened from both sides and the locking handles should remain in place at all times. Such skylights should be properly marked and be in a position that they are always accessible from both sides.		
4.2.5.4	The construction of the skylights should be of the approved type.	The construction of the skylights should be of the approved type.	The construction of the skylights should be of the approved type.
4.2.5.5	One portable cover for each glazed opening should be provided on board. This has to be able to be properly secured in case of damage to the glass panel. The Administration may dispense a yacht from the requirement 4.2.5.5 in cases where the glazing is certified by Class to provide adequate additional strength, in accordance to Class Rules or ISO 3903. In any case a minimum 30% increase in glazing thickness over the rule class requirements is to be achieved.		
4.2.6	**Port Lights**		
4.2.6.1	Any port light fitted below the weather deck should be of good construction and suitable for the intended use. In case of existing yachts the quality of the port lights would have to be proven to be suitable for the intended use. In case of new yachts any port light fitted in the main hull and below the weather deck should:- - have the equivalent strength of the hull; - be of the non-opening type; - be build to a minimum of ISO (12216) standard. The lower edge of the port lights should be at least 500mm or 2.5% of the breadth of the yacht (whichever is the greatest) above the deep water line.	All port lights fitted below the weather deck shall be of good construction and meet a National or International standard. In general, all port lights fitted below the weather deck shall be fitted with a dead light. In case of existing yachts the quality of the port lights would have to be proven to be suitable for the intended use. In case of new yachts all port lights fitted in the hull below the weather deck shall be of the approved type or certified by class for the particular design and application. They should at least be certified for a hydraulic test of 24 metres head. They should be of the non-opening type. The lower edge of the port lights should be at least 500mm or 2.5% of the breadth of the yacht (whichever is the greatest) above the deep water line.	They should be of the non-opening type.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.2.6.2	Blanks shall be provided for 50% of each size of port lights fitted below the weather deck which are not equipped with deadlights.		
4.2.6.3	No port light should exceed 250mm in diameter (or equivalent area).	No port light should exceed 250mm in diameter (or equivalent area)	No port light should exceed 250mm in diameter (or equivalent area)
4.2.6.4	No port lights should be fitted in way of the machinery space.	No port lights should be fitted in way of the machinery space.	No port lights should be fitted in way of the machinery space.
4.2.6.5	In case of yachts certified for unrestricted use, all port lights are to be of a heavy duty design, tested and certified by a Recognised Organisation for unrestricted navigation for commercial vessels.		
4.2.7	**Windows**		
4.2.7.1	Windows fitted below the weather deck should provide the watertight integrity necessary for safe operation.	Windows fitted on existing yachts have to be proven to be suitable for the intended use. The calculated thickness of the glazing should satisfy National or Classification Society Rules. Existing yachts will be dealt with on an individual basis to confirm safety is not prejudiced.	
4.2.7.2	All windows fitted below the weather deck on new yachts should at least be type approved.	Windows fitted on new yachts below the weather deck should at least be of type approved to ISO (12216) standard or certified by class for the particular design and application. They should be certified for a hydraulic test of 24 metres head.	
	The lower edge of the port lights should be at least 500mm or 2.5% of the breadth of the yacht (whichever is the greatest) above the deep water line.	The lower edge of the port lights should be at least 500mm or 2.5% of the breadth of the yacht (whichever is the greatest) above the deep water line.	
4.2.7.3	Portable blanks are to be carried on board for all windows fitted below the weather deck.	Portable blanks are to be carried on board for all windows fitted below the weather deck. Such blanks are to be strong to act as storm blanks as well.	

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.2.7.4	Windows fitted above the weather deck on the hull or in way of the superstructure should be of sound and weather tight construction.	Front and side windows fitted on the hull or in the superstructure at weather deck (1st tier) and front windows at 2nd tier of 'unrestricted' yachts are to be provided with storm shutters. A reduction in the amount and disposition of storm covers for side windows on 1st tier and windows on 2nd tier will be considered on a case by case basis and following recommendations by the attending surveyor. All windows are to be substantially built and efficiently secured. The glass is to be of the toughened safety glass type.	
4.2.7.5		Where chemically toughened glass is used, the glass is to be of the laminated type and the minimum depth of the chemical toughening is to be shown on the equipment certificate issued by the Makers. The surface condition is to be inspected regularly.	The surface condition is to be inspected regularly.

4.2.7.6 The fitting of windows below the weather deck should be avoided as far as practicable. If it is found necessary to install windows in this position then they are to be as small as possible and always certified to class requirements.

If windows are fitted then operational instructions are to be made available on board clearly instructing the crew when and how the blanks (4.2.7.3) are to be installed.
Windows should never be fitted in the ¼ forward length or in way of engine rooms.

4.2.7.7	Only clear glass is to be used in the navigation position. The laying of tinted film is not allowed. Use of retractable sunscreens in compliance with ISO 8468 is permitted.	Only clear glass is to be used in the navigation position. The laying of tinted film is not allowed. Use of retractable sunscreens in compliance with ISO 8468 is permitted.	Only clear glass is to be used in the navigation position. The laying of tinted film is not allowed. Use of retractable sunscreens in compliance with ISO 8468 is permitted.

4.2.7.8 In case of yachts certified for unrestricted use, all windows are to be of a heavy duty design, tested and certified by a Recognised Organisation for unrestricted Navigation, typical of deep sea ship standards and not to pleasure yacht rules.

4.2.8 Ventilators and Exhaust Ducts / Pipes

4.2.8.1	A ventilator should be efficiently constructed and should be provided with permanently attached means of weather tight closure. Such closing device is to be easily accessible.	Ventilators should be of efficient construction and provided with means of weather tight closure. Such closing device is to be easily accessible. The minimum coaming height above the weather deck is to be:- - forward ¼ length : 900mm (450mm for short range yachts); - all other areas : 760mm (350mm for short range yachts).

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.2.8.2	Ventilators should be installed as far inboard as possible and their height above the deck is to be such that it would prevent the admission of water when the yacht is heeled.		
4.2.8.3	Goose necks and ventilators fitted on the ¼ forward length are to be of the type that they can face backwards so that they will not be flooded with green seas.		
4.2.8.4	A ventilator which must be kept open at all times (such as a machinery space) are to be specially considered with respect to its location and height above deck. Special consideration is to be given to the down-flooding angle.		
		Additional means of closure for such ventilators should be installed taking in consideration the fire protection and the fire extinguishing medium provided in the particular space.	
4.2.8.5	Engine exhaust outlets which penetrate the hull below the weather deck should be provided with anti-syphon equipment to avoid back flooding into the hull through the exhaust system.		
		For short range yachts, if such a closing device is not possible then an anti-syphon loop having a minimum height of 1000mm will be considered. Additionally for yachts operation on an "unrestricted service" a mechanical means of closing the exhausts pipes should be supplied. The closing device should have the equivalent strength of the hull.	
4.2.9	**Air Pipes**		
4.2.9.1	An air pipe fitted on the weather deck should be of an efficient construction and properly supported.	An air pipe fitted on the weather deck should be of an efficient construction and properly supported.	An air pipe fitted on the weather deck should be of an efficient construction and properly supported.
4.2.9.2	An air pipe fitted on the weather deck should be kept as far inboard as possible and have an adequate height above the deck to prevent the entrance of water into the tanks being vented when the yacht is heeled.	An air pipe fitted on the weather deck should be kept as far inboard as possible. Air pipes to tanks should have a minimum coaming height of: - Weatherdeck: 760mm (380mm for short range yachts); - All other locations above main deck : 450mm (220mm for short range yachts).	
4.2.9.3	An air pipe on the weather deck having a diameter 10mm or more should have a permanently attached means of closure.	All air pipes are to be equipped with a permanently attached means of closure.	All air pipes are to be equipped with a permanently attached means of closure.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.2.9.4		Air pipes to fuel tanks should be fitted at a height of not less than 760mm above the top of the filler pipes.	
4.2.10	**Sea Inlets, Discharges and Scuppers**		
	All sea inlets and overboard discharges below the waterline, or which can be below the waterline (e.g. heeling sailing yachts), should be provided with approved type shut off valves. Adequate access should be made available to all the shut off valves.		
4.2.10.1	A valve or similar fitting attached to the side of the yacht below the water line within the engine room or any other high fire risk area should be of steel, bronze, brass or other approved metal. In general, the sealing of the valve should be metal to metal.		
4.2.10.2			All valves fitted on the hull are to be certified by a Recognised Organisation.
4.2.10.3	No plastic valves are allowed to be fitted on the hull below the weather deck.	No plastic valves are allowed to be fitted on the hull below the weather deck.	No plastic valves are allowed to be fitted on the hull below the weather deck.
4.2.10.4	Any openings for speed logs or any other sensors which can be withdrawn are to be supplied with closing valves. These valves are to be equipped with blanking devices.		
4.2.10.5	The use of synthetic material piping should be kept to a minimum. Should any such piping be used in the engine room or other high fire risk spaces, such piping should be adequately supported and protected against chafing. Such piping should be certified to the IMO Fire Test Procedures Code and the relevant certificates should be made available. The couplings between synthetic pipes/hoses and metal pipes should be of the approved type.		In general no synthetic material piping should be used in the engine rooms and high fire risk spaces on yachts of this Class.
4.2.11	**Water Freeing Arrangements**		
	This Section takes in consideration the dangers of green waters being shipped on board and the resulting consequences with respect to the stability of the yachts and the safety of the personnel on board.		
	In general the standards for the water-freeing arrangements should follow the ICLL rules.		

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
4.2.11.1	When a bulwark is fitted it should be provided with freeing ports. The freeing ports should be located as close to the deck as possible and not higher than the lower 1/3 height. The total area of the freeing ports should be 4% of the bulwark area for motor yachts and 10% of the bulwark area for sailing yachts.	The ICLL requirements are to be applied for these classes of yachts. In certain cases if the ICLL requirements may not be met, the Administration may consider and approve alternative arrangements as long as safety will not be prejudiced. In considering such cases the past performance and the declared areas of operation will be taken in consideration. Any condition issued will be shown on the Load Line Certificate.	The ICLL requirements are to be applied for these classes of yachts.
	Permanent doors in bulwarks may be accepted as freeing ports. However, for such doors to be designated as freeing ports they should be provided with the following: - adequate securing devices to keep them in open position, and; - removable temporary rails.		
4.2.11.2	Should a non return flap be fitted in way of the freeing ports these should be kept free to move at all times.	Should a non return flap be fitted in way of the freeing ports these should be kept free to move at all times.	Should a non return flap be fitted in way of the freeing ports these should be kept free to move at all times.
4.2.11.3	The freeing ports should be fairly distributed along the full length of the deck. If the yacht tends to draw by the stern during operation adequate capacity of freeing ports is to be allowed for at the stern.		
4.2.11.4		Any recesses on the weather deck should be of weathertight construction and should be self draining under all conditions. Swimming pools and spas open to the elements are to be treated as a recess. Means should be provided to prevent the backflow of sea water into the recess.	
4.3	**Bulwarks and Guard Rails**		
4.3.1	Bulwarks and guard rails should have a minimum height of 1000mm.	Bulwarks and guard rails should have a minimum height of 1000mm.	Bulwarks and guard rails should have a minimum height of 1000mm.

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT

4.3.2 In case of guard rails the vertical distance between the different rails should not exceed 330mm. If steel wire is used for guard rails the wire used is to be stainless steel with a stainless steel core. The minimum diameter of the wire used for the railing should be calculated as follows:-

- Diameter of Top Rail :

$$\frac{\text{length of yacht in metre}}{4} = \text{(mm)}$$

- Diameter of other railing :

$$\frac{\text{length of yacht in metre}}{5} = \text{(mm)}$$

The minimum wire diameter in any position should not be less than 5mm.

Note: Toe rails should be fitted in case guard rails are fitted.
Toe rails should have a minimum height of 25mm (yachts $\leq$ 24m) or 40mm (yachts $>$ 24m).

4.3.3 Vertical stanchions are to be fitted at a distance of not less than 2.2 metres from each other.

Vertical stanchions are to be fitted at a distance of not less than 2.2 metres from each other.

Vertical stanchions are to be fitted at a distance of not less than 2.2 metres from each other.

Transport Malta

SECTION 5

RIGGING ON SAILING YACHTS

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
5.	**RIGGING ON SAILING YACHTS**		
	The condition of the masts, booms and the rigging should be the subject of continuous monitoring. The records of all inspections are to be recorded and inspected by the Surveyor during the Annual Surveys and Special Surveys.		
5.1	**Masts and Spars**		
5.1.1	Masts/rig specialist and spars on new yachts should form part of the evaluation by the Notified Body.	Masts/rig specialist and spars on new yachts should be in accordance with the requirements of the Recognised Organisations or a recognised National or International Standard.	
5.1.2	Masts and spars on existing yachts shall be subjected to a thorough inspection prior to the entry into the Registry. Due consideration will be given to the past performance and the declared areas of operation of the yacht.	Masts and spars on existing yachts shall be subjected to a thorough inspection prior to the entry into the Registry. Due consideration will be given to the past performance and the declared areas of operation of the yacht.	Masts and spars on existing yachts shall be subjected to a thorough inspection prior to the entry into the Registry. Due consideration will be given to the past performance and the declared areas of operation of the yacht.
5.1.3	There should be adequate access to inspect the condition of the masts in way where it passes through the deck and in way of the mast step.	There should be adequate access to inspect the condition of the masts in way where it passes through the deck and in way of the mast step.	There should be adequate access to inspect the condition of the masts in way where it passes through the deck and in way of the mast step.
5.1.4	The structure supporting the masts and spars should be constructed to effectively carry and transmit all forces involved.	The structure supporting the masts and spars should be constructed to effectively carry and transmit all forces involved.	The structure supporting the masts and spars should be constructed to effectively carry and transmit all forces involved.
5.2	**Standing Rigging**		
5.2.1	Wire rope used for standing rigging should be non flexible wire rope. Fibre core rope should not be used. The yacht should carry a log of all rope used clearly recording when each rope has been put in use.		
5.2.2	When solid rod is used for standing rigging the yacht is to log the time when each element has been put in use. The solid rods are to be renewed strictly within the time limit set by the Makers.		
5.2.3	The strength of all parts of the rig, including blocks, shackles, rigging screws, cleats, running rigging, winches and all other associated fittings and attachment points should exceed the breaking point of the rigging.		
5.2.4	Chainplates for standing rigging should be of strong construction and adequate to carry and transmit all forces involved. Adequate access to be given to examine the attachment to the hull of all chainplates.		

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SECTION 6

MACHINERY

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
6.	**MACHINERY**		
6.1	**Machinery Spaces**		
6.1.1	Machinery spaces are to be totally enclosed. They are to be heat and sound insulated. The materials used are to be of the type that do not absorb oil and do not support fires.	The machinery spaces and machinery installations are to meet the applicable standards of the Rules and Regulations for Charter Yachts of any recognised organisation. New yachts under 500 GT are required to follow SOLAS Regulations II–1 Part C, for Machinery Installations as far as practicable. In case of deviations, an equivalent degree of redundancy is desired particularly in relation to machinery controls. Yachts above 500 GT are expected to comply with SOLAS Regulations II–1 Part C and any alternatives are to be agreed with the Administration. In case of unattended machinery spaces then the Machinery Installations are also to comply with SOLAS Regulation II–1 Part E so far as is reasonable and practicable. Any item which does not comply will be specially considered by the Administration, particular consideration being given especially to yachts below 500 GT and Short Range yachts. Alternative/equivalent machinery arrangement and installation proposals are to be submitted to the Administration through the Authorised Surveyor or Recognised Organisations.	
6.1.2	Every yacht is to be fitted with a diesel powered inboard engine of adequate power to navigate the yacht safely.		
6.1.3	No petrol engines are allowed to power the yachts.		
6.1.4	The machinery installation should be adequately designed and outfitted for the intended use. The design and outfit should be such that all parts are properly shielded and protected to minimise the danger of personal injury to persons in the engine room. Due regard is to be given to moving parts, hot surfaces and other hazards.		
6.1.5	The fuel system shall have means to close the source of fuel that may feed a fire in the machinery spaces. This means of closure shall be a valve which can be closed from outside the machinery spaces. In case of sailing yachts below 20 metres alternative arrangements may be considered.		
6.1.6	Glass gauges on a fuel tank shall be of the flat glass type and shall be fitted with cocks at the top and bottom ends of the gauges. Other systems may be considered but all systems are to be fire proof.		
6.1.7	If flexible hoses are used for the fuel system, such hoses are to be made of fire retarding material and should be certified for such use. The end connections are to be of an approved screwed type.		

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT

No temporary fittings are to be allowed. All materials used on fuel systems are to be of an approved type and certified.

6.1.8 Engine Starting

6.1.8.1 Means shall be provided to ensure that the machinery can be brought in to operation from a dead ship condition without external aid.

Engines can be started manually, mechanically, or by batteries.

6.1.8.2 When the sole means of starting is by battery, the battery should be in duplicate and connected to the starter motor via a change over switch so that either battery or set of batteries can be used for starting either engine. Charging facilities for the batteries should be available on board. Batteries should be located above the floor plates in the machinery space. If location above floor plates is not possible, batteries could be located in a water tight box below floor plates. The water tight box should be properly ventilated above floor plates.

6.2 Steering Gear

6.2.1 Every yacht should be fitted with an efficient means of steering. This is to be of adequate strength and design to enable the heading and direction of the yacht to be effectively controlled at all operating speeds.

6.2.2 The control position is to be located so that the person at the steering position will have a clear view for the safe navigation of the yacht.

6.2.3 When the steering gear is equipped with remote control, arrangements should be provided for emergency steering.

6.2.4 The steering gear of any new yacht is to form part of the approval by the Notified Body.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
6.2.5	In case of existing yachts the Administration will consider the existing arrangements to ensure the safety standards. Sea trials will be carried out at initial survey to confirm the efficiency of the existing steering system.	In case of existing yachts and in case the steering arrangements have not been built to Class, the Administration will consider existing arrangements and take in consideration the experience factor of the particular yacht. Sea trials will be carried out at initial survey to confirm the efficiency of the existing steering system.	
6.3	**Bilge Systems**		
6.3.1	Each yacht is to be outfitted with an efficient Bilge pumping system. It should consist of at least:- - one engine driven pump; - one independent power bilge pump; - one manual pump.	The bilge pumping system should be in compliance with the requirements of a Recognised Organisation. If the yacht is not classed then a statement of compliance is to be issued by a Recognised Organisation or by an Approved Surveyor.	The bilge pumping system should be in compliance with the requirements of a Recognised Organisation.
	In the case of sailing yachts below 20m length, the Administration may accept the fitting of automatic or manual starting pumps for each compartment together with the fitting of a hand pump which can take suction from each compartment.	Each yacht is to be supplied by two independently powered pumps.	Each yacht is to be supplied by two independently powered pumps.

6.3.2 The bilge lines should be made of metal. The suction pipes are to be so arranged that any compartment can be pumped dry when the yacht is heeled up to an angle of 10°. The diameter of the main bilge line should be calculated as follows:-

$$d = 25 + 1.68\sqrt{L(B+D)}$$

where d = diameter of bilge main in mm
L = length of yacht in metres
B = breadth of yacht in metres
D = moulded depth of yacht in metres

6.3.3 The two pumps and their power supplies should be located in two different compartments. Whilst the engine driven pump will be located in the machinery space the power driven pump will be located outside the machinery compartment. Any one of the two pumps can take suction from any of the compartments.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
	The manually operated pump is to be located in the cockpit or weather deck and it should be able to take suction from all compartments.		
6.3.4	The bilge lines should be equipped with strum boxes.	The bilge lines should be equipped with strum boxes.	The bilge lines should be equipped with strum boxes.
6.3.5	A bilge level alarm should be fitted for each space. The alarm should be able to provide an audible alarm at the control position and in the crew quarters or Captain's quarters.		

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SECTION 7

ELECTRICAL INSTALLATION

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
7.	**ELECTRICAL INSTALLATION**		
7.1	The electrical installation shall be such that:-	The electrical installation shall be designed and outfitted to the rules and requirements of a Recognised Organisation. The installation shall be such that:-	
7.1.1	All electrical auxiliary services necessary for maintaining the yacht in normal, operational and habitable conditions are to be ensured without relying on the emergency service of power.		
7.1.2	Electrical services essential for the safety of the yacht and personnel on board are to be confirmed to be able to be operational under various emergency conditions.		
7.1.3	The yacht and personnel on board are to be protected from electrical hazards.	The yacht and personnel on board are to be protected from electrical hazards.	The yacht and personnel on board are to be protected from electrical hazards.
7.2	**Overload and Short Circuit protection**		
7.2.1	The electrical system shall be provided with overload and short circuit protection of all circuits with the exception of the engine starting circuits from the batteries.		
7.2.2	Lighting circuits including any circuits should be distributed through all spaces and in such a manner that a total black-out cannot occur due to the tripping of a single protective device.		
7.2.3	An alternative source of lighting shall be provided sufficient to enable persons to make their way to the open deck and to allow work on essential machinery. Such alternative sources of lighting may include torches or flash lights which would be located at prescribed locations.	An emergency source of lighting shall be provided. This shall be independent and distinct of the general lighting. The source shall be sufficient for 3 hours duration and should also supply the navigation lights. This source of lighting should be sufficient to allow the personnel to evacuate all spaces on board. It should be totally separate from the main power supply, external to the engine room and with an independent distribution.	
7.3	**Batteries**		
7.3.1	Batteries suitable for marine use and not easily liable to leakage are to be used. Stowage areas for batteries that can emit dangerous gases are to be equipped with adequate ventilation to avoid the build up of explosive gases. In the case of steel yachts or equivalent, the battery lockers are to be lined with an inert material.		
7.4	**Cables**		
7.4.1	All electric cables and wiring external to equipment shall be confirmed to be flame retardant marine cables. The installation of the cables shall be such so as not to in any way impact their mechanical and chemical properties.		

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
7.4.2	Cables and wiring serving essential or emergency power, lighting, internal communications or signals shall be routed clear of galleys, laundries, machinery spaces of Category A and any other high fire risk areas. Bulkhead penetrations should be of the approved type.		
7.5	**Switchboards**		
7.5.1		All switchboards on new vessels or replacement switchboards are to be built to the rules of a Recognised Organisation and IEE Regulations.	
7.5.2	Water, oil or fuel pipes are to be laid away from main switchboards so that any leakage from any pipe will not spray on the main switchboard.		

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SECTION 8

STABILITY

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT

8. STABILITY

8.1 The stability of this class of yacht is to be calculated per EN ISO 12217-1 for non sailing yachts and EN ISO 12217-2 for sailing yachts.

The assigned Category, i.e. :-

- Category 'A' (Ocean Going):-
  wind force exceeding 8, significant wave height exceeding 4m;

- Category 'B' (Offshore) :-
  wind force up to and including 8, significant wave height up to and including 4m;

- Category 'C' (Inshore) :-
  wind force up to and including 6, significant wave height up to and including 2m.

This section deals with the standards for both intact and damaged stability.

8.1.1. An intact stability standard proposed for assessment of a yacht type not covered by the standards defined in the Code should be submitted to the Administration or a Recognised Organisation for approval at the earliest opportunity.

8.1.2 If used, permanent ballast should be located in accordance with a plan approved by the Administration and in a manner that prevents shifting of position. Permanent ballast should not be removed from the ship or relocated within the ship without the approval of the Administration. Permanent ballast particulars should be noted in the ship's stability booklet. Attention should be paid to local or global hull strength requirements from the fitting of additional ballast.

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
8.2 Existing motor yachts not having stability data complying with 8.1.	**Intact Stability Standard Motor Yachts**	
8.2.1 Existing motor yachts not having stability data may have a "simplified" test.	**Monohull Yachts** The curves of statical stability for seagoing conditions should meet the following criteria: 1. the area under the righting lever curve (GZ curve) should not be less than 0.055 metre-radians up to 30° angle of heel and not less than 0.09 metre- radians up to 40° angle of heel, or the angle of downflooding, if this angle is less; 2. the area under the GZ curve between the angles of heel of 30° and 40° or between 30° and the angle of downflooding if this is less than 40°, should not be less than 0.03 metre-radians; 3. the righting lever (GZ) should be at least 0.20 metres at an angle of heel equal to or greater than 30°; 4. the maximum GZ should occur at an angle of heel of preferably exceeding 30° but not less than 25°; 5. after correction for free surface effects, the initial metacentric height (GM) should not be less than 0.15 metres, and; 6. in the event that the yachts intact stability standard fails to comply with the criteria defined in 1. to 5. the Administration may be consulted for the purpose of specifying alternative but equivalent criteria.	
8.2.1.1 A yacht should be tested in the fully loaded conditions (which should correspond to the freeboard assigned) to ascertain the angle of the heel and the position of the waterline which results when all persons which the yacht is to be certified to carry are assembled along one side of the yacht (The helmsman may be assumed to be at the helm). Each person may be substituted by a mass of 75kg for the purpose of the test. The yacht will be judged to have an acceptable standard of stability if the test shows that:- 1. the angle of heel does not exceed 7 degrees, and; 2. in the case of a yacht with a watertight weather deck extending from stem to stern, as described in Section 4.1.5, the freeboard to deck is not less than 75mm at any point;		

3. The angle of heel may exceed 7 degrees, but should not exceed 10 degrees, if the freeboard in the heeled condition is in accordance with that required by Section 9 in the upright condition.

8.2.1.2 Additionally, for yachts over 15 metres in length overall, the heeling moment applied during the text described in 8.2.1.1 should be calculated. By using the below formula, the yacht should attain a value of initial GM not less than 0.5m if using an
estimated displacement of the yacht, or 0.35m if the displacement of the yacht is known and can be verified by the Certifying Authority.

$$GM = \frac{57.3 \times HM}{\theta \times \triangle}$$

Where: **HM** = Heeling moment in kilogram metres
θ = angle of heel in degrees obtained from the test as defined in section 8.2.1.1.
$\triangle$ = the displacement of the yacht in kilogrammes, either estimated or measured and verified by the certifying Authority

In all cases, the maximum permissible weights of persons derived from the tests conducted shall be recorded on the certificate. Yacht loading will be restricted by the position freeboard mark and maximum permissible weight, and thus for the purposes of this test, attention should be paid to any activity related equipment where this may be significant e.g. diving equipment.

Monohull Yachts operating as Short Range Yachts

Where Short Range Yachts are unable to meet criteria above, the following criteria may be used:-

1. the area under the righting lever curve (GZ curve) should not be less than 0.07 metre-radians up to 15° angle of heel, when maximum GZ occurs at 15°, and 0.055 metre-radians up to 30° angle of heel, when maximum GZ occurs at 30° or above. Where the maximum GZ occurs at angles of between 15° and 30°, the corresponding area under the GZ curve, A_{req} should be taken as follows:-

$A_{req} = 0.055 + 0.001\ (30° - \theta\ max)$ metre-radians

Where θ max is the angle of heel in degrees where the GZ curve reaches its maximum;

2. the area under the GZ curve between the angles of heel of 30° and 40° or between 30° and the angle of downflooding if this is less than 40°, should not be less than 0.03 metre-radians;
3. the righting lever (GZ) should be at least 0.20 metres at an angle of heel equal to or greater than 30°;
4. the maximum GZ should occur at an angle of heel not less than 15°;
5. after correction for free surface effects, the initial metacentric height (GM) should not be less than 0.15 metres.

8.2.1.3 **Multi-hulls**

The curves of statical stability for seagoing conditions should meet the following criteria:-

1. the area under the righting lever curve (GZ curve) should not be less than 0.075 metre-radians up to an angle of 20° when the maximum righting lever (GZ) occurs at 20° and, not less than 0.055 metre-radians up to an angle of 30° when the maximum righting lever (GZ) occurs at angles between 20° and 30° the corresponding area under the GZ curve, Areq should be taken as follows:-

A_{req} = {0.055 + 0.002 (30 - θ max) metre-radians;

Where θ max is the angle of heel in degrees where the GZ curve reaches it's maximum.

2. The area under the GZ curve between the angles of heel of 30° and 40° or between 30° and the angle of downflooding if this is less than 40° should not be less than 0.03 metre-radians;
3. the righting lever (GZ) should be at least 0.20 metres at an angle of heel where it reaches its maximum;
4. the maximum GZ should occur at an angle of heel not less than 20°;
5. after correction for free surface effects, the initial metacentric height (GM) should be not less than 0.15 metres, and;
6. if the maximum righting lever (GZ) occurs at an angle of less than 20° approval of the stability should be considered by the Administration as a special case.

8.2.1.4 For the purpose of assessing whether the stability criteria are met GZ curves should be produced for the loading conditions applicable to the operation of the yachts.

8.2.1.5 **Superstructures**

8.2.1.5.1 The buoyancy of enclosed superstructures complying with regulation 3(10)(b) of the ICLL may be taken into account when producing GZ curves.

8.2.1.5.2 Superstructures, the doors of which do not comply with the requirements of Regulation 12 of ICLL, should not be taken into account.

8.2.1.6 **High Speed Yachts**

In addition to the criteria above, designers and builders should address the following hazards which are known to effect yachts operating in planing modes or these achieving relatively high speeds:

1. directional instability, often coupled to roll and pitch instabilities;
2. bow diving of planing yachts due to dynamic loss of longitudinal stability in calm seas;
3. reduction in transverse stability with increasing speed in monohulls;
4. porpoising of planing monohulls being coupled with pitch and heave oscillations;
5. generation of capsizing moments due to immersion of chines in planing monohulls (chine tripping).

8.2.2 Sailing Yachts

8.2.2.1 Monohulls

8.2.2.1.1 Curves of statical stability (GZ curves) for at least the Loaded Departure with 100% consumables (but assuming slack tanks) and the Loaded Arrival with 10% consumables should be produced.

8.2.2.1.2 The GZ curves required by 8.2.2.1.1. should have a positive range of not less than 90°. For yachts of more than 45m, a range of less than 90° may be considered but may be subject to agreed operational criteria.

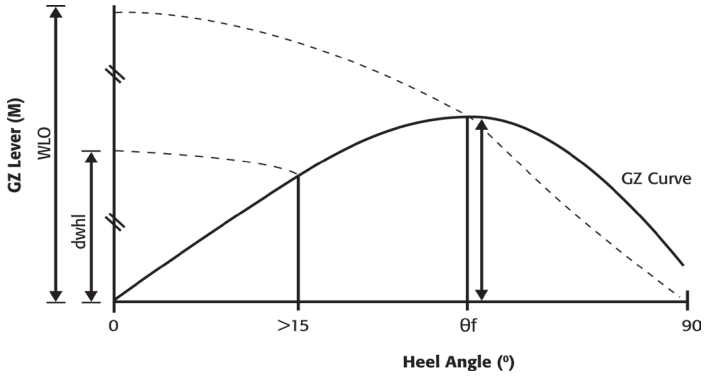
8.2.2.1.3 In addition to the requirements of 8.2.2.1.2, the angle of steady heel should be greater than 15 degrees (see figure). The angle of steady heel is obtained from the intersection of a 'derived wind heeling lever' curve with the GZ curve required by 8.2.2.1.1.

In the figure:

'dwhl' = the 'derived wind heeling lever' at any angle θ °

$= 0.5 \times WLO \times \cos^{1.3}\theta$

where $WLO = \frac{GZ_f}{\cos^{1.3}\theta_f}$



Noting that:-

WLO is the magnitude of the actual wind heeling lever at 0° which would cause the yacht to heel to the 'down flooding angle' θ_f or 60° whichever is least.

GZf is the lever of the yacht's GZ at the down flooding angle (θ_f) or 60° whichever is the least.

θ_f is the angle at which the 'derived wind heeling' curve intersects the GZ curve. (If θ_d is less than 15° the yacht will be considered as having insufficient stability for the purpose of the Code).

θ_d the 'downflooding angle' is the angle of heel causing immersion of the lower edge of openings having an aggregate area, in square metres, greater than:

$$\frac{\triangle}{1500}$$

where $\triangle$ = yachts displacement in tonnes.

All regularly used openings for access and for ventilation should be considered when determining the downflooding angle. No opening regardless of size which may lead to progressive flooding should be immersed at an angle of heel of less than 40°. Air pipes to tanks can, however, be disregarded.

If as a result of immersion of openings in a superstructure, a yacht cannot meet the required standard, those superstructure openings may be ignored and the openings in the weather deck used instead to determine θ_f. In such cases the GZ curve should be derived without the benefit of the buoyancy of the superstructure. It might be noted that provided the yacht complies with the requirements of sections 8.2.2.1.1, 8.2.2.1.2 and 8.2.2.1.3 and is sailed with an angle of heel which is no greater than the 'derived angle of heel', it should be capable of withstanding a wind gust equal to 1.4 times the actual wind velocity (i.e. twice the actual wind pressure) without immersing the 'down flooding openings', or heeling to an angle greater than 60°.

8.2.2.3 **Multi-hull**

8.2.2.3.1 Curves of statical stability in both roll and pitch shall be prepared for at least the Loaded Arrival with 10% consumables. The VCG shall be obtained by one of the three methods listed below:-

i. inclining of complete craft in air on load cells, the VCG being calculated from the moments generated by the measured forces, or;

ii. separate determination of weights of hull and rig (comprising masts and all running and standing rigging), and subsequent calculation assuming that the hull is 75% of the hull depth above the bottom of the canoe body, and that the VCG of the rig is at half the length of the mast (or a weighted means of the lengths of more than one mast), or;

iii. detailed calculation of the weight and CG position of all components of the yacht, plus a 15% margin of the resulting VCG height above the underside of canoe body.

8.2.2.3.2

If naval architecture software is used to obtain a curve of pitch restoring moments, then the trim angle must be found for a series of longitudinal centre of gravity (LCG) positions forward of that necessary for the design waterline. The curve can be derived as follows:

GZ in pitch = CG' x cos (trim angle)

$$\text{Trim angle} = \tan^{-1}\left[\frac{T_{FP} - T_{AP}}{L_{BP}}\right]$$

Where:

CG' = shift of LCG forward of that required for design trim, measured parallel to baseline

T_{FP} = draught at forward perpendicular

T_{AP} = draught at aft perpendicular

L_{BP} = length between perpendiculars

Approximations to maximum roll or pitch moments are not acceptable.

8.2.2.3.3

Data shall be provided to the user showing the maximum advised mean apparent wind speed appropriate to each combination of sails, such wind speeds being calculated as the lesser of the following:-

$$V_w = 1.5\sqrt{\frac{LM_R}{A'_S h \cos \Phi_R + A_D b}}$$

OR

$$V_w = 1.5\sqrt{\frac{LM_p}{A'_S h \cos \Phi_p + A_D b}}$$

where:

V_w = maximum advised apparent wind speed (knots)

LM_R = maximum restoring moment in roll (N-m)

LM_P = limiting restoring moment in pitch (N-m), defined as the pitch restoring moment at the least angle of the following:

a) angle of maximum pitch restoring moment, or

b) angle at which foredeck is immersed

c) 10° from design trim

A'_s = area of sails set including mast and boom (square metres)

h = height of combined centre of effort of sails and spars above the waterline

Φ_R = heel angle at maximum roll righting moment (in conjunction with LMR)

Φ_P = limiting pitch angle used when calculating LMP (in conjunction with LMP)

A_D = plan area of the hulls and deck (square metres)

b = distance from centroid of AD to the centreline of the leeward hull

This data shall be accompanied by the note:
In following winds, the tabulated safe wind speed for each sail combination should be reduced by the boat speed.

8.2.2.3.4 If the maximum safe wind speed under full fore-and-aft sail is less than 27 knots, it shall be demonstrated by calculation using annex D of ISO 12217-2 (2002) that, when inverted and/or fully flooded, the volume of buoyancy, expressed in cubic metres (m^3), in the hull, fittings and equipment is greater than:

1.2 x (fully loaded mass in tonnes)

Thus ensuring that it is efficient to support the mass of the fully loaded yacht by a margin. Allowance for trapped bubbles of air (apart from dedicated air tanks and watertight compartments) shall not be included.

8.2.2.3.5 The maximum safe wind speed with no sails set calculated in accordance with 8.2.2.3.3 above should exceed 36 knots. For Short Range Yachts this wind speed should exceed 32 knots.

8.2.2.3.6 Trimarans used for unrestricted operations should have sidehulls each having a total buoyant volume of at least 150% of the displacement volume in the fully loaded condition.

8.2.2.3.7 The stability information booklet shall include information and guidance on:-

1. the stabilitity hazards to which these craft are vulnerable, including the risk of capsize in roll and/or pitch;
2. the importance of complying with the maximum advised apparent wind speed information supplied;
3. the need to reduce the tabulated safe wind speeds by the yacht speed in following winds;
4. the choice of sails to be set with respect to the prevailing wind strength, relative wind direction and sea state;
5. the precautions to be taken when altering course from a following to a beam wind.

8.2.2.3.8 In yachts required to demonstrate the ability to float after inversion (according to 8.2.2.3.4 above) an emergency escape hatch shall be fitted to each main inhabited watertight compartment such that it is above both upright and inverted waterlines.

8.3 Damaged Stability

The following rquirements are applicable to all yachts, other than those operating as Short Range Yachts. Whilst Short Range Yachts are not required to meet the damage stability criteria defined above, ultimate survivability after minor damage or flooding is recommended. It should be noted that compliance with the damage stability criteria is not required for yachts that obtain full compliance with the ICLL conditions of assignment.

8.3.1 The watertight bulkheads of the yacht should be so arranged that minor hull damage that results in the free flooding of any one compartment, will cause the yacht to float at a waterline which, at any point, is not less than 75mm below the weather deck, or bulkhead deck if not concurrent.

8.3.2 Minor damage should be assumed to occur anywhere in the length of the yacht, but not on a watertight bulkhead.

8.3.3 Standard permeabilities should be used in this assessment, as follows:-

Space	Percentage Permeability
Stores	60
Stores but not a substantial quantity thereof	95
Accommodation	95
Machinery	85

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
8.3.4	In the damaged condition, considered in 8.3.1, the residual stability should be such that any angle of equilibrium does not exceed 7° from any upright, the resulting righting lever curve has a range to the downflooding angle of at least 15° beyond any angle of equilibrium, the maximum righting lever within that range is not less than 100mm and the area under the curve is not less than 0.015 metre radians. For multi-hull yachts, a resultant angle of heel of up to 10° may be accepted.	
8.3.5	A yacht of 85 metres and above should meet a SOLAS 1-compartment standard of subdivision, calculated using the deterministic damage stability methodology.	
8.4	**Elements of Stability**	
8.4.1	The lightship weight, vertical centre of gravity (KG) and longitudinal centre of gravity (LCG) of a yacht should be detetermined from the results of an inclining experiment.	
8.4.2	An inclining experiment should be conducted in accordance with a detailed standard which is approved by the Administration and, in the presence of an Authorised Surveyor.	
8.4.3	The report of the inclining experiment and the lightship particulars derived should be approved by the Administration prior to its use in stability calculations. A lightweight check should be carried out at every renewal survey. At the discretion of the owner(s)/ managing agent(s) and prior to approval of the lightship particulars by the Administration, a margin for safety may be applied to the lightship weight and KG calculated after the inclining experiment. Such a margin should be clearly identified and recorded in the stability booklet. A formal record should be kept in the stability booklet of alterations or modifications to the yacht. The original location of the KG and LCG (including Margin if applicable) should be updated to reflect these changes. Such amendments shall be approved by an authorised surveyor against the parameters for major alteration as defined in Section 2 of this Code.	
8.4.4	When sister yachts are built at the same shipyard, the Administration may accept a lightweight check on subsequent yachts to corroborate the results of the inclining experiment conducted on the lead yacht of the class.	

8.5 Stability Documents

8.5.1 A yacht should be provided with a stability information booklet that is to be approved by the Administration. Approval of stability information booklets for yachts certified under this code may be carried out by the approved surveyors strictly in line with the guidelines and checklists provided by the Administration. Approval by Recognised Organisations may be carried out in accordance to class rules and procedures.

8.5.2 The content, form and presentation of information contained in the stability information booklet should be based on the model booklet for the yacht type (motor or sailing) published by the Administration.

8.5.3 A yacht with previously approved stability information which undergoes a major alteration or refit alterations should be subjected to a complete reassessment of stability and provided with newly approved stability information. Additionally, unless it can be clearly demonstrated that no major change has occurred, a lightweight check should be carried out at the renewal survey.

8.5.4 Sailing yachts should have, readily available, a copy of the Curves of Maximum Steady Heel Angle to Prevent Downflooding in squalls, or in the case of a multi-hull, the values of maximum advised mean apparent windspeed, for the reference of the watchkeeper. This should be a direct copy taken from that contained in the approved stability booklet.

8.5.5 The overall sail area and spare weights and dimensions should be as documented in the yacht's stability information booklet. Any rigging modifications that increase the overall sail area, or the weight/dimensions of the rig aloft, must be accompanied by an approved updating of the stability information booklet.

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SECTION 9

FREEBOARD AND FREEBOARD MARKING

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
9.	**FREEBOARD AND FREEBOARD MARKING**		
9.1	A freeboard mark should be placed on each side of the hull at the longitudinal position of the longitudinal centre of flotation for the maximum draught at which the stability of the yacht has been determined. This mark shall consist of a horizontal bar having a length of 300mm and a width of 25mm. The top of the bar is to be in line with the relevant water line.	Yachts should comply with ICLL for the assignment of the freeboard mark which corresponds to the deepest load condition. This is to be included in the stability information of the yacht. Yachts under 500 GT are not required to comply fully with Regulation 5 of the ICLL, but in any case the inner diameter of the plimsoll mark should not be less than 150mm.	
9.2		The assigned freeboard should be compatible with the strength of the hull structure, intact and damage stability requirements for the yacht and the minimum bow height requirements are to be met. The approved Authority who shall assign the loadline should provide the Owners / Managers of the yacht a copy of the documentation showing the particulars relating to the conditions of assignment.	
9.3		The assigned freeboard mark should be painted on both sides of the yacht amidships. The mark should be the permanent freeboard disc and should be of contrasting colour to that of the adjacent hull.	
9.4		If the yacht is to operate in sea water and fresh water then the freeboard allowance for fresh water is also to be painted on the port and starboard sides.	
9.5	A yacht must not operate in any condition which will result in the freeboard marks being submerged when the yacht is moored in calm water.	A yacht must not operate in any condition which will result in the freeboard marks being submerged when the yacht is moored in calm water.	A yacht must not operate in any condition which will result in the freeboard marks being submerged when the yacht is moored in calm water.
9.6		**Datum Draught Marks**	
9.6.1		Datum draught reference marks are to be provided on both sides of the yacht at the bow and stern. These may be single datum lines and be adequate to determine the trim of the yacht. Only one datum line in each position need be marked. These positions are to be at the same level and should be above but within 1000mm of the assigned deepest water line. These datum lines are also to be shown, together with the freeboard mark, on a diagram to be included in the stability booklet forwarded to the Administration.	

9.7 Minimum Freeboard

9.7.1 In the case of a yacht with a continuous watertight weather deck in accordance with section 4.1.5.1 which is neither stepped or recessed or raised, have a freeboard measured down from the lowest point of the weather deck of not less than 425mm for yachts of 15m in length and not less than 994mm for yachts of 24 metres in length. For a yacht of intermediate length the freeboard should be determined by linear interpolation;

9.7.2 In the case of a yacht with a continuous watertight weather deck in accordance with section 4.1.5.1 which may be stepped, recessed or raised, have a freeboard measured down from the lowest point of the weather deck, of not less than 255mm for yachts of 15m in length and not less than 510mm for yachts of 24m in length.

For a yacht of intermediate length the freeboard should be determined by linear interpolation. The raised portion(s) of the watertight weather deck should extend across the full breadth of the yacht and the average freeboard over the length of the yacht should comply with 9.7.1 above for a yacht with a continuous watertight weather deck.

9.8 A yacht required to be provided with an approved Stability Information Booklet or whose stability has been calculated per EN ISO 12217-1 for non sailing yachts or EN ISO 12217-2 for sailing yachts should be assigned a freeboard which corresponds to the draught of the yacht in sea water when fully loaded (each persons taken as 75kg) but which in no case should be less than the freeboard required by Section 9.7.1 or 9.7.2 nor that corresponding to the scantling draught.

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SECTION 10

LIFE SAVING EQUIPMENT

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
10.	**LIFE SAVING EQUIPMENT**		
10.1	Life saving equipment is to be provided onboard. All equipment is to be of an approved type.	Life saving equipment is to be provided onboard. All equipment is to be of an approved type.	Life saving equipment is to be provided onboard. All equipment is to be of an approved type.
10.2	Inflatable liferafts, hydrostatic release devices and gas inflated lifejackets should be serviced annually by Makers approved servicing stations. Servicing certificates are required to be maintained on board		
	Liferafts are to be equipped with a SOLAS B Pack. SOLAS B equipment may be stowed in a grab bag and placed next to the liferaft.	Liferafts are to be equipped with a SOLAS B pack in case of short range yachts and with a SOLAS A Pack in case of other yachts.	Liferafts are to be equipped with a SOLAS A pack.
10.3	All lifejackets carried on board are to be of the SOLAS approved type.	All lifejackets carried on board are to be of the SOLAS approved type.	All lifejackets carried on board are to be of the SOLAS approved type.
10.4	When personal safety equipment used for watersports is carried, this is to be distinctly stored apart from the life saving equipment so that it would not be mistaken for the approved type of Life Saving Equipment in case of emergencies.		
10.5	All life-saving equipment is to be fitted with retro reflective tape.	All life-saving equipment is to be fitted with retro reflective tape.	All life-saving equipment is to be fitted with retro reflective tape.
10.6	Liferafts on multihull yachts are to be located in a position which would be accessible when the yacht is upright or in the capsized position.		
10.7		The liferaft embarkation arrangements should comply with the following:- - an embarkation ladder is to be provided when the distance between the lowest embarkation deck of the yacht and the topmost edge of the liferaft tube exceeds 1000mm; - Davit launched liferafts are to be installed when the distance between the embarkation deck and the topmost edge of the liferaft tube exceeds 4500mm;	

- All launching devices for liferafts and rescue boats are to be type approved and comply with the requirements of the IMO Life Saving Appliances Code, Ch VI/6.1.2. The appliance should be able to launch the boat within 5 minutes. When a power operated device, if fitted, it should be capable of operation either by hand or by an emergency source of power in the event of a main power failure. The routing of an emergency source of power should be considered in respect of damaged waterlines and fire. The launching appliance and its attachments should be constructed to withstand a static proof load on test of not less than 2.2 times the maximum working load. Acceptable factors of safety are 6 for wires, hooks and sheaves, and 4.5 for the remainder of the launching appliance. The appliance and its attachments should also be tested dynamically to 1.1 times the working load. It should be noted that there is no requirement to recover the rescue boat provided that the casualty and the boat's crew can be recovered on board from the boat in the water.

Galvanised steel falls are to be certified and non-rotating type. Their position is to be changed end for end every two years and they are to be renewed every four years. Stainless steel falls are to be renewed at intervals not exceeding the Makers' recommendations.

10.7.1 On yachts having projections on the side (such as but not only fin stabilisers), special provisions are to be made to ensure that such projections do not interfere with the safe evacuation of the yacht or damage the life-saving equipment. Means should be provided to prevent overboard discharge of water into the survival craft.

10.7.2 The maintenance of equipment should be carried out in accordance with the instructions for on board maintenance. Type approval certificates and/or Declaration of Conformity should be kept on board in an Equipment Record File.

10.7.3 All life saving equipment is to be maintained in a good state of maintenance and ready for immediate use at all times. The equipment is to be stored in easily accessible locations on board and such locations should never be blocked by equipment, furniture or any other encumbrance.

		Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT		
10.8	**Life Saving Appliances**					
	- Liferaft (See note 1)	Full capacity of number of persons onboard	Full capacity of number of persons onboard	Full capacity of number of persons onboard		
	- Lifeboats (See note 2)	-	-	On yachts above 85m		
	- Rescue Boat (See note 3)	-	Long range yachts only	Yes		
				Under 60m	**60m to 120m**	**120m to 180m**
	- Lifebuoys total (See note 4)	2	5	6	10	13
	- with self-igniting lights (min.)	1	2	2	4	7
	- with smoke & light (min.)	-	1	2	2	2
	- with buoyant line (min.)	1	2	2	4	4
	- Lifejackets with lights	120% of total persons	120% of total persons	120% of total persons		
	- Children lifejackets with lights	A least 4 or such greater number as may be required to provide a lifejacket for each child	A least 4 or such greater number as may be required to provide a lifejacket for each child	A least 4 or such greater number as may be required to provide a lifejacket for each child		
	- Safety Harness	100% on sailing boats	100% on sailing yachts	100% on sailing yachts		
	- Pyrotechnics:					
	- Parachute signals	4	6	12		
	- Red hand flares	4	6	12		
	- Buoyant smoke signals	2	2	2		
	- Line throwing appliance	-	1	4		
	- General Positioning Satellite (GPS)	Yes	Yes	Yes		
	- NAVTEX	Yes	Yes	Yes		
	- EPIRB (See note 5)	1	1	1		
	- SART (See note 5)	1	1	2		
	- Radar Reflector (GRP and Wooden Hulls only)	1	1	-		
	- Two way Radio Telephone Sets (GMDSS Approved)	2	2	2		
	- General Alarm	-	Yes	Yes		
	- Emergency Lighting	Yes	Yes	Yes		

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
- Life Saving Signals and Rescue Poster (SOLAS No.1) in Wheelhouse	Yes	Yes	Yes
- Posters and signs describing Survival craft and equipment Operating instructions	Yes	Yes	Yes
- Training manual	-	Yes	Yes
- Instructions for onboard Maintenance	-	Yes	Yes
- Thermal Protective Aids	100% (see note 6 below)	100% (see note 6 below)	100% (see note 6 below)
- Immersion Suits		2 (see note 7 below)	100% (see note 7 below)

Note 1: Approved type of liferafts are to be carried. They must contain emergency packs. Their stowage on board is to be such that they may be easily launched. Liferafts are to be fitted with hydrostatic release device so they would be able to float free.
Unless liferafts are of the 'easily transferrable' type (mass of liferaft, container and equipment up to 185kg) then 100% aggregate capacity is to be provided on each side. In cases where liferafts are enclosed in a special moulded locker, then this locker should be easily openable in any condition even on a yacht over 24m.

Note 2: In case lifeboats are fitted, their launching devices are to be of the approved type.

Note 3: Yachts below 500 GT can either be equipped with a SOLAS approved rescue boat or a boat which is suitable for rescue purposes. The boat may be a rigid hull, RIB or inflatable and should have a capacity of not less than 4 persons one of which will be assumed to be lying down. Tubes of float free or inflatables and RIB's should have at least three compartments. Short range yachts should have sufficient mobility and manoeuvrability in a sea way to enable persons to be retrieved from the water. The retrieval of persons over the stern is not considered acceptable. The recovery position should be visible from the control station. Yachts should be provided with the necessary equipment and arrangements to enable the person/s to be recovered without further persons entering the water. All yachts above 500 GT should be equipped with a rescue boat meeting SOLAS requirements.

Note 4: In the case of short range yachts, each lifebuoy shall be marked with the yacht's name and port of registry. Buoyant lines should have a minimum length of 30 metres.

Note 5: All EPIRB's and SART's are to be installed in an easily accessible position so that they can be either float free or manually released and placed in the survival craft. All EPIRB's should be registered with the Administration. Ref. to section 15 of this Code.

Note 6: Required on all yachts operating during summer only and where the sea water temperature in the area of operation does not fall below 20 degrees C.

Note 7: Required on all yachts having a restricted range and which may trade in areas where the sea water temperature may fall below 20 degrees C. The amount listed above can be reduced to 3 units per life boat if lifeboats are fitted. For long range yacht they should be equipped with 100%.

Transport Malta

SECTION 11

FIRE SAFETY

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT

11 GENERAL

11.1 The purpose of this section is to provide the basic principles and minimum expected fire safety standards vis-à-vis fire prevention, detection and extinction.

Unless expressly stated otherwise, fire safety appliances and systems shall comply with the requirements of the International Code for Fire Safety Systems and the International Code for Application of Fire Test Procedures, in their up to date version.

Being fully aware that the particular design and operational characteristics of commercial yachts may render unfeasible the strict application of various industry prescriptive requirements, whilst still not guaranteeing an adequate level of fire safety, this Code seeks to ensure the highest possible fire safety standard through a balanced combination of passive and active fire protection measures. Yacht designers, builders, owners and managers may propose equivalent or alternative arrangements designed to satisfy the minimum standards set in this section. The Administration, in considering such proposals will require a safety case to be submitted in writing through the appointed Recognised Organisation or Approved Surveyor. The safety case should include detailed description of the proposed design and arrangement philosophy, supported by any related studies, risk assessment, simulations and tests conducted.

Apart from the general requirements of sub-sections 11.1.1 to 11.1.5 (that unless stated otherwise are applicable to **all** yachts), this section is divided into three distinct sub-sections with applicability determined by yacht size and operational category:

11.2 Fire Prevention.
11.3 Active Fire Protection.
11.4 Structural Fire Protection.

11.1.1 Fire Control Plans

Yachts over 24 metres in length shall have an approved fire control plan permanently exhibited for the guidance of the Master and Crew. The plan should indicate and describe the fire protection, detection and extinction equipment and materials. The Fire Control Plan may be combined with the safety plan as a "Fire and Safety Plan". The plans may be approved either by the appointed Recognised Organisation or by a Government Surveyor of Ships. The plans shall be kept updated in such instances where equipment or systems are modified, replaced or newly installed. The plans are to be of an adequate size and be easily read.

The symbols used in the plans are to comply with IMO A.952(23) or ISO 17631. The plan should include details of each deck and space and indicate the position of all equipment.

A plan permanently stored in a prominently marked weather tight enclosure should be located on the outside of the deckhouse and be in a readily accessible position.

11.1.2 Means of Escape

11.1.2.1	Stairways, corridors and ladders serving all spaces are to provide a direct means of escape to the embarkation deck.	Stairways, corridors and ladders serving all spaces are to provide a direct means of escape to the embarkation deck.	Stairways, corridors and ladders serving all spaces are to provide a direct means of escape to the embarkation deck.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
11.1.2.2	Machinery spaces are to have two means of escape as widely separated as possible.	Machinery spaces are to have two means of escape as widely separated as possible.	Machinery spaces are to have two means of escape as widely separated as possible.
	A single means of escape may be accepted for machinery spaces whose size and configuration does not allow the provision of a second means of escape. In such cases special consideration should be given to assess possibility of providing a primary and secondary escape route.		
		Yachts over 24 in hull meters should have a vertical means of escape.	Yachts over 24 in hull meters should have a vertical means of escape.
11.1.2.3	The escape routes from the accommodation spaces are not to be led through any high risk area such as the machinery space, galley, paint store, etc.		
11.1.2.4	Single escape routes from spaces other than accommodation spaces may be exceptionally accepted as long as these are not through high risk spaces.		
11.1.2.5	Lifts are not to be considered as a means of escape.	Lifts are not to be considered as a means of escape.	Lifts are not to be considered as a means of escape.
11.1.2.6	A secondary escape route from an accommodation space may be through an adequately sized hatch within such space or alternatively through another adjacent compartment. The means of escape within the accommodation space are to be as widely separated as is reasonably possible.		
11.1.2.7	All accommodation spaces are to have two distinct and easily accessible means of escape. All escape routes, including any concealed or "unusual" routes are to be clearly indicated and marked. Each accommodation space is to have its escape route clearly indicated.		
	In exceptional cases and in instances when a second means of escape cannot be installed a single means of escape may be accepted if:-		
	i) the existing single escape route leads directly to the open deck or alternatively an Emergency Escape Breathing Device (EEBD) per passenger is provided; ii) the provision of a second means of escape would be detrimental to the overall safety of the yacht; iii) the installed smoke detection and alarm system is capable to provide sufficient early warning of any fire emergency that could isolate the single means of escape within the space in question. Emergency lighting should also be installed; iv) the length of the escape route from the space to open deck does not exceed 5 metres.		
11.1.2.8	Multi-hull yachts are to have additional means of escape through each hull in case of capsize. Escape hatches installed for this particular application are to be type approved accordingly.		
11.1.3	**Openings to propulsion machinery rooms**		

It shall be possible to close access openings in the trunk walls of propulsion machinery rooms with steel doors or doors that have been shown to be functionally equivalent. The walls shall not contain any windows, portholes or fixed port lights. Skylights of propulsion machinery rooms shall not have any windows, port holes or fixed port lights and they shall be designed for easy closing from outside the spaces in which they are installed. Ventilation trunks on propulsion rooms shall be fitted with fire dampers that can be closed safely from the deck. Access to propulsion machinery rooms shall be from a corridor or from the open deck or from outside machinery space.

Automatic and manual fire dampers are accepted provided that they can be activated from outside machine spaces.

No port lights or windows can be fitted on the boundary of the engine space. Notwithstanding the aforementioned, the fitting of an observation port having a maximum diameter of 150mm may be allowed in internal doors leaving to the engine room. Such an observation port is to be of the non-opening type having a steel frame and supplied with a permanently attached cover with closing devices. The glass is to be of a fire rated toughened safety glass.

11.1.4 Pipe Systems

Pipes carrying oil or combustible liquids shall be of approved material and suitable for intended use. Use of materials that can be easily rendered ineffective by heat is not permitted for scupper pipes, sanitary discharges and other discharges close to the load line when melting in the event of fire may result in flooding.

11.1.5 Use of LPG or equivalent on Yachts

11.1.5.1 Any LPG installation shall be approved. Any open flame appliance should be certified in compliance with the requirements of EC Directive 90/396/EC as amended. Gas detectors and CO detectors are to be installed in the areas where LPG is used.

11.1.5.2 Gas cylinders, regulators and safety devices should be stowed in a dedicated locker on open deck. This locker should be equipped with a natural ventilation facility so designed to drain away from the cockpit, recesses or the accommodation spaces. If gas fired space heaters are used on board they are to be installed and secured in a position away from soft furnishings, curtains etc. This locker is not to have any electrical fittings.

11.1.5.3 Gas piping should be of metal with only the shortest possible lengths of rubber hoses used for the connection with the gas liners and the appliances. Rubber hoses are to be type approved and suitable for the intended use.

11.1.5.4 The couplings are to be crimped and threaded. Rubber hoses by virtue of their definite life require to be replaced at regular intervals. If copper piping is used is to be borne in mind that copper can work harden and fracture and therefore periodical inspection is necessary. Any parts of the copper piping that may be subjected to vibrations should have to be identified and annealed as necessary.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
11.2	**Fire Prevention**		
11.2.1	**Fuel Systems and Storage**		
11.2.1.1	No fuel or flammable liquids having a flash point below 60°C may be carried in machinery spaces.	No fuel or flammable liquids having a flash point below 60°C may be carried in machinery spaces.	No fuel or flammable liquids having a flash point below 60°C may be carried in machinery spaces.

11.2.1.2 Petrol or other highly flammable liquids shall be kept to a minimum and should not exceed 150 litres in spaces containing vehicles or craft with fuel in their tanks or lockers storing such fuel. Containers used for the carriage of flammable liquids should be constructed to a recognised standard. Each container is to be clearly marked.

11.2.1.3 The Location of small lockers on open deck used for stowage of hand-held containers, must be clearly marked that it contains flammable material and no-smoking signs posted. In addition these should:

- be located away from any high risk area;
- have no electrical fittings in or around them;
- have natural ventilation at the top and bottom;
- have self draining holes leading to overboard;
- have means to secure the fuel containers;

Enclosed spaces, garages and larger lockers containing vehicles or craft with fuel having a flash point below 60 degrees Celsius in their tanks or lockers storing such fuel are to have:

- a fixed, ducted, mechanical ventilation system which is exclusive to this space and not connected to any other space on board. The motor used is to be intrinsically safe. The ventilation system is to have a capacity of 6 air charges per hour;
- An audible and visual alarm is to be fitted in the bridge and at the locker/garage access to indicate a significant reduction in air flow. The ducting should take suction from the lower area of the bilge. The exhaust ducting is to be fitted with a shut down flap which can be easily closed externally;
- All electrical equipment fitted up to 450mm above the deck of this space is to be certified to be suitable for use with petrol. All other electrical equipment should be rated IP55 as a minimum standard. Emergency lighting is to be installed in this space. All lighting in this space should be low voltage lighting of sealed type;
- Petrol fuel detector shall be fitted with an alarm on the bridge and crew accommodation.

11.2.1.4 Store rooms used for the storage of highly flammable products are to be provided with totally independent ventilation systems. Such systems are to be served by intrinsically safe fans. The exhaust side of these ventilation systems are to be fitted with spark arrestors. For paint lockers with a floor area exceeding 4m², additional requirements are defined under section 11.3.1.2.1.

Storage rooms with a floor area not exceeding 4m² housing fuel filled lamps, paraffin, paint cans and other flammable materials shall have suitable ventilation features. Any direct connection with any accommodation space is not permitted.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
11.2.1.5	No fuel, lube oils or any other flammable materials may be may be carried in the forecastle space or the forepeak or chain lockers. chain lockers.	No fuel, lube oils or any other flammable materials may be carried in the forecastle space or the forepeak or chain lockers.	No fuel, lube oils or any other flammable materials carried in the forecastle space or the forepeak or
11.2.1.6	The fuel pipes from all tanks are to be fitted with remotely operated closing valves. Such valves are to be provided with mechanical means of closure. For vessels less than 500 GT low voltage electrically operated shut off may be accepted provided the system is approved by the Recognised Organisation in case of a classed vessel.		
11.2.1.7	Means shall be provided for the fuel transfer pumps to be stopped from outside the machinery spaces.	Means shall be provided for the fuel transfer pumps to be stopped from outside the machinery spaces.	Means shall be provided for the fuel transfer pumps to be stopped from outside the machinery spaces.
11.2.1.8	Fuel filter bowls should be of all metal construction.	Fuel filter bowls should be of all metal construction.	Fuel filter bowls should be of all metal construction.
11.2.2	**Ventilation**		
11.2.2.1		Ventilation fans for machinery spaces and galleys are to be capable of being stopped from outside these spaces. The stopping controls of these ventilation fans are to be from an area which would be easily accessible in case of a fire and should be clearly marked.	
11.2.2.2		Ventilation ducts from machinery spaces, galleys and any other high risk areas are generally not to pass through accommodation areas. If it is inevitable that such ventilation ducting passes through accommodation spaces then:- i) the material of the ventilation ducting passing through the accommodation spaces including galley exhaust should be made of metal (galvanised steel or equivalent) having a thickness of at least 3mm, and should be thermally insulated to the same standard as the machinery space. ii) automatic temperature activated dampers are to be fitted inside the trunking at the place where the ventilation ducts pass from the 'high risk' zones to the accommodation spaces. These dampers are to have manual controls as well.	
11.2.2.3			Unrestricted yachts are required to have their air spaces enclosed behind ceilings, panelling or linings divided by close-fitting draught stops spaced not more than 14 metres apart. In the vertical direction, such enclosed air spaces, including those behind linings of stairways, trunks etc., shall be closed at each deck.

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT

11.2.3 Paints

Paints, varnishes and other finishing materials used on exposed internal surfaces shall be such that in the opinion of the Authority they do not constitute an unnecessary fire hazard and there should be no possibility of them producing excessive quantities of smoke or toxic gases.

11.2.4 Furnishing Materials

11.2.4.1 Foams used in upholstery and furniture should be of the Combustion Modified High Resilient (CMHR) type. On existing yachts this requirement may be delayed until the materials are due for renewal.

11.2.4.2 Fabrics should satisfy the Cigarette and Butane flame tests. On existing yachts this requirement may be delayed until the materials are due for renewal. These materials should be of the not readily ignitable type.

11.2.5 Galleys, Galley Equipment

Linings on bulkheads and ceilings around cookers should be of non-combustible material having a fire rating. Non-certified combustible materials should not be left unprotected within the following distances:-

- 400mm vertically above the cooker for horizontal surfaces;
- 200mm above the top of the cooker for horizontal surfaces, when the yacht is heeled to 30 degrees in case of gimbal hot plate;
- 125mm horizontally from the cooker for vertical surfaces;
- curtains or any other suspended materials should not be fitted within 600mm of the top of the cooker.

It is not advisable to install deep fat cooking equipment however if installed equipment is to be supplied with fire extinguishing systems for SOLAS II-2/10.6.4 requirements. Refer also to EU Directive 96/98/EC item A.1/3.43 as amended. In case of fryers having a capacity of not more that 15 liters of cooking oil a Class F extinguisher (BS.7937:2000) or equivalent should be installed.

11.2.6 Wooden Yachts

On wooden yachts, measures should be taken to prevent the absorption of oil into the structure. Metal drip trays may be installed under engines. Such drip trays are to have draining facilities so that they can be drained in appropriate containers. Such containers are to be properly disposed of ashore at oil reception facilities. Engine rooms are to be kept clean and free from oily waste, oily rags and other combustible material. Special consideration is to be given to yachts having unrestricted trading range, yachts carrying 16 or more persons and any yacht having a total installed power exceeding 750kW.

11.3 Active Fire Protection

11.3.1 Fixed Fire Detection and Alarm Systems

11.3.1.1 All yachts where the total installed power (propulsion and electrical generation) is greater than 750 kW are required to be fitted with an approved type fire/smoke detection and alarm system in their machinery spaces. In case of multi-hulled vessels the engine power in each hull is to be considered.

The alarm panel is to be addressable and located at the steering position and the alarm is to be such that it can be heard from the crew sleeping quarters.

11.3.1.2 This sub-section applies to all yachts over 24 m in length (and below 500 GT) and to yachts over 500 GT certified as 'Short Range Yachts'.

11.3.1.2.1 Fixed fire detection and alarm systems are to be fitted in:-

a) machinery spaces as per 11.3.1.1;
b) accommodation spaces;
c) service spaces (high risk) including technical spaces;
d) control stations.

Detectors shall be operated by heat or smoke or both, but cabins are to be fitted with smoke detectors. When flame detectors are used, these may only be used in conjunction with heat or smoke detectors. Detectors operated by other factors indicative of incipient fires are accepted by the Administration subject to test certification demonstrating these detectors are no less sensitive than heat/smoke detectors.

The alarm control panel is to be located in the navigation space and is to be in the form of a main panel also incorporating 11.3.1.1. If the system does not include means of remotely identifying each detector individually, it shall be divided into clearly labelled separate sections and such that no section covers more than one deck. Any one section shall not include more than 20 detectors.

11.3.1.3 All unrestricted range and all yachts over 500GT shall have an automatic fire detection and alarm system. The system shall include detectors as per 11.3.1.2.1 and in 11.3.1.4 and in all rooms where there is a fire hazard including galleys (even if not falling under high risk definition). Smoke detectors shall be installed in all stairways, corridors, cabins and escape routes within accommodation spaces. All detectors shall be of an approved marine type. Manually operated call points complying with the Fire Safety Systems Code shall be installed throughout the accommodation spaces, service spaces and control stations. One manually operated call point shall be located at each exit. Manually operated call points shall be readily accessible in the corridors of each deck such that no part of the corridor is more than 20m from a manually operated call point.

The number of detectors in each detection loop shall not exceed eight (8). The detectors shall be powered by the central unit, which shall have an audible and optical alarm for every detection loop. It shall be possible to operate the system from an emergency source of power. In the event of a failure of the main supply, the system shall be capable of switching automatically to the emergency source of power.

As a minimum requirement, the central unit shall be capable of displaying the following fault messages:

a. Mains power failure. System working on emergency power source;
b. Detection loop interruption;
c. Alarm line (call line) interruption.

Alarms b and c shall be optical as well as audible. If necessary, additional alarm bells shall be connected to ensure that the alarm shall be audible in all spaces. Joints in the lines are not permitted. The linking of detectors is only permitted in the detector base. The detection loop lines and the alarm lines should preferably be installed in a cable duct. Use of lines with a red protection sleeve is recommended. The detectors should first trigger an alarm at the steering position and at one or more crew rooms. If the fire detection alarm is not acknowledged within two minutes of sounding then the general alarm shall sound automatically.

11.3.1.4 Positioning of Detectors

Detectors shall be located for optimum performance. Positions near beams and ventilation ducts or other positions where patterns of air flow could adversely affect performance and positions where impact or physical damage is likely shall be avoided. Overhead detectors shall be located a minimum distance of 0.5 m away from bulkheads; except in corridors, lockers and stairways. It is also recommended that, on yachts over 24 metres in length, at least one smoke detector is positioned behind (within) the navigation bridge console for early detection of electrical fires initiating in this space.

The maximum spacing of detectors shall be in accordance with the table overleaf:

Type of detector	Maximum floor area per detector	Maximum distance apart between centres	Maximum distance away from bulkheads
Heat	37m²	9m	4.5m
Smoke	74m²	11m	5.5m

Different spacing to that specified in the above table may be required or permitted if the test data demonstrating the characteristics of the detectors so warrants.

11.3.2 Deep fat cooking equipment is to be supplied with fire extinguishing systems as specified in SOLAS II–2/10.6.4. Attention is also drawn to EU Directive 96/98/EC item A.1/3.43 as amended. Fryers having a capacity of not more than 15 litres of cooking oil should be capable of being manually isolated from the electrical power supply. In addition, a Class F extinguisher (BS.7937:2000) or equivalent should be installed.

11.3.3 Automatic Sprinkler System or Equivalent

Automatic sprinkler/mist systems in accordance with the requirements of the IMO Fire Safety Systems Code as amended are to be fitted in all yachts which are not found to meet the restrictions on combustible materials. The fitting of such systems is particularly favourable when alternative/equivalent compliance measures with this section are proposed to the Administration and on all unrestricted range vessels over 500 GT.

11.3.4 Protection of spaces containing vehicles or craft with fuel in their tanks or lockers storing such fuel

In addition to the fire prevention measures of 11.2.1, small lockers on open deck used for the stowage of hand-held petrol containers are to be provided with the facility of boundary cooling of such lockers. A readily available fire hose is considered as providing such facility.

Enclosed spaces, garages and larger lockers on open deck should be fitted with:-

- a manual water spray system having a coverage of 3.5ltr/m²/minute over the total deck area. This may be supplied from the fire main connection adjacent to the garage. Alternatively, it may have a fixed drencher system which can be remotely operated;
- a fixed smoke, heat and gas detection system complying with 11.3.1.2.1.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
11.3.5	**Fire Fighting Equipment** The provision of fire fighting appliances is to be in accordance to the requirements of 11.3.5.1. The equipment is to be kept in good working order at all times and is to be serviced regularly by shore-based servicing stations in accordance with manufacturer's instructions. Reference is also to be made to relevant section/s of the Malta Flag Administration Requirement. If the engine space is provided with a gas extinguishing system then the engine space should be capable of being isolated to avoid loss of extinguishing medium and therefore extinguishing potential and in addition avoid the risk of dispersion of extinguishing medium to other spaces with the resulting hazard to personnel.		
11.3.5.1	**List of Fire Fighting Appliances**		
11.3.5.2	One hand powered or powered fire pump located outside engine space with sea suction and hose connection, capable of delivering a jet of water to any part of the yacht. In the case of motor yachts the pump is to be of powered type.	One powered fire pump. This can be engine driven or independently powered and be capable of delivering a jet of water to any part of the yacht.	This class of yachts are to comply with the requirements of SOLAS II-Reg. 2/10 for cargo ships. In no case should the standards applied to this class of yacht be less than that applied to yachts having a length above 24m but below 500 GT.
11.3.5.3	One fire hydrant.	Adequate number of hydrants but not less than 2 however, all spaces must be easily accessible.	
11.3.5.4	One fire hose of adequate length with a 10mm jet and spray nozzle.	Minimum of three fire hoses of adequate length with a 10mm jet and spray nozzle.	
11.3.5.5	Fixed fire extinguishing medium in engine space. This may be automatically or manually discharged. See Note 8. Adequate quantity of fire extinguishers of the approved type. The quantities and types required will be on a yacht by yacht basis but should not be less than five.	Fixed fire extinguishing medium in the engine space. This may be automatically or manually discharged. See Note 8. Adequate fire extinguishers of the approved type as follows:- Accommodation: - minimum of 4 fire extinguishers Bridge: - 1 CO_2 and 1 powder	

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
11.3.5.5		Engine Room: - 2 portable extinguishers For oil fires: - An aggregate of 20 lt foam extinguisher For Electrical Fire: - A minimum of 9Kg CO_2 extinguishers	
11.3.5.6		Emergency fire pump. This may be a portable fire pump which may give a throw of 6 metres through a 10mm nozzle or a power driven pump which is also connected to the main fire line. The emergency fire pump is to be located outside the engine space.	
11.3.5.7	2 fire buckets with lanyards.	2 fire buckets with lanyards.	
11.3.5.8	1 fire blanket in galley.	1 fire blanket in galley.	
11.3.5.9		One fireman's outfit, including BA Set.	

Notes:

1. The location of any concealed fire (or safety) appliances is to be clearly marked.

2. The capacity of the power driven fire pumps (including engine driven pumps) should have a capacity of

$$2.5 \times \{1 + 0.066 \times (L(B+D))^{0.5}\}^{2} m^3 / hr.$$

Where : **L** is the length of the yacht
B is the moulded breadth
D is the moulded depth at mid length

3. The second (emergency) fire pump (which may be a portable pump) is to have a capacity of at least 80% of the main fire pump. Such a pump is to take suction from a location outside the engine space. This pump is to have a separate source of power.

4. Fire mains are to be dedicated solely for the purpose and are to be made of steel (adequately protected against corrosion). Fire mains located on deck are to be provided with drain points to avoid freezing. The size of the fire main is to be designed to suit the size of the fire pumps.

5. Fire hydrants should be located in easily accessible locations and be fitted with valves and couplings to allow the quick attachment of the fire hoses.

6. Fire hoses should have jet / spray nozzles. Only hoses made uniquely for this purpose should be used.

7. Both main and emergency fire pumps should be connected to the same fire main. An isolation valve should be installed in the fire main. This valve is to be operated from outside the engine room.

8. CO_2 systems should comply with SOLAS Chapter II-2 Regulation 5, paras 1 and 2.
Other systems should comply with SOLAS Chapter II–2 Regulation 5, para 1 and MSC / Circ.668.
All new systems should be certified by an Authorised Body.

9. Maintenance and servicing of fire systems should be done regularly as recommended by the Makers. A log of all maintenance and certificates is to be maintained on board.

11.4 Structural Fire Protection

The purpose of this sub-section is to ensure a consistent and safe level of structural fire protection. It is concerned with protecting high risk spaces such as the engine room, galleys, etc. It makes provisions for the restriction on the use of combustible materials and proposes the requirements for fire detection and effective escape.

For yachts **not** constructed in steel, the fire class of bulkheads and walls will be determined for each case separately on the basis of functional equivalence.

11.4.1 General principles

In order to ensure containment of fires in the space of origin, the following functional requirements shall be met:

11.4.1.1 The yacht is to be subdivided by structural and thermal boundaries. The bulkheads and ceilings forming the thermal boundaries are defined in accordance with the SOLAS convention and the Torremolinos Protocol of 1993 relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 as summarised hereunder. Doors, windows and penetrations situated in classified boundaries are to be certified in accordance with Sections 2.3, 2.6 and the appendix of IMO Resolution A.754(18) as applicable.

«A» Class divisions are those divisions formed by bulkheads and decks which comply with the following criteria:

1. they are constructed of steel or other equivalent material;

2. they are suitably stiffened;

3. they are insulated with approved non-combustible materials such that the average temperature of the unexposed side will not rise more than 140 degrees C above the original temperature, nor will the temperature, at any one point, including any joint, rise more than 180 degrees C above the original temperature, within the time listed below:

Class "A-60" - 60 min
Class "A-30" - 30 min
Class "A-15" - 15 min
Class "A-0" - 0 min

4. they are constructed as to be capable of preventing the passage of smoke and flame to the end of the one-hour standard fire test; and

5. the Administration required a test of a prototype bulkhead or deck in accordance with the International Code for Application of Fire Test Procedures to ensure that it meets the above requirements for integrity and temperature rise.

"B" Class divisions are those divisions formed by bulkheads, decks, ceilings or linings which comply with the following criteria:

1. they are constructed of approved non-combustible materials and all materials used in the construction and erection of "B" class divisions are non-combustible, with the exception that combustible veneers may be permitted provided they meet the requirements set out in Chapter II-2 of the SOLAS Convention;

2. they have an insulation value such that the average temperature of the unexposed side will not rise more than 140 degrees C above the original temperature, nor will the temperature at any one point, including any joint, rise more than 225 degrees C above the original temperature, within the time listed below:

Class "B-15" - 15 min

Class "B-0" - 0 min

3. they are constructed as to be capable of preventing the passage of flame to the end of the first half hour of the standard fire test; and

4. the Administration required a test of a prototype division in accordance with the Fire Test Procedures Code to ensure that it meets the above requirements for integrity and temperature rise.

"F" Class divisions are those divisions formed by bulkheads, decks, ceiling or linings which comply with the following:

1. they shall be so constructed as to be capable of preventing the passage of flame to the end of the first half hour of the standard fire test; and

2. they shall have an insulation value such that the average temperature of the unexposed side will not rise more than 139 degrees C above the original temperature, nor will the temperature at any one point, including any joint, rise more than 225 degrees C above the original temperature, up to the end of the first one-half hour of the standard fire test.

"C" Class divisions are divisions constructed of approved non-combustible materials. They need meet neither requirements relative to the passage of smoke and flame nor limitations relative to the temperature rise. Combustible veneers are permitted provided they meet the requirements set out in Chapter II-2 of the SOLAS Convention.

11.4.1.2 The insulation and fire resistance is to be such that the temperature of the structural core does not rise above that at which the structure would start to lose its structural strength during the period of time of the rating of the insulation.

11.4.1.3 Aluminium alloy structures require to be insulated in such a manner that the structural core does not rise more than 200 degrees C above the ambient temperature at any time during the applicable fire exposure.

11.4.1.4 For composite structures the insulation is to be such that the laminate temperature is protected from rising above the minimum allowable heat deflection temperature under load of the resin at any time during the applicable fire exposure. Particular emphasis is made for high risk spaces in way of escape routes, muster areas and life saving appliance launching and embarkation stations. The fire class of bulkheads and walls will be determined for each case separately on the basis of functional equivalence. For qualification and acceptance by the Administration, fire class bulkheads are to be certified by means of tests in accordance with either IACS Class Society Rules, equivalent International Standards (i.e. ISO 75-2 Method A or equivalent) or National Standards, that the minimum heat deflection temperature under load is not exceeded at the end of the applicable fire test. Excessive toxic fumes are not to be released at any time and the necessary arrangements are required to prevent this.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
11.4.1.5	Thermal insulation of boundaries shall take in consideration the fire risk to particular space and adjacent areas.	Thermal insulation of boundaries shall take in consideration the fire risk to particular space and adjacent areas.	Thermal insulation of boundaries shall take in consideration the fire risk to particular space and adjacent areas.
11.4.1.6	Fire integrity of the divisions should be maintained at all openings and penetrations.	Fire integrity of the divisions should be maintained at all openings and penetrations.	Fire integrity of the divisions should be maintained at all openings and penetrations.

11.4.1.7 For structures in contact with sea-water, the required insulation should extend at least 300mm below the lightest waterline. In spaces where penetration of oil products or oil vapours is possible, the surface of the insulation is to be impervious to oil or oil vapours. Arrangements shall be such as to avoid immersion in any oil spillages.

11.4.2 Fire Divisions

11.4.2.1	The fire divisions shall have the fire resistance as required within this section.	The fire divisions shall have the fire resistance as required within this section.	The fire divisions shall have the fire resistance as required within this section.

11.4.2.2 Insulation need only be applied on the side exposed to the greatest fire risk. If a bulkhead is exposed to fire risks from both sides then the bulkhead is to be protected from both sides. All insulation materials used are to be of the not readily ignitable or combustible quality. Adhesives used in the installation of insulation materials need not be of the non-combustible type but are to be kept to a minimum and their exposed surfaces are to have low flame spread characteristics.

11.4.2.3 Any doors fitted in the insulated bulkheads are to have the same rating as the insulation itself. Such doors and all their fixtures are to be certified and type approved. The doors and their fixtures are to be installed as per Maker's instructions. Such doors, or other openings, are to be fitted with spring loaded devices to normally keep them in the closed position. Such doors or openings are to be able to be opened from both sides.

11.4.2.4 Pipes or ducts penetrating A Class or B Class divisions are to be made of metal and of structural construction to withstand the same conditions as the divisions they penetrate

11.4.2.5 Materials which are adversely effected by heat are not to be used for hull fittings or other outlets close to the waterline and which may result in flooding. Due regard to be given to IMO Fire Test Procedure Code.

11.4.2.6 Electrical cables, pipes, ventilation trunks, girders etc. which penetrate A Class or B Class divisions are to be installed with accepted and type approved arrangements so that the fire resistance is not impaired.

11.4.2.7 Where A Class or B Class divisions are required it is to be ensured that intersections, joints, penetrations etc. do not expose any un-insulated sections which may result in heat transmission.

11.4.2.8 Where B Class divisions are installed, they shall extend to the shell insulation or other separating walls with equivalent fire resistant properties, unless continuous ceilings and/or panelling of class B-15 are installed on both sides of the bulkheads. In that case the bulkhead may end at the continuous ceiling or continuous panelling.

11.4.3 Deck covering

11.4.3.1 The lowest covering layer of decks in accommodation spaces, wheelhouses, navigation rooms, staircases and corridors situated above rooms with a fire hazard shall be of an approved material that is not easily flammable, c.f. the FTP code.

11.4.4 Structural Fire Protection

11.4.4.1 Steel yachts having a steel boundary for the machinery spaces do not require additional fire protection. However surfaces on the opposite side of the machinery space should be coated with finishes with low flame spread characteristics.

11.4.4.2 Composite, Aluminium and wooden yachts are required to have machinery boundaries that prevent the passage of smoke and flame for at least 15 minutes. Where fire insulation is fitted in the machinery space it need not be fitted more than 300mm below the water line.

11.4.4.3 The various spaces and areas are categorised according to the fire risk they present and are defined in section 2 of this Code. Lift and dumbwaiter trunks are to be enclosed by at least 'B-0' Class divisions and self closing doors. Galleys may be combined with a mess room if the separating bulkheads and ceilings of the entire space satisfy the requirements for the galley.

11.4.4.4 Structural Fire Protection - Yachts over 24 metres in length and under 500GT

The following table provides the fire integrity requirements for bulkheads and decks separating the various spaces of this yacht category:

Spaces	***(1)***	***(2)***	***(3)***	***(4)***	***(5)***	***(6)***	***(7)***	***(8)***	***(9)***
Control Stations ***(1)***	B-0* B-15	B-0* B-15	B-0* B-15	B-0* B-15	B-0	B-15* A-30	B-0	B-15	U†
Corridors ***(2)***	-	C* B-0	C* B-0	B-0	B-0	B-15* A-30	B-0	B-15	U†
Accommodation spaces ***(3)***	-	-	C	B-0	C	B-15* A-30	B-0	B-15* A-0	U†
Stairways ***(4)***	-	-	-	B-0	B-0	B-15* A-30	B-0	B-15	U†
Service spaces (low risk) ***(5)***	-	-	-	-	C	B-15* A-30	C	B-15	U†
Category 'A' Machinery Spaces ***(6)***	-	-	-	-	-	B-15* A-30	B-0	B-15* A-30	U†
Other Machinery Spaces ***(7)***	-	-	-	-	-	-	B-0	B-15* A-0	U†
Service Spaces (high fire risk) ***(8)***	-	-	-	-	-	-	-	B-15* A-0	U†
Open decks ***(9)***	-	-	-	-	-	-	-	-	-

* For 'Short Range Yachts'.
† Unclassified steel or equivalent. In the case of composite, aluminium and wooden yachts, B-15 required in way of liferaft launching stations, muster areas and escape route passageways

Fire class divisions of bulkheads separating adjacent spaces:

Spaces	***(1)***	***(2)***	***(3)***	***(4)***	***(5)***	***(6)***	***(7)***	***(8)***	***(9)***
Control Stations ***(1)***	B-15* A-0	B-15*	A-30†	A-0	B-15‡ A-15	A-30† A-60	B-15‡ A-0	A-30†	U§
Corridors ***(2)***	-	C**	B-0	A-0 B-0	B-0	A-30† A-60	B-15‡ A-0	A-0	U§
Accommodation spaces ***(3)***	-	-	C**	A-0 B-0	B-0	A-30† A-60	B-15‡ A-0	A-0	U§
Stairways ***(4)***	-	-	-	A-0 B-0	A-0 B-0	A-30† A-60	B-15‡ A-0	A-0	U§
Service spaces (low risk) ***(5)***	-	-	-	-	C**	A-30† A-60	B-15‡ A-0	A-0	U§
Category 'A' Machinery Spaces ***(6)***	-	-	-	-	-	A-30† A-60	B-15‡ A-0	A-30†	U§
Other Machinery Spaces ***(7)***	-	-	-	-	-	-	B-15‡ A-0	A-0	U§
Service Spaces (high fire risk) ***(8)***	-	-	-	-	-	-	-	A-0	U§
Open decks ***(9)***	-	-	-	-	-	-	-	-	-

See notes following table.

Fire Class divisions of decks separating adjacent spaces

Spaces	*(1)*	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
Control Stations *(1)*	A-0	A-0	A-0	A-0	A-0	A-60	A-0	A-0	U§
Corridors *(2)*	A-0	U§	U§	A-0	U§	A-60	A-0	A-0	U§
Accommodation spaces *(3)*	A-60	A-0	U§	A-0	U§	A-60	A-0	A-0	U§
Stairways *(4)*	A-0	A-0	A-0	U§	A-0	A-60	A-0	A-0	U§
Service spaces (low risk) *(5)*	A-15	A-0	A-0	A-0	U§	A-60	A-0	A-0	U§
Category 'A' Machinery Spaces *(6)*	A-60	A-60	A-60	A-60	A-60	U§	A-60	A-60	U§
Other Machinery Spaces *(7)*	A-15	A-0	A-0	A-0	A-0	A-0	U§	A-0	U§
Service Spaces (high fire risk) *(8)*	A-60	A-0	A-0	A-0	A-0	A-60	A-0	A-0	U§
Open decks *(9)*	U§	U§	U§	U§	U§	U§	U§	U§	-

* Or Class F division provided exposed surfaces have low flame spread characteristics for 'Short Range Yachts' but A-0 for 'Unrestricted' yachts.
† For yachts up to 50 metres in length and Short Range Yachts of any size.
‡ For yachts of composite construction.
§ Steel bulkheads of 'unclassified' type or B-15 class division in case of yachts of composite construction.
** A-0 if boundary forms part of a 'main vertical zone'.

11.4.5 Requirements relating to low flame spread and limited use of combustible material

11.4.5.1 Definition

"Low flame spread" is the property required for the surface of certain non-combustible material that ensures that the spread of flame on the surface takes place at a limited rate. A surface can be considered "low flame spread" when that has been demonstrated in the relevant test in the FTP Code issued by the IMO and it has been certified under the FTP Code.

11.4.5.2 Objective of the articles on low Flame Spread Characteristics

The objective of the following requirements regarding low flame spread for surfaces as well as the requirement for limiting the quantity of combustible material within a space is to limit the propagation rate as well as the size of a fire in a space. If this objective can be achieved in a different manner, the Authority may permit alternative arrangements if equivalence is adequately demonstrated.

11.4.5.3 Requirement low flame spread

On all yachts, all exposed surfaces of walls, ceilings and floors in corridors and stairways for which structural fire protection is required shall have low flame spread properties.

Moreover on all yachts:-
- the exposed surfaces of all ceilings shall comply with the requirements for low flame spread;
- all exposed surfaces in concealed and inaccessible spaces shall comply with the requirements for low flame spread.

11.4.5.4 Limited use of Combustible material

Veneer layers applied on surfaces and panelling shall comply with the requirements for low flame spread. The thickness of these combustible decorative layers shall not exceed 1.5mm

11.4.5.5 Limited use of combustible material for decoration

Notwithstanding 11.4.5.4, in the various spaces, only limited quantities of combustible material may be used for decoration. The total volume of combustible lining, decorations and veneer in any room for accommodation or general use shall not exceed the volume corresponding to a veneer lining of 2.5mm of the total area of walls and ceiling.

11.4.6 Doors

11.4.6.1 Doors shall have a level of fire resistance equivalent to what is required for the bulkhead in which they are installed and they shall comply with the requirements of EU Directive 96/98/EC as amended Ventilation openings are permitted in the bulkhead doors of class B but only in their bottom section, with the exception of doors within stairway enclosures. The nominal area of these openings shall not exceed 0.05m^2. Gratings shall be of non-combustible material.

11.4.7 Penetrations

11.4.7.1 If Class A, Class B or Class F bulkheads and decks are penetrated by openings for electric cables, pipes, shafts. ducts etc., measures shall be taken to ensure that the fire resistance of such bulkheads and decks is not reduced by the penetrations.

11.4.8 Void Spaces

11.4.8.1 Void spaces behind walls and panelling and between ceilings and decks in rooms for accommodation, service rooms and monitoring stations shall be subdivided by draught stops that prevent the free passage of fire, smoke and heat. Draught stops shall be spaced no more than seven metres apart.

Transport Malta

SECTION 12

EQUIPMENT

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
12	**EQUIPMENT**		
12.1	**Anchors and Cables**		
12.1.1	This section sets out the minimum standards for the anchoring and mooring arrangements. For yachts below 24 metres in length, requirements are shown in 12.1.4.	This section sets out the minimum standards for the anchoring and mooring arrangements. The size / strength of the chain cable and the anchors for yachts in these categories will be determined by Classification Rules and Regulations. In instances where these are not in compliance with the Class Rules and Regulations, the provision of high-holding power anchors will be considered.	This section sets out the minimum standards for the anchoring and mooring arrangements.
12.1.2	All Yachts are to have at least two (2) anchors. At least one anchor is to be rigged and ready for use at all times.	All Yachts are to have at least two (2) anchors. At least one anchor is to be rigged and ready for use at all times.	All Yachts are to have at least two (2) anchors. At least one anchor is to be rigged and ready for use at all times.
12.1.3	Electrically operated anchor winches / windlasses should be supplied by an emergency source of power or be able to be manually operated.	Electrically operated anchor winches / windlasses should be supplied by an emergency source of power or be able to be manually operated.	Electrically operated anchor winches / windlasses should be supplied by an emergency source of power or be able to be manually operated.
12.1.4	The sizing of anchors and cables should take into account of the additional windage forces of the masts and rigging of sailing yachts. Up to 50% increase in the size / weight of anchors and the chain may have to be allowed for sailing yachts (over and above the figure allowed for motor yachts).	The sizing of anchors and cables should take into account of the additional windage forces of the masts and rigging of sailing yachts. Up to 50% increase in the size / weight of anchors and the chain may have to be allowed for sailing yachts (over and above the figure allowed for motor yachts).	The sizing of anchors and cables should take into account of the additional windage forces of the masts and rigging of sailing yachts. Up to 50% increase in the size / weight of anchors and the chain may have to be allowed for sailing yachts (over and above the figure allowed for motor yachts).

12.1.5

Anchors and Cables for Yachts below 24m in length

Loa + Lwl / 2	Anchor Mass		Anchor Cable Diameter			
	Main	Kedge	Main Chain	Main Rope	Kedge Chain	Kedge Rope
(metres)	(kg)	(kg)	(mm)	(mm)	(mm)	(mm)
10	12	6	8	12	6	10
11	15	7	8	12	6	10
12	18	9	8	14	8	12
13	21	10	10	14	8	12
14	24	12	10	14	8	12
15	27	13	10	-	8	12
16	30	15	10	-	8	12
17	34	17	10	-	8	14
18	38	19	10	-	8	14
19	42	21	12	-	10	14
20	47	23	12	-	10	14
21	52	26	12	-	10	14
22	57	28	12	-	10	16
23	62	31	12	-	10	16
24	68	34	12	-	10	16

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT

12.1.5.1 Chain cable diameter given is for short link chain. Chain cable should be sized in accordance with EN 24565:1989 (covering ISO 4565:1986 and covered by BS.7160:1990 – Anchor chains for small craft), or equivalent.

12.1.5.2 The rope diameter given is for nylon construction. When rope of another material is proposed, the breaking load should be not less than that of the nylon rope specified in the table.

12.2 Tenders and other ancillary craft

12.2.1 All yachts should carry a tender allowing for safe transfer of passengers and crew from yacht to shore. This may be of rigid or inflatable construction, or a combination of both and may be either stowed on board or towed however, it may not engage on separate commercial activity. Such tenders are to be used in conjunction with the mother yacht and may operate only within a 3 nautical mile radius from the mother vessel. The number of people the tender may safely carry and the name of the yacht are to be clearly marked. Personal watercraft is not considered as a tender for the purposes of this sub-section.

12.2.2 All tender/s and leisure craft belonging to the yacht are to be maintained in a good state of maintenance and should be provided with the necessary safety equipment for the range of operation intended. When a tender is intended to be used as a rescue boat, it is required to be certified in line with the EU Marine Equipment Directive 96/98/EC as amended.

12.2.3 All tender/s and other leisure craft belonging to the yacht and having a length of between 2.5 metres and 24 metres are to be certified and marked in accordance with the Recreational Craft Directive 94/25/EC as amended. Craft not falling under this Directive is to be certified to an applicable International/National Standard, personal watercraft is to be certified in accordance with ISO 13590. Submersibles are considered on a case-by-case basis.

12.2.4 All crafts falling under this sub-section are to be used exclusively in conjunction with the yacht and are not permitted to engage in separate voyages or other commercial activity. The Master is responsible to ensure that use of this craft is in compliance with the Rules and Regulations imposed by the Port Authorities for the area of operation in question.

12.3 Storm Sails

12.3.1 Sailing yachts should carry efficient storm sails. These are to be proven capable to take the yacht to windward in cases of heavy weather. In case of sails that can be furled, addition storm sails may not be carried.

12.4 Wire Cutters

12.4.1	All sailing yachts are to carry adequately sized wire cutters suitable for the largest size of rigging wire used on board. In case of solid rod rigging adequate rod cutting equipment for emergency use must be placed on board.	All sailing yachts are to carry adequately sized wire cutters suitable for the largest size of rigging wire used on board. In case of solid rod rigging adequate rod cutting equipment for emergency use must be placed on board.	All sailing yachts are to carry adequately sized wire cutters suitable for the largest size of rigging wire used on board. In case of solid rod rigging adequate rod cutting equipment for emergency use must be placed on board.

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT

12.5 Safety of Navigation

All yachts should be equipped with adequate nautical instruments, navigational equipment and navigational and hydrographic data to ensure safe operation and safe navigation. All equipment listed within this section is to be certified ('wheelmarked') in accordance to the Marine Equipment Directive 96/98/EC as amended.

12.5.1 Every yacht should carry on board adequate and updated Nautical Charts for the intended voyage. Yachts fitted with an approved Electronic Chart Display and Information System (ECDIS), are accepted as meeting the chart carriage requirements when navigating within waters covered by Electronic Navigation Charts (ENC) officially issued by an authorised Hydrographic Office subject to suitable back-up arrangements being provided.

The following arrangements are accepted as fulfilling the back-up requirement:

1. an appropriate folio of up-to-date paper nautical charts; or
2. a second type approved ECDIS; or
3. a type approved electronic back-up arrangement for ECDIS mode of operation (using ENC).

Both the primary and secondary (alternative 2.) ECDIS shall be fully independent and both supplied from the yacht's main and emergency source of power. In addition, a reserve power source (UPS mode) with a capacity of at least 30 minutes is to be provided if change-over of the source of power entails restarting of ECDIS.

For alternatives 2. and 3. above, an appropriate folio of up-to-date paper charts is to be available to enable the yacht to safely reach a port within or adjacent to its trading areas when coverage by ENC is not available.

When paper nautical charts serve as the only back-up arrangement (alternative 1.), the charts shall include the planned route and, when navigating within restricted waters, the yacht's position is to be regularly updated to ensure a safe take-over of ECDIS functions should the need arise.

12.5.1.1 Every yacht should also carry on board adequate and updated Nautical Publications. These include:-

- Sailing directions;
- List of lights;
- Notices to Mariners;
- Pilot Books;
- Tide Tables;
- Radio Aids to Navigation.

Every yacht should also carry on board adequate and updated Nautical Publications. These include:-

- Sailing directions;
- List of lights;
- Notices to Mariners;
- Pilot Books;
- Tide Tables;
- Radio Aids to Navigation.

Every yacht should also carry on board adequate and updated Nautical Publications. These include:-

- Sailing directions;
- List of lights;
- Notices to Mariners;
- Pilot Books;
- Tide Tables;
- Radio Aids to Navigation.

Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT

12.5.2 Shipborne Navigational Equipment

12.5.2.1 All yachts should be provided with a properly adjusted magnetic compass, or other means, independent of any power supply, to determine the ship's heading and display the reading at the main steering position. All yachts over 150 GT are to have a spare magnetic compass.

12.5.2.2 On steel yachts, it should be able to correct the compass for co-efficient B, C and D and heeling error.

On steel yachts, it should be able to correct the compass for co-efficient B, C and D and heeling error.

On steel yachts, it should be able to correct the compass for co-efficient B, C and D and heeling error.

12.5.2.3 The magnetic compass and repeater should be so positioned as to be easily seen and read by the helmsman at the main steering position.

The magnetic compass and repeater should be so positioned as to be easily seen and read by the helmsman at the main steering position.

The magnetic compass and repeater should be so positioned as to be easily seen and read by the helmsman at the main steering position.

12.5.2.4

Magnetic compasses are to be supplied with a deviation card.

Magnetic compasses are to be supplied with a deviation card.

12.5.2.5 Alternative for yachts and/or short range yachts the use of satellite compasses are accepted provided following conditions are satisfied:

- Two type-approved satellite compasses are installed;
- The compasses are independently supplied from the main emergency source of power;
- The compasses are each provided with a reserve power source (UPS) having a capacity sufficient for at least 30 minutes operation;
- The compasses have separate display unit;
- One compass is positioned at the main steering position and the second compass must be positioned in a location which is clearly visible from the main steering position;
- If fitted the gyro-compass is also independently powered from UPS system.

12.5.2.6 All yachts are to be equipped with an Echo Sounding Device. This is to be easily visible from the navigation position. On yachts below 300 GT this device need not be of the approved type.

12.5.2.7 All yachts are to be equipped with a 9 GHz radar. This is to be easily visible from the Navigation position. On yachts below 300 GT this device need not be of the approved type.

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
12.5.2.8	All yachts are to be equipped with a receiver for a global navigation satellite system (GPS) or other means suitable for use at all times throughout the intended voyage to establish and automatically update the yacht's position.		
12.5.2.9	A distance measuring log is to be installed on every yacht.	A distance measuring log is to be installed on every yacht.	A distance measuring log is to be installed on every yacht.
12.5.2.10		All yachts are to be equipped with a Rudder Angle Indicator.	All yachts are to be equipped with a Rudder Angle Indicator.
12.5.2.11	All yachts are to be equipped with an Engine Revolution Counter in the navigation stand.	All yachts are to be equipped with an Engine Revolution Counter in the navigation stand.	All yachts are to be equipped with an Engine Revolution Counter in the navigation stand.
12.5.2.12	All sailing yachts are to be fully equipped with Wind Instruments that are to include:-	All sailing yachts are to be fully equipped with Wind Instruments that are to include:-	All sailing yachts are to be fully equipped with Wind Instruments that are to include:-
	- wind speed; - wind direction; - wind force.	- wind speed; - wind direction; - wind force.	- wind speed; - wind direction; - wind force.
12.5.2.13			A Gyro Compass is to be provided.
12.5.2.14	All yachts above 300 GT shall be fitted with an approved Automatic Identification System (AIS). Yachts below 500 GT operating exclusively within the territorial waters of a State and which do not engage on International voyages are not required to comply with this sub-section.		
12.5.2.15		All 'Unrestricted' yachts over 300 GT, are to be fitted with a Long-Range Identification and Tracking (LRIT) system. The system is to be certified in accordance with IMO Resolution MSC.210(81). Reference is also to be made to IMO MSC.1/Circ.1307 and Malta Merchant Shipping Notices No.77 and No.78.	
12.5.2.16	All yachts are to be equipped with a Search Light of adequate size and intensity for search and rescue operations at night and to assist any berthing operations in dark hours.		
12.5.2.17	All yachts should be provided with an efficient daylight signalling lamp. On yachts below 150 GT, an efficient waterproof electric torch suitable for Morse signalling is accepted.		

	Yachts Below 24m Length	Yachts above 24m Length but below 500 GT	Yachts above 500 GT
12.5.3	Measuring Instruments		
12.5.3.1	All yachts should carry the following Measuring Instruments: 1. barometer; 2. Sailing yachts shall carry an anemometer and an inclinometer.	All yachts should carry the following Measuring Instruments: 1. barometer; 2. Sailing yachts shall carry an anemometer and an inclinometer.	All yachts should carry the following Measuring Instruments: 1. barometer; 2. Sailing yachts shall carry an anemometer and an inclinometer.
12.5.4	**Navigation Lights, Shapes and Sound Signals**		
	Reference is to be made to the requirements of the International Regulations For Preventing Collisions At Sea, 1972, COLREG.	Reference is to be made to the requirements of the International Regulations For Preventing Collisions At Sea, 1972, COLREG.	Reference is to be made to the requirements of the International Regulations For Preventing Collisions At Sea, 1972, COLREG.
12.5.4.1	All yachts over 24 metres are required to comply with the applicable sections within COLREG. Yachts under 24 metres in length are to demonstrate compliance with the applicable section of the Recreational Craft Directive.		
12.5.4.2	Navigation lights should be provided with a main and emergency power supply. If navigation lights are not fitted with duplicated bulbs, spare bulbs should be provided on board and in case of replacement need, this should be possible within a short period of time.		
12.5.4.3		Yachts over 24 metres are required to have their 'Navigation Lights Plan' approved by a Recognised Organisation or Authorised Surveyor. In cases where compliance is not practicably possible, the proposed alternatives/equivalent arrangements are to be authorised by the Administration.	
12.6	**Lifting Machinery**		
12.6.1	Lifting machinery provided on board is to be surveyed and tested in accordance to the applicable sections of the Dock Safety Regulations.	Lifting machinery provided on board is to be surveyed and tested in accordance to the applicable sections of the Dock Safety Regulations.	Lifting machinery provided on board is to be surveyed and tested in accordance to the applicable sections of the Dock Safety Regulations.

Transport Malta

SECTION 13

ACCOMMODATION

13 ACCOMMODATION

13.1 General

13.1.1 This section provides the minimum requirements for crew and passenger accommodation spaces on board yachts certified under the provisions of this Code. Crew accommodation spaces are to follow the provisions of Merchant Shipping (Crew Accommodation) Regulations.

13.1.2 An adequate standard of accommodation should be provided on board to ensure the safety of all persons on board and the comfort and recreation of the passengers.

13.1.3 Crew accommodation should, in general, not be sited below the deepest water line and should not be sited within hazardous spaces.

13.1.4 The accommodation spaces shall be equipped with sufficient hand holds and grab rails within the accommodation spaces to allow safe movement around the accommodation when the vessel is in a seaway.

13.2 Access and Escape Arrangements

13.2.1 The means of access and escape should comply with the requirements set in Section 11 of this Code.

13.3 Lighting in Accommodation Spaces

13.3.1 An electric lighting system is to be installed in the accommodation and working spaces. The system is to give adequate lighting in ALL enclosed spaces.

13.4 Ventilation

13.4.1 All enclosed spaces which will be used or entered by the personnel on board have to be effectively ventilated.

When mechanical ventilation is provided for the accommodation spaces this should have a capacity of 6 air changes per hour (with all openings closed).

Enclosed galleys should have mechanical ventilation with a supply of 20 air changes per hour and a mechanical exhaust of 30 changes per hour.

13.5 Fresh Water Supply

13.5.1 There should be an adequate supply of fresh drinking water on board. This should be piped to the different accommodation spaces on board.

The fresh water system should be maintained in a clean condition to protect against the contamination of the water.

13.5.2 In addition to 13.5.1, an emergency reserve of drinking water is to be carried on board. This may be in dedicated tanks or bottles. The amount required is to be not less than 2 litres / person on board.

13.6 Galley

13.6.1 Every vessel shall be provided with a galley with a means for cooking.

This space is to be supplied with a sink and adequate working surface.

The floor of the galley is to be of the non skid type.

All furniture and fittings in the galley shall be made of a material which is impervious to dirt and moisture.

Non rusting metals only may be used.

13.6.2 When gimballed cooking appliances are provided, this should be provided by a crash bar or by other means to retain the cooking equipment lying on top of the appliances and avoid personal injury.

Means shall be provided to lock the gimballing mechanism.

13.6.3 Storage of Food and Garbage

- means shall be provided for the secure and hygienic storage of food.
- means shall be provided for the storage of garbage which will not in any way contaminate the stored food.

13.6.4 Messing Facilities

Adequate messing facilities are to be provided. Each messing area shall be large enough to accommodate the greatest number of persons likely to make use of it at any time.

13.6.5 Toilet and Shower Facilities

13.6.5.1 Adequate sanitary facilities should be supplied on board.

- There should be at least one water closet per eight persons on board;
- There should be at least one fresh water shower for every eight persons on board;
- There should be at least one wash basin for every six persons on board.

13.6.5.2 In cases when the sanitary system includes a holding tank care should be taken to ensure that no fumes or odours would leak from any part of the system to the toilet and into the accommodation spaces.

13.6.6 Stowage and Storage Facilities

Adequate stowage and storage facilities for personal effects should be provided for each person on board.

13.6.7 Heavy Equipment

All items of heavy equipment are to be able to be secured during the sea voyage.

The doors of all stowage lockers containing heavy items should be capable of being securely fastened.

Transport Malta

SECTION 14

PROTECTION OF PERSONNEL

14 PROTECTION OF PERSONNEL

14.1 Gangways, Passarelles, Accommodation Ladders etc.

14.1.1 A safe means of access is to be provided whilst the yacht is moored in port.

14.1.2 Any gangways, passarelles and accommodation ladders should be manufactured to national or international standards. They should be clearly marked by the number of persons and the total weight that can be safely carried.

In case such equipment has not been manufactured to these standards and there are no details of the capacity, then a load test is to be carried out and witnessed by an Authorised Surveyor.

This test should:-
- be carried out to 120% of the rated load at mid span;
- Deflections are measured;
- Confirmation that no permanent deformations are suffered by the equipment.

A test certificate is to be issued and retained on board.

14.2 Sea and Harbour Pilots

Should it be necessary for a yacht to take a pilot on board then boarding arrangements are to be provided.

Reference is also to be made to any National Requirements where the yacht is trading.

14.3 Safework Aloft, Overside and on the bow sprit of Sailing Yachts

14.3.1 When it is necessary to access any of the above mentioned areas the following arrangements are to be made:-

- Safety nets are laid below the bow sprit. Safety grab rails and strong points for the attachment of safety harnesses are to be provided;
- The use of safety harnesses is to be mandatory;
- Sufficient foot supports are to be rigged to enable the crew working on the yards or on the bow sprit to step on them;
- For climbing aloft, the mast should be equipped with fixed metal steps or ladders. An alternative ratlines or rattling bars fitted across the shrouds on traditional rigs may be considered to form an acceptable permanent ladder.

14.4 Personal Clothing

14.4.1 Each person on board shall have the necessary protective clothing required for the prevailing atmospheric conditions.

14.4.2 Each member of the crew shall have the necessary safety working clothing required to carry out his work in a safe manner.

14.4.3 Each person on board should wear non skid deck shoes.

14.5 Chemicals

Each crew member shall be given suitable protective clothing to protect him / her from the effects of corrosive chemicals that may be used for maintenance on board. This may include special gloves, goggles and eyewash points.

14.6 Noise

Noise levels on board yachts should be kept to the lowest possible levels.

14.6.1 The noise levels in machinery spaces, workshops and stores which are continuously manned or manned for long periods of time should not exceed:-

- 85 dB(A) for machinery spaces, workshops stores and any other noise generating areas

14.6.2 The noise levels in machinery spaces which are not intended to be continuously manned or are only attended for short periods should not exceed 110 dB(A).

14.6.3 The wearing of ear defenders in spaces where the noise levels exceeds 85dB(A) is mandatory. Such defenders must be capable of being worn with other safety equipment.

Under the circumstances signs and symbols for the use of ear protectors are to be posted on the entrance of the machinery spaces. Such symbols must conform to international (IMO, EU) standards.

Ear defenders having the correct level of noise attenuation required for each particular application are to be supplied for each member of the crew who may have to enter the spaces. Same defenders are to have indelible EU or wheel markings and are to be supplied with a performance chart.

14.6.4 Where exposure is continuous, hearing checks are to be carried out after 12 months from initial exposure and consequently at intervals not exceeding 5 years.

Transport Malta

SECTION 15

RADIO INSTALLATION

15 RADIO INSTALLATION

All yachts should carry radio transmitting and receiving equipment adequate for the area and range of operation. The Certificate of Compliance issued to a yacht will reflect the Sea Area coverage provided by the equipment installed. Reference is to be made to Section 2 of this Code for definitions of the Sea Areas A 1, A 2, A 3 and A 4.

15.1 Sea Area A 1

All yachts navigating in Sea Area A 1 shall be fitted with:

15.1.1 A VHF/RT radio installation capable of transmitting Digital Selective Calling (DSC) on Channel 70. It shall also be possible to initiate transmission of distress alerts on Channel 70.

15.1.2 In addition to 15.1.1, have a VHF DSC watch receiver. This unit may be combined with the unit specified under 15.1.1.

15.1.3 A NAVTEX receiver.

15.1.4 A Search And Rescue Transponder (SART). Yachts of over 500 GT are to have a second SART unit.

15.1.5 A 406 MHz satellite Emergency Position-Indicating Radio Beacon (satellite EPIRB), programmed with the yacht's MMSI number.

15.1.6 Two portable VHF (GMDSS) units. Yachts of over 500 GT are to be provided with a third portable VHF unit.

15.2 Sea Area A 2

In addition to the equipment prescribed for Sea Area A 1, yachts navigating in Sea Area A 2 shall be fitted with:

15.2.1 An MF DSC/RT installation also having DSC watch keeping capability on frequency 2187.5Khz.

15.2.2 Alternatively to 15.2.1 – an INMARSAT-C unit c/w EGC receiver.

15.3 Sea Area A 3

In addition to the equipment prescribed for yachts navigating in Sea Area A 1, yachts navigating in Sea Area A 3 shall also have:

15.3.1 An additional VHF DSC/RT unit (para. 15.1.1, 15.1.2 refers).

15.3.2 An INMARSAT-C unit with Enhanced Group Call (EGC) receiver capability.

15.3.3 An MF DSC/RT installation also having DSC watch keeping capability on 2187.5Khz, 8414.5Khz and at least on one other DSC distress & safety frequencies within the HF marine band.

15.3.4 Alternatively to 15.3.3 – an additional an INMARSAT-C unit c/w EGC receiver.

15.3.5 A valid shore based maintenance agreement.

15.4 Sea Area A 4

In addition to the equipment and requirements specified in sections 15.3.1, 15.3.2, 15.3.3 and 15.3.5 - an additional COSPAS-SARSAT satellite EPIRB (as per 15.1.5) is to be provided.

15.5 Sources of Energy

15.5.1 Whilst the yacht is at sea there should be a continuous supply of electrical energy adequate to operate the radio installation and to charge any batteries used as the reserve source of energy.

15.5.2 A reserve source of energy, independent of the propelling machinery of the yacht and its electrical systems, shall be provided for the purpose of conducting distress and safety communications. This shall have a minimum capacity of operating the required equipment for a period of at least:

i) 1hr on vessels having the GMDSS installation provided also with an emergency source of electrical power, and;

ii) 6hrs on vessels not having the GMDSS installation connected to an emergency source of electrical power.

15.5.3 When the reserve source of energy consists of a re-chargeable accumulator battery such batteries should be able to be automatically re-charged through a dedicated battery charger to the minimum capacity requirements within 10 hrs.

15.5.4 All accumulator batteries for the radio installation shall be installed as high as possible in the yacht so that any form of flooding will not effect the efficiency of the batteries.

15.6 Operation Performance

15.6.1 All radio communication equipment is to be type approved.

15.6.2 The installation should be installed in an easily accessible position.

15.6.3 The installation is to be protected against the effects of sea water/spray, extremes of temperature and other adverse conditions.

15.6.4 The following should be clearly marked next to the equipment:

- the stations call sign / MMSI No. / IMN Nos.;
- the yacht's station I.D.;
- any other applicable codes.

15.6.5 On board sailing yachts, if the radio antenna is fitted on the mast, then an emergency antenna is to be provided on board.

15.7 Watches

A yacht at sea shall maintain a continuous watch on (as applicable):-

- VHF Channel 16;
- VHF Channel 13;
- VHF (DSC) Channel 70;
- MF on the distress and safety DSC frequency 2187.5 KHz;
- HF on the distress and safety distress frequencies 8414.5Khz and at least on one other DSC distress & safety frequency within the hf marine band.

- Satellite shore to ship distress alerts if fitted with a radio facility for reception of maritime safety information by INMARSAT enhanced group calling systems.

It is recommended that yachts carry on board Volume 5 of Admiralty List of Radio Signals (ALRS).

15.8 Radio Personnel

GMDSS equipment shall be operated by duly qualified GMDSS operators holding a valid and recognised qualification as follows:

- Restricted Operator's Certificate (ROC) for yachts certified only for Sea Area A1;
- General Operator's Certificate (GOC) for yachts certified for Sea Areas other than A 1.

Transport Malta

SECTION 16

MARINE POLLUTION PREVENTION

16 MARINE POLLUTION PREVENTION

This section seeks to ensure that all yachts certified under this Code operate in a manner that respects all aspects of the marine environment.

16.1 It is the responsibility of the crew and all persons on board commercial yachts to comply with the applicable requirements of this section at all times.

16.2 For yachts below 400 GT not subject to some/all sub-sections hereunder it is the Owner's/ Master's responsibility to comply with the requirements of the local Administration or Port.

16.3 Oil Pollution Prevention

All yachts are prohibited from discharging oily bilge water overboard. Tank/s of adequate capacity are to be provided for retention of all oil residues, these must be retained on board until disposal to shore facilities is possible.

Where a yacht is fitted with oil filtering equipment, it shall be ensured that the equipment is of approved type and that the calibration and testing of the equipment is carried out at intervals as per manufacturer's recommendations.

All yachts of 400 GT and above are required to be surveyed and certified in line with MARPOL Annex I.

16.4 Prevention of Pollution by Sewage

All yachts over 400 GT and all yachts certified to carry more than 15 persons are required to be equipped with one of the following sewage systems:

- A sewage treatment plant of approved type[1]. There are no restrictions on discharge of treated sewage provided the system is certified and the effluent produces no solids and no water discoloration;
- A sewage comminuting and disinfecting system designed and certified to a national standard, with adequate holding tank for temporary storage when the yacht is within 3 nautical miles from the nearest land. Disinfected sewage may be discharged at sea in areas beyond 3 nautical miles from nearest land when the yacht is en-route at speeds of not less than 4 knots. Sewage should be discharged at moderate rates as per MEPC. 157(55);
- A holding tank/s of adequate capacity for the retention of all sewage with facility to discharge to shore. Untreated sewage may be discharged at sea in areas beyond 12 nautical miles from nearest land when the yacht is en-route at speeds of not less than 4 knots. Sewage should be discharged at moderate rates as per MEPC. 157(55). It is recommended that when determining the minimum black water holding tank capacity, the following volumes are allowed for each consecutive day between discharging:
- 15 litres per person/day for vacuum type toilets;
- 50 litres per person/day for normal type toilets.

At the request of the owners the authorised surveyors or Recognised Organisations may, upon satisfactory on board verification, issue a Statement of Compliance with MARPOL annex IV. Upon Malta becoming a Party to the 1997 Protocol, the Statement of Compliance, issued on behalf of the Administration may be reissued as an International Sewage Pollution Prevention Certificate, after the relevant surveys are conducted.

16.5 Prevention of Pollution by Garbage

All yachts are required to comply with the applicable provisions of MARPOL Annex V. Yachts of 400 GT and above and yachts certified to carry 15 persons or more are required to be provided with a garbage management plan* and a garbage record book in the form specified within MARPOL Annex V.

16.6 Prevention of Air Pollution

At the request of the owners the authorised surveyors or Recognised Organisations may, upon satisfactory on board verification, issue a Statement of Compliance with MARPOL Annex VI. Upon Malta becoming a Party to the 1997 Protocol, the Statement of Compliance, issued on behalf of the Administration may be reissued as an International Air Pollution Prevention Certificate, after the relevant surveys are conducted.

Particular attention is made to the provision of Reg.12 on Ozone Depletion Substances (ODS).

[1] For sewage treatment plants installed onboard on or after 1st January 2010 the revised guidelines as stated in MEPC. 159(55).

* Refer to the guidelines for the development of garbage management plans adopted by the MEPC resolution on MEPC 71(88).

Yacht having equipment containing ODS shall maintain an Ozone Depletion Substances Record book (can be in electronic format) where entries and records of repair or maintenance of such equipment, recharge and discharge ODS can be made.

16.7 Anti-Fouling Systems

The use of organotin compounds which act as biocides in anti-fouling systems is prohibited. Yachts of over 400 GT shall be surveyed and certified in accordance with the requirements of annex I of EC Regulation 782/2003 as amended and all yachts over 24 metres but below 400 GT shall be issued with an AFS-Declaration as per Annex III of EC Regulation 782/2003 as amended.

16.8 Green Yacht Notation

In its quest to encourage the design, construction and operation of more environmentally friendly yachts the MSD has introduced a 'Green Yacht Notation'. This voluntary notation is assigned to those yachts which in addition to full compliance with all the above sub-sections are found to comply with the sub-sections below.

16.8.1 Yachts built in a yard implementing an Environmental Management System certified under the requirements of ISO 14000.

16.8.2 Measures taken to minimise noise and vibration levels in motor yachts are certified to an IACS Classification Society standard.

The Certificate of Compliance issued to yachts complying with this Code would also reflect this voluntary compliance in cases where the 'Green Yacht Notation' is assigned.

Transport Malta

SECTION 17

MANNING AND CREW CERTIFICATION

17 MANNING AND CREW CERTIFICATION

The aim of this section is to determine the minimum safe manning requirements and the minimum level of certification of the crew.

The manning levels noted in this Code relate to the yacht at sea.

During lay up or wintering periods the number of crew may be reduced. However the number of crew on board during these periods would have to be adequate to handle any emergencies. Furthermore, the number of crew on board required is to be to the satisfaction of local port Authorities or marinas rules and regulations and must satisfy the requirements of the Yacht's Insurance requirements and conditions. The Administration must be notified of any manning arrangements for the intended lay up or wintering periods.

17.1 Crew Qualifications

Qualifications issued in accordance with the STCW Convention as amended are accepted subject to endorsement by this Administration. On case by case basis other yacht qualifications may be accepted.

The placing on board of a cook / stewards remains the Owners' responsibility if and as required.

All crew on board should hold a valid medical fitness certificate.

As a minimum on yachts less than **24 metres in hull:**

- the Master should hold an approved Basic Sea Survival Certificate;
- one crew member should hold an approved Fire Fighting Certificate.

As a minimum on yachts more than **24 metres in length and above but below 500 GT:**

- the Master should hold an approved Basic Sea Survival course Certificate and a Fire Fighting course Certificate;
- one crew member should hold an approved Basic Sea Survival course Certificate;
- one crew member should hold an approved Fire Fighting course Certificate.

As a minimum on yachts **over 500 GT and above but less than 3000 GT:**

- all officers are to hold an approved Basic Sea Survival course Certificate;
- the Master should hold an approved First Aid at Sea course Certificate and Fire Fighting course Certificate;
- one crew member is to hold an approved First Aid at Sea course Certificate;
- A minimum of four crew members are to hold an approved Fire Fighting course Certificate.

17.2 Radio Qualifications

There shall be at least one person holding the appropriate GMDSS Operator's Certificate.

Yachts less than 300 GT and operating within Sea Area A1 require as a minimum one operator to be in possession of a GMDSS Short Range Certification (S.R.C).

Yachts of 300 GT and over operating within Sea Area A1 require as a minimum one operator to be in possession of a GMDSS Restricted Operator's Certificate (R.O.C.).

Yachts of 300 GT and over operating beyond Sea Area A1 require as a minimum one operator to be in possession of a GMDSS General Operator's Certificate (G.O.C.).

Yachts of 500 GT and above but below 3000GT require a minimum of two crew members to be in possession of a GMDSS G.O.C.

17.3 Manning requirements for yachts less than 24 metres in hull length

Operational limits	Sailing Yachts	Motor Yachts
Up to 20 miles from safe haven	Yacht Master Coastal	Yacht Master Coastal
Up to 90 miles from safe haven	Yacht Master Offshore	Yacht Master Offshore
	Experienced seaman	Experienced seaman
Up to 150 miles from safe haven	Yacht Master Offshore	Yacht Master Offshore
	Yacht Master Coastal	Yacht Master Coastal
		One of the above crew members should have an Approved Engine Course certificate.
Unrestricted navigation	Yacht Master Ocean	Yacht Master Ocean
	Yacht Master Ocean or Offshore	Yacht Master Ocean or Offshore
	One of the crew members should have an Approved Engine Course certificate.	One of the crew members should have an Approved Engine Course certificate.

17.4 Requirements for yachts more than 24 metres in length

17.4.1 Minimum Manning Requirements

The Administration will issue a Minimum Safe Manning Certificate for yachts of more than 24 metres in length following receipt and review of the application for a safe manning document. The application may, be supplied with the owner/managers proposed manning levels and copies of related certification.

When determining the minimum manning levels on board, the following factors will be taken in consideration:

i. Gross tonnage;
ii. Main propulsion machinery power installed on board;
iii. Length and nature of voyages with passengers on board;
iv. Frequency of Port Calls;
v. Nature of areas of operation including the environmental conditions and time of year;
vi. Size, age, type of yacht, type of rig (in case of sailing yachts), equipment, automation and layout;
vii. Type of construction and type of equipment on board;
viii. STCW requirements;
ix. Yacht's operational requirements and the minimum number of crew required to maintain a safe operational level for the crew and to handle emergency situations and muster and disembark the passengers;
x. Maintain a safe engineering watch and operate the ship's machinery in a safe manner.

The schedules provided within this section should serve to indicate the typical manning expectations of the Administration.

17.4.2 Manning Scale for Motor Yachts 24 metres or more in length

Certificates are subject to prior acceptance by the Administration.

Miles from a Safehaven	Personnel	Vessel Type		
		>24m <200 GT	200 – 500 GT	500 – 3000 GT
Up to 60	Master	1	1	1
	Chief Officer	-	1	1
	OOW (Navigation)	-	-	-
	Chief Engineer	1	1	1
	Second Engineer	-	-	-
	Assistant Engineer	-	1	1
	Yacht Rating	1	2	2
Up to 150	Master	1	1	1
	Chief Officer	1	1	1
	OOW (Navigation)	-	-	-
	Chief Engineer	1	1	1
	Second Engineer	-	-	1
	Assistant Engineer	-	1	-
	Yacht Rating	1	2	2
Unlimited	Master	1	1	1
	Chief Officer	1	1	1
	OOW (Navigation)	-	1	1
	Chief Engineer	-	1	1
	Second Engineer	1	1	1
	Assistant Engineer	1	-	-
	Yacht Rating	2	2	2

17.4.3 Manning Scales for Sailing Yachts 24 metres or more in length

Certificates are subject to prior acceptance by the Administration.

The indicated manning scales for sailing yachts are based on a standard rig. The level of automation and/or complexity of the rig may require additional personnel to operate the rig.

Miles from a Safehaven	**Personnel**	**Vessel Type**		
		>24m <200 GT	**200 – 500 GT**	**500 – 3000 GT**
Up to 60	Master	1	1	1
	Chief Officer	1	1	1
	OOW (Navigation)	-	-	-
	Chief Engineer	1*	1*	1
	Second Engineer	-	-	-
	Assistant Engineer	-	1+	1
	Yacht Rating	2	2	3
Up to 150	Master	1	1	1
	Chief Officer	1	1	1
	OOW (Navigation)	-	-	-
	Chief Engineer	1*	1*	1
	Second Engineer	-	-	1
	Assistant Engineer	-	1+	-
	Yacht Rating	2	2	3
Unlimited	Master	1	1	1
	Chief Officer	1	1	1
	OOW (Navigation)	-	1	1
	Chief Engineer	1	1	1
	Second Engineer	-	-	1
	Assistant Engineer	1+	1+	-
	Yacht Rating	2	2	3

Note * The Chief Engineer may be omitted if the power is less than 300 KW per engine. In case of omission of the Chief Engineer the yacht must have the main engine parameter indicators on the cockpit.

\+ The Assistant Engineer may be omitted if the power is above 300 KW but less than 500 KW per engine.

17.5 Dual Certification

Dual deck and engineer roles are accepted provided:

- The officer is suitably qualified and experienced in both disciplines;
- Only one officer on board may be allowed to act in dual role;
- The person is not the Master.

17.6 Special Considerations

On considering each manning proposal, the Administration will consider on a case by case basis, requests for reduction in the required engine crew subject to the following:

- Yacht being a 'Short Range Yacht';
- Maximum periods when undertaking navigation not exceeding 12 hours duration;
- A minimum of one crew member having a Yacht Engine Operator Certificate or equivalent;
- The yacht having a valid engine maintenance agreement with the engine makers (or their approved service station). Copy of this agreement/certificate is to be submitted to the Administration.

Transport Malta

SECTION 18

SPECIAL CATEGORY YACHTS

18 SPECIAL CATEGORY YACHTS

18.1 High Speed Yachts

18.1.1 High speed yachts shall comply with the IMO HSSC Code in its entirety.

18.1.2 High speed yachts shall be built to Class and maintained in Class.

18.1.3 High speed yachts below 24m in length have to be built under Class rules and outfitted to the HSSC Code as far as practicable.

18.2 Sail Training Yachts

18.2.1 Sail training yachts should comply with the contents of this Code as new yachts.

18.2.2 The number of passengers on board should never exceed 12.

18.2.3 The crew compliment on board requires to be set by the Administration taking in consideration the area of operation, the time of year and weather condition and the level of competence of the passengers being trained.

18.3 Traditional / Historical Ships

18.3.1 This class of yachts will be considered by the Administration on an individual basis.

18.3.2 These yachts, as far as practicable, comply with the contents of this Code.

However the Administration is conscious that these yachts may not be able to comply with all the requirements set out in this Code.

Under the circumstances, what traditional / historical ships lack in modern technology or structural details **must** be compensated for by operational measures that ensure their safe operation without destroying their particular historical character.

18.3.3 Such yachts would be certified to operate within 60 miles from safe haven in good weather conditions only.

18.4 Bareboat Charter Yachts (Yachts below 24 metres in length only)

18.4.1 Duty of Familiarisation at Handover

The Owner / Manager of the yacht or his representative (which could be the Master and Engineer) must be present for the handover to the crew taking over the yacht. The following items should be dealt with:-

The Owner / Managing Agent or appointed representative with intimate knowledge of the yacht would be present at the handover of the yacht to the chartering skipper and crew in order to complete the following familiarisation process:

1. A demonstration of the stowage of all gear and the method of use of all lifesaving and fire-fighting appliances on board the yacht should be given;
2. The location and method of operation of all sea cocks and bilge pumps should be explained;
3. A demonstration to ensure familiarisation with all mechanical, electrical and electronic equipment should be carried out;
4. Checks to be carried out on the engine prior to starting, whilst running and after stopping to be demonstrated;
5. The method of setting, sheeting and reefing each sail should be shown.

18.4.2 Documentation

The Owner / Manager of the yacht or his representative should make sure that the Original Trading Certificates are handed over to the incoming Master and Crew. The documents should include:-

1. Certificate of Registry;
2. Safe Manning Certificate (if issued);
3. The Certificate of Compliance to trade as a commercial yacht;
4. All certificates issued to the yacht;
5. Details of permitted operating area and any special instructions which may affect the operational safety of the yacht;

6. All instruction manuals;
7. All the yacht's technical drawings and diagrams;
8. Yacht's maintenance records. The due dates of maintenance of all equipment are to be highlighted;
9. Yacht's Class records (if yacht in Class);
10. Inventory of yacht's equipment and spare parts. Details of spare parts suppliers to be provided;
11. Plan of stowage of all moveable equipment necessary for the safe operation of the yacht;
12. A list of contact telephone numbers (24 hours) of persons who may be contacted by the Chartering Master and Crew in case of emergencies or when special advise is given;
13. The original copy of the insurance policy (unless the Charterers will take separate insurance cover for the duration of the charter).

18.4.3 Handover Documentation

18.4.3.1 The handing over and taking over Masters should sign a handing over document. This document should list all items noted in 18.4.1 and 18.4.2 and any other items they deem important.

18.4.3.2 The quantities of fuels and unbroached consumables remaining on board at time of hand over should be agreed upon and a separate hand over document drawn up and signed by both parties.

18.4.3.3 A crew list of the taking over crew is to be forwarded to the Administration. This is to be accompanied with a copy of the Crew Certificates.

18.4.4 Off-Hire Procedures

18.4.4.1 When the yacht is returned to the Owners / Managers after the period of Charter the same procedures indicated in 18.4.1, 18.4.2 and 18.4.3 are to be followed.

18.4.4.2 All documents are to be signed by both parties.

18.5 Yachts taking part in races

18.5.1 Yachts holding a Certificate of Compliance to trade as a Commercial Yacht do not need to comply with the Code if and when they take part in races.

18.5.2 Any person on board other than the Owner and Crew is to be advised of the status of certification of the yacht for the duration of the race.

18.5.3 It remains the responsibility of the Owner / Agents of the yacht to have the persons on board covered by a valid insurance policy for the duration of the race.

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SECTION 19

MEDICAL STORES

19 MEDICAL STORES

All yachts are to carry adequate medical stores suitable for the area and range of operation.

19.1 Yachts below 24 metres in length should carry:-

Name of Item and Ordering Description	Quantity Required
FIRST AID KIT The following to be in a damp proof strong canvas bag, satchel or box with a strap for carrying:	1*
Triangular bandages with sides of about 90cm and a base of about 127cm	4
Standard dressings No.8 or 13 BPC	6
Standard dressings No.9 or 14 BPC	2
Extra large sterile unmedicated dressings 28cm x 17.7cm	2
Medium size safety pins, rustless	6
Assorted adhesive dressing strips medicated BPC	19
Sterile pads with attachments	2
Packages each containing 15g sterile cotton wool	2
Pair of large disposable polythene gloves	5
PARACETAMOL 500mg tablets	50*
SEASICKNESS REMEDY Tablets (Hyoscine hydrobromide 0.3mg recommended)	50*
BUTTERFLY CLOSURES Adhesive skin closures, length about 5cm individually sealed sterile, in a container	19*
FORECEPS Epilation with oblique ends, 12.5cm of stainless steel throughout	1
SCISSORS (approved medical type) About 18cm, one blade sharp pointed and the other round-ended	1
THERMOMETER Ordinary range clinical thermometer, stubby bulb pattern	1
FIRST AID MANUAL (Published by an approved Body or Authority)	1

19.2 Yachts above 24 metres in length should comply with the Merchant Shipping Act (Cap. 234) and the Merchant Shipping (Medical Stores) Regulations, 2002.

Transport Malta

SECTION 20

SURVEY & CERTIFICATION

20 SURVEYS, CERTIFICATION, INSPECTIONS

20.1 All yachts covered by this Code are required to be surveyed and certified in accordance to their respective category requirements.

20.2 Yachts below 24 metres in length

20.2.1 Initial Survey

20.2.1.1 These yachts may be surveyed by an Approved Surveyor or by a Recognised Organisation.

20.2.2 Existing Yachts

20.2.2.1 An initial survey is to be carried out. During this survey a record of compliance with the Code is to be drawn up. The survey report is to be provided to the Administration.

20.2.2.2 Any deviation from the Code or any equivalent proposals as may be proposed by the owners, may be considered by the Registrar General.

20.2.2.3 A full survey of the hull and equipment will be carried out on the hard. If the yacht is surveyed afloat then the survey of the underwater parts is to be carried out within 12 months on the initial survey.

20.2.2.4 A full survey of safety equipment, fire detection and fire fighting equipment shall be carried out. Tests of equipment shall be carried out.

20.2.2.5 All items relating to freeboard, waterfreeing and crew safety shall be checked against the Code.

20.2.2.6 The stability data of the yacht shall be checked for compliance with the minimum requirements set out in the Code.

20.2.2.7 The radio installation shall be inspected by a radio inspector approved by a Recognised Organisation.

20.2.2.8 The type and operational range of the yacht shall be determined.

20.2.2.9 Trials shall be carried out under supervision of the attending surveyor.

20.2.2.10 Reference to be made to 20.7.

Upon satisfactory review of the survey reports and related documentation by the Administration, a Certificate of Compliance to trade as a Commercial Yacht will be issued by the Administration.

20.2.3 New Yachts

20.2.3.1 The following drawings / calculations shall be submitted to a Recognised Organisation or a Notified Body for their approval:

- General arrangement plan
- Structure / scantlings plan
- Lines plan
- Midship section and transverse sections
- Structural fire protection plan
- Material specifications
- Rigging plan and full specifications of the rig
- Full safety and fire safety plan (ISO 17631:2002)
- Calculation of engine power
- Design and details of fuel system
- Bilge system diagram
- Fire fighting plan
- Design of electrical systems (including navigation lighting)
- Rudder details / design
- Equipment number

20.2.3.2 In addition to the above the following documents shall be submitted for approval to a Recognised Organisation or an approved surveyor:

- Stability calculations
- Freeboard determination

- Record of compliance with the Code
- Record of Radio Equipment on board

20.2.3.3 Reference to be made to 20.8.

20.2.4 Renewal Survey

20.2.4.1 A renewal survey shall be carried out every 4th year.

20.2.4.2 During a renewal survey a full inspection of the yacht similar to that carried out at the Initial Survey shall be carried out. The yacht shall be inspected on the hard. All parts, machinery and systems of the yacht shall be inspected.

The ship's documents shall be inspected.

On successful completion of the renewal survey the Certificate of Compliance shall be re-issued by the Administration.

20.2.5 Annual Surveys

20.2.5.1 Annual Surveys may be carried out by the Master/Engineer, approved surveyor or by a Recognised Organisation.

The Annual Surveys carried out are to be endorsed on the prescribed space on the Certificate of Compliance. A copy of the endorsed Certificate of Compliance together with a survey report shall be provided to the Administration.

20.2.5.2 Any accidents are to be reported to the Administration.

20.2.5.3 Major repairs or conversions shall be surveyed by an Approved Surveyor.

20.2.5.4 At the end of the 4th year the yacht will undergo a Renewal Survey by the Approved Surveyor.

20.3 Yachts above 24 metres in length but below 500 GT

20.3.1 These yachts shall be surveyed by an Approved Surveyor or by a Recognised Organisation.

20.3.2 Existing Yachts Initial Survey

20.3.2.1 An initial survey is to be carried out. During this survey a record of compliance with the Code shall be drawn up. The survey report shall be submitted to the Administration.

20.3.2.2 Any deviations from the Code or any equivalent proposals shall be submitted to the Registrar General for consideration.

20.3.2.3 A full survey of the hull, machinery and equipment shall be carried out. This survey shall be equivalent to a Class Renewal Survey and shall be carried out to Class Rules. If the yacht is surveyed afloat, the survey of the underwater parts shall be carried out within 12 months of the initial survey.

20.3.2.4 A full survey of safety equipment, fire detection and fire fighting equipment shall be carried out. Tests of equipment shall be carried out.

20.3.2.5 All items relating to freeboard, water freeing and crew safety shall be checked against the Code.

20.3.2.6 Load line items shall be checked against the ILLC.

20.3.2.7 The radio installation shall be inspected by a radio inspector approved by a Recognised Organisation. Yachts above 300 GT shall be issued with an International Cargo Ship Safety Radio Certificate.

20.3.2.8 On yachts above 400 GT the equipment on board shall be checked against MARPOL.

20.3.2.9 The stability data of the yacht shall be approved for compliance with the Code.

20.3.2.10 The type and operational range of the yacht shall be determined.

A Certificate of Compliance to Trade as a Commercial Yacht (Yachts above 24 metres in length but below 500 GT) shall be issued by the Administration.

20.3.2.11 Trials shall be carried out under supervision of the attending surveyor.

20.3.2.12 Reference to be made to 20.7.

20.3.3 New Yachts

20.3.3.1 The following drawings / calculations shall be submitted to a Recognised Organisation for their approval:-

- General arrangement plan
- Structure / scantlings plan
- Lines plan
- Midship section and transverse sections
- Structural fire protection plan
- Material specifications
- Rigging plan and full specifications of the rig
- Full safety and fire safety plan (ISO 17631:2002)
- Calculation of engine power
- Design and details of fuel system
- Bilge diagram
- Fire fighting plan
- Design of electrical systems (including navigation lighting)
- Rudder details / design
- Equipment number

20.3.4 Upon successful completion of the initial survey the following certificates shall be issued:

- Certificate of Registry;
- Certificate of Compliance to Trade as a Commercial Yacht (Yachts above 24 metres in length but below 500 GT), issued by the Administration;
- International Tonnage Certificate;
- International Load Line Certificate;
- International Cargo Ship Safety Radio Certificate (in case of yachts above 300 GT) (in compliance with Chapter 15 of this Code);
- International Oil Pollution Prevention Certificate (In case of yachts above 400 GT);
- Minimum Safe Manning Certificate issued by the Administration.

20.3.4.1 Reference to be made to 20.8.

20.3.5 Annual Surveys

20.3.5.1 All yachts shall be surveyed annually by a Recognised Organisation or by an Approved Surveyor.

Annual surveys will cover all items relating to Class and Statutory requirements.

The Annual Surveys carried out shall be endorsed on the prescribed space on the Certificate of Compliance. A copy of the endorsed Certificate of Compliance together with a survey report is to be provided to the Administration.

20.3.5.2 The due date of the annual surveys shall be $\pm$ 3 months from the anniversary of the last Special Survey (or the date of the Initial Survey).

20.3.6 Renewal Surveys

20.3.6.1 A renewal survey shall be carried out every 5th year.

20.3.6.2 During a special survey a full inspection similar to that carried out at the initial survey shall be carried out.

The yacht shall be inspected on the hard.

All parts, machinery and systems of the yacht shall be inspected.

The ship's documents shall be inspected.

20.3.6.3 On successful completion of the special survey the Trading Certificates will be re-issued.

20.4 Yachts above 24 metres in length and 500 GT or more

20.4.1 These yachts shall be surveyed by an approved survey or by a Recognised Organisation. All yachts within this category are to be fully classed and all Statutory Certificates are to be issued by a Recognised Organisation.

20.4.2 Existing Yachts Initial Survey

20.4.2.1 An initial survey shall be carried out. During this survey a record of compliance with the Code shall be drawn up. The survey report shall be submitted to the Administration.

20.4.2.2 Any deviations from the Code or any equivalent proposals shall be submitted to the Registrar General for consideration.

20.4.2.3 A full survey of the hull, machinery and equipment on the hard. This survey will be equivalent to a Statutory Special Survey.

20.4.2.4 A full safety equipment, fire detection and fire fighting equipment survey should be carried out for compliance with the Code.

20.4.2.5 A freeboard report to be drawn up for the assignment of freeboard.

20.4.2.6 A full Load Line inspection to be carried out.

20.4.2.7 The radio installation shall be inspected in line with the requirements of the Code by radio inspector approved by a Recognised Organisation and an International Cargo Ship Safety Radio Certificate shall be issued.

20.4.2.8 The pollution control installation on board shall be checked against MARPOL.

20.4.2.9 The stability data of the yacht will be checked for compliance with the Code and the relevant SOLAS requirements.

20.4.2.10 The type and operational range of the yacht will be determined.

A Certificate of Compliance to trade as a Commercial Yacht (over 24m and over 500 GT) shall be issued by the Administration.

20.4.2.11 Trials shall carried out under supervision of the attending surveyor.

20.4.2.12 Reference to be made to 20.7.

20.4.3 This Class of yacht shall be issued with the following additional certificates by a Recognised Organisation:

- ISM Certification
- ISPS Certification

20.4.4 New Yachts Initial Survey

20.4.4.1 The following drawings / calculations shall be presented to a Recognised Organisation for approval:-

- General arrangement plan
- Structure / scantlings plan
- Lines plan
- Midship section and transverse sections
- Structural fire protection plan
- Material specifications
- Rigging plan and full specifications of the rig
- Full safety and fire safety plan (ISO 17631:2002)
- Calculation of engine power
- Design and details of fuel system
- Bilge diagram
- Fire fighting plan
- Design of electrical systems (including navigation lighting)
- Rudder details / design
- Equipment number

20.4.4.2 Reference to be made to 20.8.

20.4.5 Certificates shall be issued on the completion of the Initial Survey:

- Certificate of Registry
- Certificate of Compliance to Trade as a Commercial Yacht (Yachts above 24 metres in length and 500 GT and above) shall be issued by the Administration
- International Tonnage Certificate
- Minimum Safe Manning Certificate issued by the Administration
- International Cargo Ship Safety Construction Certificate
- International Load Line Certificate
- International Cargo Ship Safety Equipment Certificate
- International Cargo Ship Safety Radio Certificate
- International Oil Pollution Prevention Certificate
- ISM Certification
- ISPS Certification

20.4.6 Annual Surveys

20.4.6.1 All yachts will be surveyed by a Recognised Organisation. The Certificate of Compliance issued by the Administration shall be endorsed by a Recognised Organisation together with the other Statutory Certificates. A copy of the endorsed Certificate of Compliance and Statutory Certificates shall be forwarded to the Administration.

20.4.6.2 Annual Surveys shall cover all items relating to Class and statutory requirements.

20.4.6.3 The due date of the annual surveys will be $\pm$ 3 months from the anniversary of the last special survey (or the date of the initial survey).

20.4.7 Special Surveys

20.4.7.1 A special survey will be carried out every 5th year.

20.4.7.2 During a special survey a full inspection similar to that carried out at the initial survey shall be carried out (Ref. to 20.4.1). The yacht shall be inspected on the hard.

All parts, machinery and systems of the yacht shall be inspected.

The ship's documents shall be inspected.

20.4.7.3 Upon successful completion of the special survey the Trading Certificates shall be re-issued.

20.5 Drydocking Surveys

20.5 .1 Yachts shall be inspected in drydock or on the hard during the Initial Survey and during the Special Survey.

20.5 .2 In addition, yachts shall be additionally surveyed in drydock or on the hard between the second and third year after the special survey, i.e. mid way between special surveys.

20.6 Historical Yachts

20.6.1 These yachts shall be surveyed by the Approved Surveyors acting under the direction of the Administration.

20.6.2 An Initial Survey shall be carried out to determine the requirements and level / quantity of inspections required. The survey outcome shall be communicated to the Administration and the particular certification requirements applicable, area of operation, number of passengers and applicable restrictions agreed with the Administration.

20.6.3 A Certificate of Compliance to Trade as a Commercial Yacht shall be issued by the Administration.

20.7 Guidelines for Initial and Other Surveys

	Statutory	Class
Hull Surveys		
Dry dock survey: The hull shall be inspected from the outside **twice every five years** with a maximum period between the surveys of 36 months. For ships older than 15 years, the Administration may require an annual dry dock survey.		X
In-water survey: For hull surveys, the Authority may, under specific conditions, be satisfied with an In-Water Survey (IWS). The requirements for an IWS are those set out by Recognised Organisations -the hull survey to obtain a new five-year Certificate of Seaworthiness shall always be conducted in dry conditions.		X
Inspection and checking of load line data		X
For the dry dock survey, the yacht's hull shall be dry and clean. It is not permitted to apply new coats of paint until after the survey. Limbers and bilges shall be clean and dry for the survey. If necessary, panelling, floor ceilings or inner planking shall be removed on the surveyor's instructions. Machinery and rigging parts etc. shall be dismounted for the survey if the surveyor considers it necessary. The surveyors and other persons acting for the Administration shall be granted free access to the yacht and the workshops. The surveyors of the Administration shall receive the necessary assistance from the owner or on the owner's behalf.		X
Structural fire protection	X	X
Rigging		X
Stability heeling test		X

Machinery Installation		
Alarms		X

	Statutory	Class
Fire Alarms		X
Emergency stops		X
Emergency start safeties		X
Bilge and ballast systems		X
Emergency lighting		X
Inspection gas attestation validity		X
Inspection MARPOL		X
Inspection fire-fighting installation		X
Steering gear		X
Dirty water and oil systems (MARPOL) (where applicable)		X
General safety engine room		X
Fire-fighting equipment		X
Fixed fire fighting installation		X

Equipment		
Equipment inspection	X	
Nautical equipment	X	
Inspection medical equipment	X	
Safety appliances (check certificates)	X	
Life-saving appliances (check certificates)	X	

	Statutory	Class
Check inspection radio communication equipment (inspection by approved companies)	X	

Five-year acceptance and inspections		
The five year survey includes those inspections that do not have to take place annually, but once every five years. These include:		X
Main engine and auxiliary engines		X
Compression pressure		X
Pressure-testing fuel nozzles		X
Pressure testing cooling water system		X
Meters	X	
Alarms	X	
Operation		X
Reversing gear		X
Endurance tests		X
Permanent fire-fighting system		X
Megger test		X
Propeller shaft inspection		X
Opening valves		X
Inspection MARPOL equipment		X

	Statutory	Class
Hull and Equipment		
Hull		X
Shell thickness measurements		X
Bow thruster – shell penetration inspection		X
Anchor gear inspection anchor chain (carried out in dock)		X
Rudder inspection		X
Rigging		X
Lowered mast inspection		X
Spars inspection		X

Special Survey		
During a period of three months before expiry of the five-year Certificate of Compliance		X

	Statutory	Class
Ship Construction		
Assignment operating area based on yacht structure (strength and watertightness) and rigging		
Stability calculations	X	
Heeling test		X
Load line aspects	X	
Yacht structure, shell, structural members, welds for strength and watertightness		X
Rudder and rudder gear		X
Anchor gear		X
Watertight closing arrangements (hatches, doors, etc)	X	X
Windows, fixed port lights and portholes	X	X
Railing and bulwark	X	X
Accommodation and exits / emergency exits	X	
Lighting	X	
Toilets	X	X
Structural fire protection	X	
Watertight doors and their remote controls	X	X

	Statutory	Class
Electrical Systems		
Plan approval		X
Generators / electric motors		X
Accumulators		X
Emergency installations	X	X
Shore connection		X
Distribution systems		X
Cables and wiring		X
Protection electrical systems		X
Earthing		X
Switchboards		X
Switchgear and protective devices		X
Measuring instruments		X
Starting devices for propulsion engines		X
Lighting	X	
Navigation lights system	X	
Emergency stop switches	X	
Public address system	X	
Load test		X

	Statutory	Class
Test emergency installations and alarms	X	
Rigging		
Rigging (strength mast, spars, blocks, running and standing rigging, sails, puttings, additional fixations etc.)	X	X

	Statutory	Class
Machinery		
Main and auxiliary engines	X	X
Propeller shafting and propeller, aligning, bearings etc.	X	X
Starting the main engine		X
Charging generator for the starting battery		X
Exhaust gas lines		X
Fuel lines		X
Cooling water lines		X
Outboard valves		X
Bilge cooling	X	X
Box cooling	X	X
Air yachts		X
Pressure water tanks		X
Bilge and ballast systems		X
Operation and monitoring propulsion systems		X
Dirty water systems (MARPOL)	X	
Environmental provisions	X	
Gas systems	X	

	Statutory	Class
Alarms and safeties	X	
Fire fighting systems	X	X
Remotely controlled valves		X

Equipment		
Life saving appliances	X	
Safety appliances	X	
Navigation aids	X	
Radio communication equipment	X	
Medicines	X	

Trial Run		
Steering tests	X	
Anchor tests	X	X
Engine tests	X	X
Rigging tests	X	X

Annex

CERTIFICATE OF COMPLIANCE TO TRADE AS A
COMMERCIAL YACHT

Name of Ship	Official Number	Port of Registry	Load Line Length	Gross Tonnage
		VALLETTA		

THIS IS TO CERTIFY THAT:

1. the ship has been surveyed in accordance with Commercial Yacht Code (2006).
2. the ship has been found to comply with the requirements of the said Code.
3. the total number of persons for which life saving appliances are provided is _____ and that the maximum number of passengers shall never exceed.
4. the ship was surveyed on the _____ at _____ .
5. the area of operation of the vessel is:-

This certificate is issued under the authority of the Government of Malta, and it will remain in force, unless previously cancelled, until the subject to the vessel, its machinery and equipment being efficiently maintained, annual surveys are carried out within the prescribed times, the manning complying with the Code and to the following conditions:-

-

Issued at Malta on the.

Signature of authorized officer issuing the Certificate:

The validity of this Certificate is subject to the following Certificates being on board:

CERTIFICATE OF COMPLIANCE TO TRADE AS A COMMERCIAL YACHT

Name of Vessel: **Official No.:**

ENDORSEMENT FOR ANNUAL SURVEYS

THIS IS TO CERTIFY that at a survey as required by the Code the vessel was found to conform with relevant requirements.

Annual

Official Stamp

Signed: .....

(signature of authorized officer)

Place:

Date:

Annual

Official Stamp

Signed: .....

(signature of authorized officer)

Place:

Date:

Annual

Official Stamp

Signed: .....

(signature of authorized officer)

Place:

Date:

Annual

Official Stamp

Signed: .....

(signature of authorized officer)

Place:

Date:

List of Authorised Surveyors

The List of Authorised Surveyors in terms of the Merchant Shipping Act can be downloaded from the following link:

http://www.transport.gov.mt/