

الهيئة الوطنية للمواصلات  
National Transport Authority



# **UAE Yacht Regulations for yachts above 24 meters**

## CONTENTS

|  |    |
|--|----|
| CONTENTS.....                                      | 2  |
| PREAMBLE .....                                     | 5  |
| PART 1 GENERAL PROVISIONS .....                    | 9  |
| Ch. 1 REGULATIONS .....                            | 9  |
| Ch. 2 YACHT OPERATION .....                        | 12 |
| Ch. 3 VERIFICATION OF COMPLIANCE.....              | 14 |
| Ch. 4 GENERAL DEFINITIONS .....                    | 15 |
| PART 2 BUOYANCY AND STABILITY .....                | 20 |
| Ch. 1 GENERAL .....                                | 20 |
| Ch. 2 FREEBOARD AND RESERVE BUOYANCY .....         | 22 |
| Ch. 3 PENETRATIONS AND CLOSING APPLIANCES.....     | 23 |
| Ch. 4 DRAINAGE AND BILGE ARRANGEMENTS.....         | 24 |
| Ch. 5 INTACT STABILITY.....                        | 25 |
| Ch. 6 DAMAGE STABILITY.....                        | 27 |
| Ch. 7 OPERATIONAL PROVISIONS .....                 | 28 |
| PART 3 STRUCTURAL INTEGRITY .....                  | 32 |
| Ch. 1 GENERAL .....                                | 32 |
| Ch. 2 LOADS AND STRENGTH.....                      | 34 |
| Ch. 3 VERIFICATION OF COMPLIANCE.....              | 36 |
| PART 4 MACHINERY AND ELECTRICAL INSTALLATIONS..... | 38 |
| Ch. 1 GENERAL .....                                | 38 |
| Ch. 2 MACHINERY GENERAL.....                       | 40 |
| Ch. 3 PROPULSION MACHINERY .....                   | 42 |
| Ch. 4 MACHINERY PIPING AND BILGE .....             | 45 |
| Ch. 5 ELECTRICAL INSTALLATIONS .....               | 46 |
| Ch. 6 AUTOMATION AND SAFETY SYSTEMS .....          | 49 |
| PART 5 POLLUTION PREVENTION .....                  | 52 |
| Ch. 1 GENERAL .....                                | 52 |
| Ch. 2 BALLAST WATER MANAGEMENT.....                | 54 |
| Ch. 3 ANTI-FOULING SYSTEMS .....                   | 55 |
| Ch. 4 OIL DISCHARGE MANAGEMENT .....               | 56 |
| Ch. 5 SEWAGE TREATMENT .....                       | 57 |
| Ch. 6 GARBAGE TREATMENT .....                      | 58 |
| Ch. 7 EMISSIONS TO AIR.....                        | 59 |

|  |     |
|--|-----|
| PART 6 ACCOMMODATION, SAFETY, SECURITY AND COMFORT ..... | 61  |
| Ch. 1 GENERAL .....                                      | 61  |
| Ch. 2 ACCOMMODATION .....                                | 63  |
| Ch. 3 SECURITY .....                                     | 64  |
| Ch. 4 COMFORT.....                                       | 68  |
| Ch. 5 SAFETY OF PERSONS .....                            | 72  |
| Ch. 6 OPERATIONAL PROVISIONS .....                       | 74  |
| <br>   |     |
| PART 7 NAVIGATION AND CONTROL .....                      | 76  |
| Ch. 1 GENERAL .....                                      | 76  |
| Ch. 2 ANCHORING, MOORING, TOWING AND BERTHING.....       | 77  |
| Ch. 3 NAVIGATION.....                                    | 79  |
| Ch. 4 BRIDGE.....  | 80  |
| Ch. 5 STEERING.....                                      | 81  |
| Ch. 6 ALERTING OTHER SHIPS.....                          | 84  |
| Ch. 7 EXTERNAL GMDSS COMMUNICATION .....                 | 84  |
| Ch. 8 GENERAL EMERGENCY ALARM.....                       | 87  |
| Ch. 9 EMERGENCY PUBLIC ADDRESS .....                     | 88  |
| Ch. 10 ONBOARD TWO-WAY COMMUNICATION .....               | 89  |
| Ch. 11 OPERATIONAL PROVISIONS .....                      | 90  |
| <br>   |     |
| PART 8 FIRE SAFETY.....                                  | 92  |
| Ch. 1 GENERAL .....                                      | 92  |
| Ch. 2 FIRE SAFETY LEVEL .....                            | 93  |
| Ch. 3 RISK OF IGNITION.....                              | 94  |
| Ch. 4 FIRE GROWTH CONTROL.....                           | 96  |
| Ch. 5 FIRE DETECTION AND ALARM.....                      | 97  |
| Ch. 6 STRUCTURAL FIRE PROTECTION .....                   | 98  |
| Ch. 7 FIRE CONTROL PLAN.....                             | 100 |
| Ch. 8 FIRE FIGHTING .....                                | 100 |
| Ch. 9 MEANS OF ESCAPE.....                               | 103 |
| Ch. 10 OPERATIONAL PROVISIONS .....                      | 104 |
| <br>   |     |
| PART 9 LIFE SAVING.....                                  | 107 |
| Ch. 1 GENERAL .....                                      | 107 |
| Ch. 2 ESCAPE AND EVACUATION .....                        | 109 |
| Ch. 3 STOWAGE AND MUSTERING .....                        | 110 |
| Ch. 4 EVACUATION.....                                    | 111 |
| Ch. 5 PERSONAL LIFE SAVING.....                          | 114 |
| Ch. 6 RESCUE.....  | 115 |
| Ch. 7 OPERATIONAL PROVISIONS .....                       | 116 |
| <br>   |     |
| PART 10 EQUIPMENT CARRIED ONBOARD .....                  | 121 |
| Ch. 1 GENERAL .....                                      | 121 |
| Ch. 2 BOATS AND WATER-SPORT EQUIPMENT .....              | 122 |
| Ch. 3 CARS AND MOTORCYCLES .....                         | 124 |
| Ch. 4 HELICOPTERS .....                                  | 125 |

|  |         |
|--|---------|
| PART 11 MANNING .....  | 127     |
| Ch. 1 GENERAL .....  | 127     |
| Ch. 2 SAFE MANNING.....  | 128     |
| Ch. 3 SAFE MANNING DOCUMENT .....  | 133     |
| Ch. 4 COMPETENCE AND EXPERIENCE .....                                    | 134     |
| Ch. 5 HOURS OF WORK AND REST.....  | 135     |
| Ch. 6 WORKING CONDITIONS .....   | 136     |
| <br>PART 12 SURVEYS AND CERTIFICATION .....                              | <br>138 |
| Ch. 1 GENERAL .....  | 138     |
| Ch. 2 SURVEY SCOPE .....   | 140     |
| Ch. 3 YACHT SAFETY CERTIFICATE .....                                     | 142     |
| Ch. 4 YACHT CONSTRUCTION CERTIFICATE.....                                | 144     |
| Ch. 5 MAINTENANCE OF CONDITION AFTER SURVEY.....                         | 145     |
| <br>ANNEXES .....  | <br>146 |
| ANNEX A - VERIFICATION OF COMPLIANCE: RISK ASSESSMENT .....              | 147     |
| ANNEX B - UAE YACHT CERTIFICATE OF REGISTRY .....                        | 150     |
| ANNEX C - UAE YACHT SAFETY CERTIFICATE.....                              | 151     |
| ANNEX D - INTERNATIONAL TONNAGE CERTIFICATE.....                         | 153     |
| ANNEX E - INTERNATIONAL LOAD LINE CERTIFICATE.....                       | 154     |
| ANNEX F - CLASSIFICATION CERTIFICATE .....                               | 156     |
| ANNEX G - YACHT CONSTRUCTION CERTIFICATE .....                           | 158     |
| ANNEX H - INTERNATIONAL SHIP SECURITY CERTIFICATE .....                  | 159     |
| ANNEX I - NATIONAL YACHT SECURITY CERTIFICATE .....                      | 160     |
| ANNEX J - DOCUMENT OF COMPLIANCE.....                                    | 161     |
| ANNEX K - SAFETY MANAGEMENT CERTIFICATE.....                             | 162     |
| ANNEX L - NATIONAL YACHT SAFETY MANAGEMENT<br>CERTIFICATE .....          | 163     |
| ANNEX M - INTERNATIONAL OIL POLLUTION PREVENTION<br>CERTIFICATE .....    | 164     |
| ANNEX N - INTERNATIONAL SEWAGE POLLUTION PREVENTION<br>CERTIFICATE ..... | 165     |
| ANNEX O - NATIONAL AIR POLLUTION PREVENTION CERTIFICATE..                | 167     |
| ANNEX P - INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE..                | 168     |

## **PREAMBLE**

### **1.1 BACKGROUND**

The international conventions and regulations applicable to conventional vessels are not applicable for yachts not engaged in commercial trade. Any yachts to be leased are to be regarded as commercial yachts, while yachts used by the Owner are private yachts.

The existing conventions and regulations applied to commercial yachts are based on the SOLAS Convention which implies the following limitations for the yacht industry and Owners:

- a) Only yachts  $\geq 500$  GT can get international safety certificates;
- b) The number of passengers / guests is limited to 12;
- c) Commercial yachts are certified having a safety level equivalent to cargo ships.

Most of the yachts in the lowest segment of size above 24 meters are built in series by established yacht manufacturers. The safety standard of these yachts reflects the safety of boats less than 24 meters as given by the EU Directive for Recreational Boats and similar certification regimes. Such yachts manufactured in series are well tested before released to the market and the series production provides a uniform technical standard.

Larger yachts are increasingly being custom built based on individual designs. The segment of yachts larger than 40 meters is predominantly individually built to the Owner's design and specification. The 100 largest yachts in the world today are from 65 meters to 165 meters, with known projects exceeding to 200 meters of length. These yachts exceed the maximum 3,000 GT size in presently available regulations for commercial yachts and also carry more than 12 persons / guests in addition to the crew, which is the limit for formal certification as Cargo Ship with equivalencies in accordance with SOLAS.

The current codes and regulations for the larger yachts are based on conventional steel ship technology which imposes strong limitations on the innovative and future orientated yacht industry. Accordingly the present statutory regime for certification of commercial yachts is not considered to be an appropriate long term solution for the non-commercial segment of the yacht industry which builds private yachts not intended for the leasing market.

The UAE National Transport Authority has identified a need for yacht regulations that address the larger size segment of the private yachts, i.e. yachts above 24 meters not intended for commercial use, without any restriction with respect to the number of persons onboard, nor to the maximum size of the yacht. The UAE National Transport Authority is the designated Maritime Authority delegated by the government of the United Arab Emirates.

## **1.2 SCOPE OF THE REGULATIONS**

The UAE Yacht Regulations are applicable for new and existing private yachts of all types. The yachts can be of any construction material, e.g. steel, aluminium, composites or wood. The hull can be of any shape from single hull to multi-hulls and the yacht can be powered by any type of propulsion, e.g. motor, sail, pods, water jets or any combination thereof.

Larger yachts are sometimes supported by other vessels carrying helicopters, boats, cars etc for the yacht. They also carry the crew for such equipment and leave the port after the yacht and are in the new port before the yacht arrives. Consequently, such vessels may be of high speed. Such supporting vessels are covered by the UAE Yacht Regulations and are regarded as yachts as long as they are private and not for commercial use.

Support vessels only carrying yacht crew, supplies and equipment shall comply with SOLAS, SPS Code or HSC Code depending of the nature of the vessel if the support vessel is operated commercially.

## **1.3 SAFETY LEVEL**

The safety level of private non-commercial yachts in accordance with the UAE Yacht Regulations is to be equivalent or better than existing regulations for other vessels carrying the same number of persons onboard taking into account the size of the yacht and its area of operation.

The UAE Yacht Regulations require full compliance with international mandatory statutory instruments that are applicable to any ship on international voyages.

The UAE Yacht Regulations accommodate the novelty and innovation of this market segment. This has been achieved by establishing the relevant regulations on a functional basis.

The UAE Yacht Regulations also accept compliance with existing prescriptive International Regulations (e.g. SOLAS and the HSC Code). This relates to all aspects of relevant regulations, both safety and environmental issues.

## **1.4 FUNCTIONAL-BASED REQUIREMENTS**

The UAE Yacht Regulations have been developed based on the principles of defining overall purpose and functional requirements for the safety segments covered by these Regulations. The purpose and functional requirements are verified either by compliance with prescriptive requirements, analysis, demonstration or risk assessment.

The purpose and functional requirements are relevant for all types of yachts and mean that the yachts are to be designed and constructed for a specified design life

to be safe and environmentally friendly, when properly operated and maintained under the specified operating and environmental conditions, in intact and specified damage conditions, throughout their life. Environmentally friendly also includes the vessel being constructed of materials for environmentally acceptable dismantling and recycling.

The UAE Yacht Regulations are arranged in such a way that all the Parts are reflecting the above purpose. Most yachts are normally used in calm weather conditions, while some seek extreme waters and conditions. These issues are addressed by the area of operation: Coastal, Ocean and Polar.

Functional requirements are independent of the technical or operational solution and have a qualitative character. A functional requirement shall provide guidance for alternative technical or operational solutions.

Many yachts are in the forefront of technology and apply novel materials, construction methods, special arrangements and outfitting. As these Regulations are setting functional requirements, such novelty can be accepted provided that the functional requirements are met.

## **1.5 VERIFICATION**

The following methods of verification are equivalent under the UAE Yacht Regulations:

- a) Prescriptive: this type of verification method is often used in statutory instruments such as SOLAS and Classification Societies' rules.
- b) Analysis: this method involves studies and calculations according to standards and guidelines provided by or agreed with IMO, Flag/RO and/or Classification Societies.
- c) Demonstration: a practical trial enables the verification of the issue in question.
- d) Risk Assessment: can be chosen if none of the above is feasible or applicable.

## **1.6 PRESCRIPTIVE REGULATIONS**

Detailed requirements developed by the IMO, National Administrations and/or Classification Societies and applied by National Administrations or Classification Societies acting as Recognised Organisations to the design and construction of a ship in order to meet the goals and functional requirements, are accepted under the UAE Yacht Regulations as long as they address the functional requirements in these Regulations.

Prescriptive regulations which are in line with the functional requirements are to be applied as far as practical in order to guide how to meet the functional requirements.

## **1.7 INDUSTRY STANDARDS**

Under these Regulations the relevant yacht industry standards developed by ISO will be accepted provided they meet the functional requirements of these Regulations.

## **1.8 RISK ASSESSMENT**

The objective of verification by Risk Assessment is to show that the risks associated with a novel / alternative design, equipment, system or operations is equivalent or lower to that of a similar yacht which complies with the prescriptive requirements of these Regulations. This shall be documented by conducting a comparative risk assessment on the two solutions, see Annex A.

## **1.9 RECOGNITION**

The UAE National Transport Authority trusts that these Regulations will be recognised by any Flag and Port State as adequate safety and environmental standard for yachts above 24 meters as these Regulations provide equivalent safety to existing IMO instruments, include all mandatory international regulations applicable to yachts and are developed based on functional requirements to accommodate the innovative and future oriented yacht industry.



## **PART 1 GENERAL PROVISIONS**

### **Ch. 1 REGULATIONS**

#### **1.1 GENERAL**

**1.1.1** These Regulations shall be applied as a complete set of requirements. It contains requirements for the design, construction and operation of private yachts, i.e. yachts not engaged in commercial trade, on international as well as domestic voyages.

**1.1.2** The UAE Yacht Regulations safety level is equivalent to the applicable requirements for yachts of the following statutory instruments:

- a) The International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS Convention);
- b) The International Convention on Load Lines, 1966, as amended (Load Line Convention);
- c) The International Convention for Maritime Pollution Prevention, as amended (MARPOL 74/78);
- d) The International Convention on Standard for Training Certification and Watch-keeping, as amended (STCW).

**1.1.3** The requirements in the UAE Yacht Regulations are given as functional requirements. These functional requirements can be met by either complying with referenced prescriptive regulations or by alternative methods of verification such as, but not limited to, risk assessments, analysis or tests to document compliance with the functional requirement.

**1.1.4** An operational specification shall be provided the describing the intended area of operation of the yacht.

**1.1.5** The Owner, prior to commencing a new building design process or change of flag process, shall present to the UAE National Transport Authority the concept and how they envisage to comply with the defined purpose and functional requirements of the yacht.

#### **1.2 APPLICATION**

**1.2.1** The requirements in these Regulations apply to all types of yachts 24 meters in length or above and of any area of operation unless otherwise specified in the respective chapters.

**1.2.2** These Regulations apply to new yachts 24 meters or above in length engaged in international and domestic voyages, the keels of which are laid or which are at a similar stage of construction on or after 1<sup>st</sup> July 2010.

**1.2.3** The UAE Yacht Regulations apply to existing yachts. Compliance with the UAE Yacht Regulations shall be provided.

**1.2.4** Existing yachts which have previously been certified according to IMO statutory instruments for cargo ship, passenger ship, high speed craft or special purpose ships are accepted under these Regulations.

### 1.3 CERTIFICATES FOR THE YACHTS

**1.3.1** Yachts covered by these Regulations are required to be issued with the certificates listed in Table 1-1, samples of which are included in the Annexes.

| CERTIFICATE  | REFERENCE  | APPLICABILITY           | CERTIFICATE PERIOD (YEARS) | CERTIFICATE ENDORSEMENT PERIOD (YEARS) |
|--|--|-------------------------|----------------------------|--|
| UAE Yacht Certificate of Registry  | UAE National Regulations                                   | All                     | No                         | No                                     |
| UAE Yacht Safety Certificate (1)   | UAE Yacht Regulations                                      | All                     | 5                          | 1                                      |
| International Tonnage Certificate  | ITC 69   | All                     | No                         | No                                     |
| International Load Line Certificate  | ICLL 66  | All                     | 5                          | 1                                      |
| Classification Certificate   | Classification Rules                                       | ≥ 400 GT                | 5                          | 1                                      |
| UAE Yacht Construction Certificate   | UAE Yacht Regulations                                      | < 400 GT                | 5                          | No                                     |
| International Ship Security Certificate  | SOLAS 74 (ISPS Code)                                       | ≥ 500 GT                | 5                          | 2½                                     |
| UAE National Yacht Security Certificate  | UAE National Regulations                                   | < 500 GT                | 5                          | 2½                                     |
| Document of Compliance   | SOLAS 74 (ISM Code)  | ≥ 500 GT                | 5                          | 2½                                     |
| International Safety Management Certificate  | SOLAS 74 (ISM Code)  | ≥ 500 GT                | 5                          | 2½                                     |
| UAE Yacht Safety Management Certificate  | UAE National Regulations                                   | < 500 GT                | No                         | No                                     |
| International Oil Pollution Prevention Certificate   | MARPOL, Annex I  | ≥ 400 GT                | 5                          | 1                                      |
| International Sewage Pollution Prevention Certificate  | MARPOL, Annex IV   | ≥ 400 GT                | 5                          | No                                     |
| UAE Air Pollution Prevention Certificate   | UAE National Regulations                                   | ≥ 400 GT                | 5                          | 1                                      |
| International Anti-fouling System Certificate  | AFS Convention   | ≥ 400 GT                | No                         | No (2)                                 |
| UAE Radio Station License  | UAE National Regulations                                   | All                     | No                         | No                                     |
| International Safe Manning Certificate   | STCW/SOLAS   | ≥ 500 GT                | No                         | No                                     |
| UAE Yacht Safe Manning Certificate   | UAE Yacht Regulations                                      | < 500 GT                | No                         | No                                     |
| Bunker Convention Certificate  | Civil Liability for Bunker Oil Pollution Damage Convention | ≥ 1,000 GT              | No                         | No                                     |
| UAE Engine Air Pollution Prevention Certificate  | UAE National Regulations                                   | ≥ 400 GT & ≥ 130 KW (3) | No                         | No                                     |
| (1) This Certificate covers the scope of a) Ship Safety Construction Certificate, b) Ship Safety Equipment Certificate and c) Ship Safety Radio Certificate. |  |                         |                            |  |
| (2) Endorsement only if significant changes more than 25% of underwater area.  |  |                         |                            |  |
| (3) For engines above 130 KW excluding emergency engines   |  |                         |                            |  |

Table 1-1 List of certificates to be issued.

**1.3.2** For yachts with international certificates the functional requirements given in the UAE Yacht Regulations are regarded to be covered.

**1.3.3** For yachts which are not to comply with international certificates the functional requirements of the UAE Yacht Regulations are to be documented as outlined in the chapters Verification of Compliance of the respective Parts.

**1.3.4** Compliance with the applicable requirements shall be verified by the UAE National Transport Authority or by a Recognised Organisation (RO) on its behalf. Such verification includes design approval, testing and surveys of the hull and its systems and components. The certificates shall be issued upon satisfactory verification.

**1.3.5** The UAE National Transport Authority may consider a specific alternative equivalent standard to any standard required by the UAE Yacht Regulations, provided that the proposed standard, code of practice, specification or technical description provides, in use, equivalent levels of safety, suitability and fitness for purpose.

**1.3.6** For issuance and maintenance of the certificates required for the yacht, the person or company operating the yacht shall:

- a) submit drawings and information for approval;
- b) ensure adequate operation, maintenance and safety management;
- c) ensure safe access, conditions and sufficient time for testing and surveys;
- d) request and facilitate surveys in accordance with the UAE Yacht Regulations Part 12;
- e) carry out required testing and trials;
- f) maintain valid and updated documents onboard, such as certificates, manuals, logbooks, etc.;
- g) subject the yacht to unscheduled inspections as may be required;
- h) promptly notify the UAE National Transport Authority, or RO operating on its behalf, observed damage, deterioration or deficiency affecting the certificate;
- i) rectify deficiencies to the satisfaction of the UAE National Transport Authority, or RO operating on its behalf;
- j) request advance approval of alterations onboard; and
- k) fully cooperate in connection with possible accident investigations.

**1.3.7** Mandatory surveys shall be formally reported to the UAE National Transport Authority or filed for audit by the RO acting on its behalf.

**1.3.8** Approvals and surveys shall be carried out by surveyors with class and statutory competence.

## **1.4 CERTIFICATE OF REGISTRY**

**1.4.1** Yachts are registered in the UAE as any other vessel engaged in international voyages with UAE initiatives for yachts. The standard application requirements outlined in the [publication for Registration] apply.

**1.4.2** A UAE citizen or national or a qualified foreign maritime entity registered with address in UAE can register the yacht. The term “citizen” or “national” include corporations, limited liability companies, partnerships, limited partnerships and association of individuals, in accordance with UAE laws.

**1.4.3** The Yacht Certificate of Registry is subject to annual revalidation. The continued validity of the Yacht Certificate of Registry is contingent upon the requirements of the Registry being met by the yacht Owning Company or operator.

## **1.5 RESPONSIBILITY**

**1.5.1** It is the responsibility of the Owning Company to ensure that a yacht is properly maintained, inspected, surveyed and certified in accordance with these Regulations.

**1.5.2** Compliance with the UAE Yacht Regulations does not overrule the obligations for yacht and/or Master to comply with local authority licensing, permit or regulatory requirements for the waters the yacht is sailing.

## **Ch. 2 YACHT OPERATION**

### **2.1 OPERATIONAL REQUIREMENTS**

**2.1.1** The yacht shall be operated with the number of persons onboard not exceeding that specified in the Yacht Safety Certificate, within the Area of Operation and not intentionally operated outside the worst intended operational conditions as specified in the documentation onboard.

**2.1.2** The Master shall be provided with adequate information and guidance in the form of approved manuals to enable the yacht to be operated and maintained safely.

**2.1.3** The required onboard documentation shall at least consist of:

- a) Yacht Certificate of Registration;
- b) Yacht Safety Certificate;
- c) International Tonnage Measurement Certificate (ITC 69);
- d) Class or Yacht Construction Certificate;
- e) Applicable mandatory statutory certificates as required;
- f) Main drawings folder;
- g) Stability book;
- h) Operating manual;

- i) Training manual;
- j) Maintenance manual;
- k) Technical handbooks; and
- l) Logbooks and record books.

**2.1.4** The documentation listed shall, where relevant, be approved by the UAE National Transport Authority or a RO on its behalf.

**2.1.5** The documentation shall be controlled and collected in dedicated folders, adequately marked and stored.

**2.1.6** The time for last closing of the access onboard before leaving the berth shall be recorded in the logbook and all persons onboard the yacht shall be counted.

## **2.2 AREAS OF OPERATION**

**2.2.1** The following Areas of Operation are applicable within the context of the UAE Yacht Regulations:

- a) Coastal operation
- b) Ocean operation
- c) Polar operation

**2.2.2** Coastal operation is operation in waters where:

- a) the yacht might be exposed to Beaufort 6 for part of the voyage, but where the Master can decide to change the route dependent on the weather conditions;
- b) the distance away from port of refuge is assumed to be limited and weather conditions are not assumed to change between alternative places of refuge to such an extent that the master cannot avoid extreme weather at sea;
- c) communications facilities by VHF radio contact are available;
- d) reliable weather forecasts are available; and
- e) suitable rescue facilities will be readily available.

**2.2.3** Ocean operation is operation in waters where the yacht:

- a) might be exposed to heavy sea states;
- b) is assumed to be outside the range of rescue assistance from shore; and
- c) is assumed to be outside the possibility to seek shelter.

**2.2.4** Polar operation is operation in waters where the yacht is:

- a) designed, equipped and manned for operation in waters with extreme weather conditions including ice. Operation in ice does not include strengthening to withstand collision with icebergs.
- b) operating in areas where no rescue assistance is assumed available; and
- c) operating in areas with limited radio communications.

## 2.3 MODES OF OPERATION

**2.3.1** The following Modes of Operation are applicable within the context of the UAE Yacht Regulations:

- a) Transfer mode
- b) Normal mode
- c) Event mode

**2.3.2** Yachts intended for Coastal operation may undertake transfer voyages on calm weather routes where yachts are transferred from one coast to another. For Coastal yachts in Transfer mode only permanent crew are to be onboard the yacht.

**2.3.3** The requirements stated in the UAE Yacht Regulations are based on the full capacity of the yacht in terms of the number of guests in addition to the permanent yacht crew, as specified in the Yacht Safety Certificate. This is the Normal operating mode for a private yacht.

**2.3.4** Event mode is only applicable in port, or at anchor or a distance limited to 5 nm from safe refuge. In the Event mode the guest capacity of the yacht can be increased provided that additional temporary crew and life saving appliances are provided.

## Ch. 3 VERIFICATION OF COMPLIANCE

### 3.1 SAFETY LEVELS

**3.1.1** The functional requirements of the UAE Yacht Regulations are to be met by either complying with existing prescriptive regulations or by the following alternative methods of verification:

- a) Analysis;
- b) Demonstration; and
- c) Risk Assessment (see Annex A).

The UAE Yacht Regulations provide a consistent safety level independent of size, area of operation, mode of operation and number of persons onboard. The UAE Yacht Regulations apply increasing requirements to compensate for increased risk.

**3.1.2** The main governing parameters described below are used to differentiate on the measures needed to meet the functional requirements within the segments covered by the UAE Yacht Regulations:

a) Number of Guests:

|      |       |     |
|------|-------|-----|
| < 12 | 12-60 | >60 |
|------|-------|-----|

b) Area of Operation:

|         |       |       |
|---------|-------|-------|
| Coastal | Ocean | Polar |
|---------|-------|-------|

c) Mode of Operation:

|          |        |       |
|----------|--------|-------|
| Transfer | Normal | Event |
|----------|--------|-------|

d) Type of yacht:

|      |       |            |
|------|-------|------------|
| Sail | Motor | Expedition |
|------|-------|------------|

**3.1.3** The Owning Company of the yacht shall accept the obligation to supply sufficient information to enable the UAE National Transport Authority, or RO operating on its behalf to fully assess the features of the design.

## **3.2 EQUIVALENTS AND EXEMPTIONS**

**3.2.1** Where the UAE Yacht Regulations require that a particular fitting, material, appliance or apparatus, or type thereof, shall be fitted or carried in a yacht, or that any particular provision shall be made, the UAE National Transport Authority or the RO may allow any other fitting, material, appliance or apparatus, or type thereof, to be fitted or carried, or any other provision to be made in the yacht, if it is satisfied that such fitting, material, appliance or apparatus, or type thereof, or provision, is at least as effective in fulfilling the functional requirements of the UAE Yacht Regulations.

**3.2.2** Acceptance of equivalences shall be based on equivalent safety of the yacht. Equivalents approved need not be stated in the Yacht Safety Certificate.

**3.2.3** Where compliance with any of the requirements of these Regulations would be impractical for the particular designs of the yacht, the UAE National Transport Authority may substitute those with exemptions provided that equivalent safety is achieved.

**3.2.4** An exemption may result in operational limitations and may be issued for a limited period of time.

**3.2.5** Exemptions approved by the UAE National Transport Authority shall be issued with an Exemption Certificate. A list of exemptions is required if there are more than one exemption. This list shall be an attachment to the Exemption Certificate.

## **Ch. 4 GENERAL DEFINITIONS**

The following general definitions, in alphabetical order, are applicable throughout these Regulations:

**Anniversary date:** Means the day and the month of each year which will correspond to the date of expiry of the relevant certificate.

**Approved:** Means approved by the UAE National Transport Authority or the Recognised Organisation.

**Area of Operation:** Means the area in which the yacht is presently operating. In the context of these Regulations the following areas of operation apply: Coastal, Ocean and Polar.

**Auxiliary machinery spaces:** Spaces containing internal combustion engines, driving generators, sprinkler, drencher or fire pumps, bilge pumps, oil filling stations, switchboards, similar spaces and trunks to such spaces.

**Auxiliary machinery spaces having little or no fire risk:** Spaces such as refrigerating, stabilising, ventilation and air conditioning machinery, switchboards of aggregate capacity 800 kW or less, similar spaces and trunks to such spaces.

**Breadth (B):** The extreme width from outside of frame to outside of frame.

**Bridge:** A location from where the yacht can be safely navigated.

**Bulkhead deck (or Datum):** Means a watertight deck or equivalent structure of a non-watertight deck covered by a weathertight structure of adequate strength to maintain the weathertight integrity and fitted with weathertight closing appliances.

**Certificates:** The Yacht Safety Certificate and other mandatory certificates, which are issued to yachts complying fully with these Regulations.

**Convention:** This term is used to refer to all IMO conventions, for example, the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS Convention).

**Control stations:** Those spaces in which the yacht's radio or navigating equipment or the emergency source of power and emergency switchboard are located, or where the fire recording or fire control equipment is centralised, or where other functions essential to the safe operation of the yacht such as propulsion control, public address, stabilisation systems, etc., are located. A continuously manned control station is a control station which is continuously manned by a crew member while the yacht is in normal operation.

**Crew / Crew member:** All of a yacht's personnel employed or engaged in any capacity either directly by the Owning Company or through a manning agency and remunerated to operate or serve onboard.

**Crew accommodation:** The spaces allocated for the use of the crew, including cabins, sick bays, offices, lavatories, lounges and similar spaces.

**Critical design conditions:** Means the limiting specified conditions, chosen for design purposes, which the yacht shall keep in displacement mode. Such conditions shall be more severe than the "worst intended conditions" by a suitable margin to provide for adequate safety in the survival condition.

**Design waterline:** Means the waterline corresponding to the maximum operational weight of the yacht with no lift or propulsion machinery active.

**Escape:** Means getting from the location of the person at the time when an incident occurs to the nearest or the assigned muster station.



**Galleys:** Those enclosed spaces containing cooking facilities with exposed heating surfaces, or which have any cooking or food heating appliances each having a power of more than 5 kW.

**Garages:** Spaces not normally subdivided in any way and normally extending to either a substantial length or the entire length of the yacht in which motor vehicles with fuel in their tanks for their own propulsion and/or goods (packaged or in bulk, in or on rail or road cars, vehicles, trailers, containers, pallets, demountable tanks or in or on similar stowage units) can be loaded and unloaded, normally in a horizontal direction.

**Gross Register Ton (GT):** The volume of all enclosed spaces expressed in volume terms on the basis of 100 ft<sup>3</sup> (2.83 m<sup>3</sup>) equals one register ton.

**Guest:** A person invited to stay onboard for a shorter or longer time by the Owner of the yacht or by any person authorised by the Owner. A guest is every person other than:

- a) the Master, officers and crew or other persons employed or engaged in any capacity onboard a yacht; and
- b) a child under one year of age.

**High speed yacht:** Any motorised yacht capable of reaching an operating speed of 25 knots or above and in accordance with the appropriate revision of the High Speed Craft Code (HSC Code 2000): a craft capable of a maximum speed, in meters per second (m/s), equal to or exceeding  $3.7 \times \nabla^{0.1667}$  ; where  $\nabla$  is the volume of the displacement corresponding to the design waterline, expressed in cubic meters (m<sup>3</sup>) excluding craft the hull of which is supported completely clear above the water surface in non-displacement mode by aerodynamic forces generated by ground effect.

**Length:** The length (L) should be taken as 96% of the total length of a waterline at 85% of the least moulded depth measured from the top of the keel, or as the length from the fore side of the stem to the axis of the rudder stock on the waterline, if that be greater. In yachts designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline. The overall length (LOA) means the overall length of the yacht's hull including all predominantly attached structure.

**Lightweight:** The displacement expressed in metric tonnes of a yacht without its variable weights such as helicopters, water-sport equipment, cars, fuel, lubricating oil, ballast water (if applicable), fresh water and feed water in tanks, consumables, guests and crew and their personal effects.

**Machinery spaces:** Spaces containing internal combustion engines, gas turbines and/or boilers, either used for main propulsion or having an aggregate total power output of more than 110 kW, generators, oil fuel units, major electrical machinery and similar spaces and trunks to such spaces.

**Maximum speed:** The speed achieved at the maximum continuous propulsion power for which the yacht is certified at maximum operational weight and in smooth water.

**Officers and crew:** Personnel necessary to carry out the maritime operations.

**Oil:** Means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products.

**Operating compartment:** An enclosed area from which the navigation and control of the yacht is exercised by the Officer on watch.

**Operating limitations:** Means the yacht limitations in respect of handling, controllability and performance and the yacht operational procedures within which the yacht is to operate.

**Operating station:** A specific area of the operating compartment equipped with the necessary means for controlling the yacht's navigation, manoeuvring and communications and from where the functions necessary to ensure safe navigation, manoeuvring, communication, command, conning and lookout can be carried out.

**Owner:** Referring to the owner in person to which the yacht belongs.

**Owning company:** The company who is officially registered as the owner of the yacht.

**Passengers:** The term "passenger" is not used within the UAE Yacht Regulations and is replaced by the term "guests" for private yachts. When present, the term "passenger" refers to other international regulations.

**Persons:** Means all persons onboard, including crew, Owners and guests.

**Public spaces:** Those spaces allocated for the guests including bars, refreshment areas, smoke rooms, main seating areas, lounges, dining rooms, recreation rooms, lobbies, lavatories and similar spaces.

**Recognised Organisation (RO):** The classification society authorised by the UAE National Transport Authority to perform approval, surveys and issue certificates on behalf of the UAE National Transport Authority in accordance with a delegation agreement.

**Service spaces:** Those enclosed spaces used for pantries containing food warming equipment but no cooking facilities with exposed heating surfaces, lockers, store-rooms and enclosed baggage rooms. Such spaces containing no cooking appliances may contain:

- a) coffee automats, toasters, dish washers, microwave ovens, water boilers and similar appliances, each of them with a maximum power of 5 kW; and
- b) electrically heated cooking plates and hot plates for keeping food warm, each of them with a maximum power of 2 kW and a surface temperature not above 150°C.

**Support yacht:** A yacht purpose built to carry supplies, equipment, stores and support crew to another yacht. The support yacht is normally owned and operated by the same company that owns the parent / supported yacht.

**Verification:** Means the evidence that proves compliance with these Regulations.

**Watertight:** Means that in any sea condition water will not penetrate into the ship. In relation to a structure watertight means capable of preventing the passage of water through the structure in any direction under the head of water likely to occur in the intact or damaged condition.

**Weathertight:** Means that water will not penetrate into the yacht in any wind and sea conditions.

**Weather deck:** A deck which is completely exposed to the weather from above and from at least two sides.

**Worst intended conditions:** Means the specified environmental conditions within which the intentional operation of the yacht is provided for in the certification of the yacht. This shall take into account parameters such as the worst conditions of wind force allowable, significant wave height (including unfavourable combinations of length and direction of waves), minimum air temperature, visibility and depth of water for safe operation and such other parameters as the UAE National Transport Authority or the RO may require in considering the type of yacht in the area of operation.

## **PART 2 BUOYANCY AND STABILITY**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** The yacht shall be designed and operated to minimise the risk, including but not limited to, the impact of the environment causing dynamic capsize, broach, damage to persons and equipment, loss of watertight integrity from collision, grounding, static capsize due to changing loading conditions, or hostile acts and errors in ship handling.

**1.1.2** High speed yachts shall have a level of seaworthiness including motions tolerable by persons and equipment in all intact operating conditions.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** The yacht shall have sufficient freeboard, buoyancy and bow height to prevent excessive shipping of green seas, plunging or foundering in any operating condition seriously affecting the safety of the yacht.

**1.2.2** In the hull or bulkhead that is supposed to be watertight all penetrations and openings shall be of a kind that provides the same degree of watertight integrity as the surrounding structure, also in the event of fire.

**1.2.3** In the event of one watertight compartment being flooded there shall be an ability to control any leakage to adjacent compartments.

**1.2.4** The yacht shall have the ability to remain afloat and not capsize in all operating conditions.

**1.2.5** The yacht shall have the ability to remain afloat and not capsize in defined damaged conditions.

**1.2.6** The yacht shall be provided with operational guidance to facilitate safe handling of the yacht.

### 1.3 DEFINITIONS

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulations:

**Afloat:** Means for the waterline not to exceed the bulkhead deck.

**Capsize:** Means roll, heel or list to the point of angle of vanishing stability.

**Closing appliance:** Means a device for ensuring an opening in a watertight structure can be closed watertight or weathertight.

**Collision damage:** Means a damage having a defined vertical, longitudinal and transverse extent as defined in referenced codes/regulations, causing loss of buoyancy. A collision can take place anywhere along the hull side and the bow area of the yacht. A collision may involve damage of transverse and longitudinal watertight bulkheads depending on the damage risk levels.

**Damage:** Means a condition in which the yacht has lost buoyancy due to penetration of the hull causing flooding of sea-water.

**Downflooding point:** Means the lower edge of any opening through which progressive flooding may take place. Such openings should include air-pipes, ventilators and those which are closed by means of weathertight closing appliances and openings with insufficient or no closing appliances (unprotected openings). Weathertight openings may not be submerged in equilibrium condition and unprotected openings are not to be submerged within the required range of positive stability.

**Green seas:** Means wash and waves that break over the weather deck and exposed ship parts.

**Main watertight compartment:** Means a space below the bulkhead deck divided by continuous (extending from side to side and from bottom to the deck) transverse watertight bulkheads with a distance of at least the value of the longitudinal extent of damage.

**Plunging:** Means the event where the yacht's bulkhead deck repeatedly dips below the waterline for a short period of time.

**Raking damage:** Means damage to the yacht's bottom as defined by the 2000 HSC Code. This is a special case of bottom damage, explicitly caused by grounding when the yacht is at high speed.

**Upright:** Means for intact, near vertical; for damaged, the angle of list acceptable for the safety of the yacht.

## **Ch. 2 FREEBOARD AND RESERVE BUOYANCY**

### **2.1 FREEBOARD**

**2.1.1** All yachts shall have a freeboard- or bulkhead deck throughout their length.

**2.1.2** For yachts with size and arrangement that fit into the framework of the ICLL this convention shall be used to verify the necessary freeboard and bow height.

### **2.2 LOADLINE AND DRAFT MARKS**

**2.2.1** A load line mark shall be fitted on each side amidships to indicate the maximum operating loadline of the yacht as used for stability- and reserve buoyancy calculations.

**2.2.2** The yacht shall be equipped with means to allow determination of the displacement and trim. Draft marks using metric units shall be marked on each side of the hull, forward and aft to enable determining trim and displacement of the yacht.

### **2.3 RESERVE BUOYANCY**

**2.3.1** Reserve buoyancy shall be calculated by including only those volumes which are assumed to be watertight, but shall include at least the volume up to the bulkhead deck. Volumes of superstructures may be included up to the lower edge of any weathertight opening.

**2.3.2** The reserve buoyancy shall not be less than that given in the table below, expressed in percentage of the displacement, for the area of operation for the yacht is certified.

| <b>TYPE OF YACHT</b> | <b>COASTAL</b> | <b>OCEAN</b> | <b>POLAR</b> |
|----------------------|----------------|--------------|--------------|
| Normal Single hull   | 200%           | 300%         | 400%         |

Tab 2-1

**2.3.3** For existing yachts the UAE National Transport Authority may allow to adjust these requirements if the requirements for freeboard and stability are fulfilled.

**2.3.4** The values in table 2-1 are required, as far as applicable, also for other kinds of yachts other than single hull motor yachts.

## **2.4 VERIFICATION OF COMPLIANCE**

**2.4.1** The following documents shall be submitted for approval for verifying compliance with the requirements:

- a) watertight and weathertight integrity plan;
- b) drawing showing position of draft marks (may be included in the yacht's loading manual); and
- c) calculation of freeboard and reserve buoyancy as used for the yacht's loading manual.

## **Ch. 3 PENETRATIONS AND CLOSING APPLIANCES**

### **3.1 BOUNDARIES**

**3.1.1** The yacht shall have water- and weathertight boundaries that prevent the accumulation of water in any undamaged main watertight compartment and superstructure.

**3.1.2** The external structure and fittings shall be possible to be kept weathertight above the bulkhead deck, including the bulkhead deck and as far up as possible.

**3.1.3** Openings in watertight boundaries shall be normally closed by a hinged hatch or door. Other arrangements may be accepted or required by the UAE National Transport Authority.

**3.1.4** Pipes and penetrations (for cabling, ducting or other purposes) shall provide the same level of watertight integrity as the surrounding structure.

**3.1.5** Pipes and penetrations shall be minimised in the forward most watertight bulkhead; not be made of materials that would impair the watertight integrity in the event of a fire.

### **3.2 CLOSING APPLIANCES**

**3.2.1** Openings in all main sub-division compartment boundaries shall be reduced to a minimum compatible with the design and operation of the yacht.

**3.2.2** Closing appliances fitted to openings in watertight boundaries shall be of class approved type and capable of being operated locally and closed rapidly in all operating conditions. Alarm for open position shall be arranged in wheelhouse.

**3.2.3** Doors and hatches fitted in watertight boundaries and intended for passage of persons shall allow escape from a watertight compartment following the flooding of any adjacent compartment.

**3.2.4** To prevent progressive flooding all hull pipe bulkhead penetrations below bulkhead deck shall be fitted with closing valves, closable from a position above bulkhead deck.

**3.2.5** All shaft penetrations shall be fitted with watertight seals.

**3.2.6** The collision bulkhead may be penetrated by one pipe for dealing with fluid in the forepeak, the valve chest of which shall be fitted on the inside of the forepeak on the collision bulkhead and the valve operable from the bulkhead deck. The UAE National Transport Authority may approve fitting of the valve on the aft side of the collision bulkhead, if readily available from the space aft of the collision bulkhead.

**3.2.7** Openings above the bulkhead deck shall be fitted with weather-tight closing devices. Weathertight closing devices shall be of adequately robust construction to withstand minor damage, be able to be rapidly closed in a safe manner and be arranged with coaming etc.

**3.2.8** Discharge openings shall be arranged with efficient means for preventing water from passing inboard.

**3.2.9** Cargo ports and similar openings shall be fitted with watertight doors and arranged to minimise the probability of water ingress.

### **3.3 VERIFICATION OF COMPLIANCE**

**3.3.1** For all yachts all penetrations and closing appliances shall be of approved type by the UAE National Transport Authority or a RO on its behalf, and according to ICLL where applicable.

**3.3.2** Necessary documentation as required by the UAE National Transport Authority or the RO acting on its behalf is to be submitted for approval. General arrangements drawings shall be available and all openings and hull penetrations shall be identified in the drawings and the means to protect against water ingress shall be marked as either: Watertight, Weathertight, Valve, or Unprotected.

## **Ch. 4 DRAINAGE AND BILGE ARRANGEMENTS**

### **4.1 DRAINAGE**

**4.1.1** The yacht shall be arranged with a system for drainage of all open decks not designed to carry water in accordance with the stability documentation of the yacht. Discharges below the bulkhead deck shall be fitted with effective and accessible means of preventing water ingress.

**4.1.2** Where applicable, to reduce the effect of free surfaces in swimming pool, an emergency system for quick drainage shall be provided. A non-return valve shall be



fitted on the discharge pipe, remotely operable from a position above the bulkhead deck. Such system shall be able to drain each swimming pool within 3 minutes.

## **4.2 BILGE ARRANGEMENT**

**4.2.1** The yacht shall be capable of bilging leakage from damages to hull penetrations. For all yachts there should be arranged at least two bilge pumps with independent power supply. For yachts in coastal operation one of the pumps may be of portable type.

**4.2.2** Bilge from engine compartment(s) shall be arranged in such a way that no oily water is discharged overboard.

## **4.3 VERIFICATION OF COMPLIANCE**

**4.3.1** Necessary documentation shall be submitted for approval according to requirements given by the UAE National Transport Authority or a RO on its behalf.

**4.3.2** Demonstrations shall be carried out according to established practice.

## **Ch. 5 INTACT STABILITY**

### **5.1 INTACT STABILITY REQUIREMENTS**

**5.1.1** The yacht shall have adequate resistance to inclination to prevent capsize due to weather and waves, ice formations, crowding or free surface effects and, adequate restoring energy to return to upright once any environmental or internal load or effect is removed, in any operating condition.

### **5.2 VERIFICATION OF COMPLIANCE**

**5.2.1** For motor yachts the intact stability requirements as given in the 2008 IS Code (IMO Res.MSC.267(85)) shall apply.

**5.2.2** Yachts < 400 GT in Coastal operation need not comply with the IMO Weather Criterion (IS Code Part A Ch.2.3), but as guidance to the Master, intact stability curves shall be made showing wind speeds for which the IMO weather criteria is in compliance with, for the yacht's draught range.

**5.2.3** Any yacht operating in Polar operation shall comply with all applicable intact and damage stability requirements including allowance for ice accretion, calculated in accordance with IS Code Part B Par.6.3.1.

**5.2.4** For monohull sailing yachts, the following requirements shall apply:

- a) Intact stability to be calculated for relevant operating conditions, as a minimum Loaded Departure with 100% consumables and Loaded Arrival with 10% consumables.
- b) GZ curves for all relevant operating conditions shall have a positive range of not less than 90°. Less than 90° may be accepted for large sailing yachts provided operational criteria / limitations are put in place.
- c) The vertical centre of gravity (VCG) to be obtained by either:
  - an inclining of the complete craft in air on load cells; or
  - a detailed calculation of the weight and CG position for all components of the vessel, plus a 15% margin on the resulting VCG height;
- d) The angle of steady heel should be greater than 15 degrees in all relevant operating conditions.
- e) No openings 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.

For multi-hull yachts, the following additional requirements shall apply:

- f) Intact stability to be calculated for relevant operating conditions in both roll and pitch.
- g) Intact stability criteria as for multihull vessels given in the 2008 IS Code shall apply.
- h) In calculating pitch restoring moments, trim angles shall be found from several longitudinal centre of gravity (LCG) positions forward of that required for the design waterline.
- i) Trimarans used for Ocean and Polar operation shall have sidehulls each having a total buoyant volume of at least 150% of the displacement volume in the fully loaded condition.

All intact stability calculations shall be conducted using approved naval architecture software and all calculations to be approved by the UAE National Transport Authority or RO on its behalf.

**5.2.5** The following documentation to be submitted for approval by the UAE National Transport Authority or a RO on its behalf:

- a) preliminary stability calculations
- b) inclining test procedure
- c) inclining test report

The documentation shall be submitted well in advance before the yacht is taken into operation. Final stability calculations incorporating the results of the inclining test shall be submitted as soon as possible after approval of the lightweight data.

## **Ch. 6 DAMAGE STABILITY**

### **6.1 PURPOSE**

**6.1.1** The safety risk for the persons onboard related to water penetration of the watertight boundaries depends upon the design of the yacht and how it is managed/operated. The most expected accidents are caused by grounding or collision (with other vessel), causing bottom or raking damage and front or side damage, respectively.

**6.1.2** The yacht shall be designed so that the consequence of any such damage shall be kept to a minimum and could easily be determined, eventually, so that in the emergency situation which may follow, the Master and his crew can take the correct actions in order to save lives and property in the most extensive way.

**6.1.3** Number and location of watertight bulkheads, types of closing appliances etc. may be in conflict with normal design and operational requirements to a certain extent. The requirements given in this Chapter are to be regarded as representing a minimum level of protection of the yacht and the persons onboard. “Level of protection” is synonymous with “survivability in damaged conditions” or “damage stability requirements”.

### **6.2 FLOATABILITY PROTECTION**

**6.2.1** The yacht shall survive any damage of a reasonable extent anywhere below or above the waterline.

**6.2.2** The yacht shall survive any damage of a reasonable extent on particularly exposed parts of the hull. Particularly exposed parts are in front of the forward collision bulkhead, the deepest part(s) of the hull bottom, and around appendices fixed to the underwater structure.

**6.2.3** Damage to or loss of any unprotected appendage fitted to the yacht, like propellers, shafts and rudders, shall not cause the loss of watertight integrity to any subdivision compartment.

**6.2.4** All new yachts  $\geq 400$  GT shall have standard survivability. The UAE National Transport Authority may deviate from this requirement if found unreasonable; operating profile, number of persons, speed at maximum continuous rating and other relevant aspects taken into consideration.

**6.2.5** For new yachts  $< 400$  GT minimum survivability requirements can be accepted. Additional requirements and/or limitations may be given related to operation area, weather conditions, speed and other relevant aspects. For high speed yachts the IMO 2000 HSC Code for cargo craft applies.

**6.2.6** For existing yachts not complying with the standard degree of survivability the UAE National Transport Authority may give additional requirements and/or limitations to achieve a reasonable degree of survivability compared with a new yacht.

### **6.3 VERIFICATION OF COMPLIANCE**

**6.3.1** Verification of compliance with the relevant damaged stability requirements shall be made with a well proven computer program accepted by the UAE National Transport Authority. The calculations shall be based on the following (for new yachts constructed after entry into force of these Regulations):

- a) For yachts  $\geq 500$  GT, SOLAS 2009 (IMO Res.MSC.216(82)) or the IMO 2000 HSC Code are applicable.
- b) For yachts  $< 500$  GT but with more 12 persons in addition to crew, the following is applicable:
  - Conventional yacht: damage stability according to SOLAS 1974 Ch.II-1 Part B Reg.8 par. 2.3-6;
  - High speed yacht: IMO 2000 HSC Code Ch.2 as applicable for a passenger craft.
- c) For yachts  $< 500$  GT with less than 12 persons in addition to crew, the following is applicable:
  - Conventional yacht: damage extent is to be assumed as specified in SOLAS 1974 Ch.II-1 Part B Reg.8.4;
  - High speed yacht: IMO 2000 HSC Code Ch.2 as applicable for a cargo craft.

For side damages and bottom damages, except bottom raking damage, a one-compartment standard can be assumed. For the bottom raking damage, a heel of 15 degrees can be accepted, provided that efficient non-slip deck surfaces and suitable holding points, e.g. holes, bars etc. are provided.

**6.3.2** Preliminary damaged stability calculations shall be forwarded to the Administration for approval as early as possible at the design stage.

## **Ch. 7 OPERATIONAL PROVISIONS**

### **7.1 STABILITY INFORMATION**

**7.1.1** Information required by the Master pertaining to the stability and buoyancy of the yacht, shall be provided and maintained with the yacht to facilitate its safe operation and for escape, evacuation and rescue. The information is subject to approval by the UAE National Transport Authority or a RO on its behalf.

**7.1.2** At least one paper copy of the loading manual shall be present onboard and available in the wheelhouse. The content of the intact and damage stability information shall as a minimum contain instructions on operation including:

- a) the stability standard or requirements;
- b) general precautions against capsizing;
- c) loading and operating restrictions;
- d) cross-flooding arrangements, if fitted, with descriptions of damage conditions which may require cross-flooding;
- e) standard operating loading conditions and examples for developing other acceptable loading conditions using the information contained in the stability booklet;
- f) trim and draught limitations;
- g) free surface effects;
- h) swimming pool drains;
- i) heeling effects from personnel, wind and equipment;
- j) loading and unloading precautions;
- k) securing arrangements;
- l) control of openings and general precautions for preventing unintentional flooding;
- m) heel/list;
- n) hull strength, if applicable;
- o) non sailing conditions, if applicable;
- p) particulars of the yacht;
- q) details of the lightship and its derivation;
- r) details of hydrostatics and cross curves of stability;
- s) capacity and centroid of tanks, stores and cargo spaces plus other payload data;
- t) example calculations of stability;
- u) example yacht conditions compliant with stability requirements;
- v) damage stability information demonstrating survivability following damage;
- w) methods to recover margins of buoyancy and stability.

**7.1.3** For all sailing yachts the stability booklet shall contain information and guidance on the following:

- a) Stability hazards to which the sailing yacht is vulnerable, including the risk of capsizing in roll and/or pitch.
- b) Maximum safe wind speeds in relevant operating conditions.
- c) The choice of sails to be set with respect to the prevailing wind strength, relative wind direction, and sea state.
- d) Precautions to be taken when altering course from a following to a beam wind.

## **7.2 LOADING COMPUTER**

**7.2.1** If the yacht has a loading/stability computer installed, it shall be approved by the same authority which approved the stability calculations. The approval shall follow the principles and guidelines as given in the IMO 2008 IS Code Part B Ch.4.

**7.2.2** If a stability or loading computer is fitted and it is the main source of verifying compliance with stability and buoyancy requirements, a duplicate backup facility shall be provided onboard.

### **7.3 DRY DOCKING**

**7.3.1** The Master shall be provided with information on dry-docking the yacht. The content of this information shall as a minimum contain:

- a) the location of dock blocks and lightship weight distribution;
- b) the location of discharges, shore connections and appendages; and
- c) information for maintaining stability throughout the dry-docking process.

### **7.4 WATERTIGHT INTEGRITY**

**7.4.1** The Master shall be provided with information to maintain the watertight and weathertight integrity of the yacht. The content of this information shall contain as a minimum:

- a) the extent, location and capabilities of watertight and weathertight boundaries, including access trunks, tunnels and scuttles;
- b) the locations of watertight and weathertight closing devices, including portable plates, for personnel and equipment access;
- c) the location of penetration closing devices including remote actuation points;
- d) the locations of downflooding points;
- e) the operational system and markings for closing appliances at sea;
- f) the drainage arrangements of enclosed spaces;
- g) the location and capacity arrangements for the removal of liquids; and
- h) information Onboard High Risk Level Yachts.

### **7.5 MANOEUVRING CHARACTERISTICS**

**7.5.1** The Master shall be provided with information pertaining to the manoeuvring characteristics of the yacht to assist in the avoidance of collisions and groundings.

The content of this information shall contain as a minimum:

- a) the turning characteristics including initial turning;
- b) the stopping and accelerating characteristics;
- c) the effects of squat and manoeuvring in shallow water;
- d) the effects of wind on manoeuvring; and
- e) the minimum manoeuvring speed.

**7.5.2** The Master shall be provided with information pertaining to ship operations (e.g. in heavy weather) or manoeuvres in order to minimise risk/reduce hazards to crew and equipment. The content of this information shall as a minimum contain information on:

- a) the risk of broaching;
- b) the shipping of green seas;
- c) slamming;
- d) heel in turn characteristics;
- e) the impact of motions on the safety of the crew and essential safety functions; and
- f) practices or methods specific to the vessel to reduce the impact of motions on the safety of the crew and equipment.

## **PART 3 STRUCTURAL INTEGRITY**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** This Part of the Regulations is to ensure that:

- a) safety related aspects to the structure of the yacht encompass safety of life, health, and the environment;
- b) the structural integrity of the yacht encompasses the property and provides a reliable mode of operation.

**1.1.2** This Part sets the requirements to the detail prescriptive formula and safety factors for calculation of strength in accordance with recognised technical standards such as Classification Rules, structural codes and ISO standards.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** All structural elements of the yacht shall have a sufficient strength for all intended operating and environmental conditions.

**1.2.2** Loads acting on the structure are to represent all intended operating and environmental conditions.

**1.2.3** Loads and load scenarios that are considered to have an acceptably low probability may be disregarded in the structural design.

**1.2.4** Where a combination of different loads acts on the structure, a realistic worst combination is to be used based on the degree of interaction and magnitude of the loads.

**1.2.5** Materials used in the structures are to be suited for the intended purpose. Material properties are to be documented and verifiable.

**1.2.6** The strength of a structural element is to reflect the criticality of the element and the characteristics of the load.

**1.2.7** Deflections of the structural elements shall be kept within normal accepted limits in the marine industry, and within limits required by functionality of machinery and equipment.

**1.2.8** The construction of the yacht is to be based on recognised quality system and procedures, and the construction must be documented and verified.



### 1.3 DEFINITIONS

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulations:

**Acceptable low probability:** Means it is applicable for events that are so unlikely that the risk is acceptable without any further mitigation. Reference level for this probability is equivalent to the safety level in the SOLAS Convention.

**Degree of uncertainty of loads:** Means the extent of uncertainty in the characterisation and calculation of design loads.

**FRP:** Means Fibre Reinforced Plastics.

**Intended operating conditions:** Means the operating conditions that the yacht is intended used and designed for.

**Interaction of loads:** Means several different load effects acting together on the same element at the same time.

**Largest expected load:** Means the most probable largest load in a statistical distribution of loads.

Realistic worst combination: Means:

- a) When several loads are acting on a structural element, the realistic worst combination is to combine the loads in such a way that it reflects the intended operation of the yacht. (Example: load combinations in a sailing rig with different sail settings)
- b) Combination of statistical loads (waveloads) in such a way that the probability for the combination is within the acceptable safety level. (Example: combination of global and local wave loads on a catamaran).

Reference for this safety level is equivalent to the safety level in the SOLAS Convention.

**Spar:** Means a strong pole used for masts and booms on a sailing yacht.

**Stay:** Means a rope, wire or solid rod supporting or bracing a mast or spar, etc.

**Standing rigging:** Means the sailing rig without sails and its roping.

## **Ch. 2 LOADS AND STRENGTH**

### **2.1 EXTENT OF STRUCTURAL VERIFICATION**

**2.1.1** These Regulations apply to the hull and superstructure of the yacht including:

- a) all parts of the hull including overall strength, and local strength;
- b) foundation for equipment;
- c) mooring and towing equipment;
- d) anchoring equipment;
- e) rudder and its attachments;
- f) hull appendices and brackets (stabilising fin attachments, propeller shaft brackets, etc.);
- g) load-carrying structure for dry-docking of the yacht.

**2.1.2** For sailing yachts the following additional items are to be covered by these Regulations:

- a) masts, spars, shrouds and stays of the standing rigging;
- b) foundation and attachment for mast, stays, shrouds, winches, cleats;
- c) keel and its attachment to the hull.

### **2.2 LOADS**

**2.2.1** The following types of load are to be considered:

- a) Permanent loads-weight of structures, equipment and permanent ballast, pretension of the rig. The magnitude of load considered is to be the specified value.
- b) Variable loads - crane loads, life boat lifting loads, variable ballast, tank pressure, accommodation load, stored materials/equipment. The basis for calculation is the specified value of the load.
- c) Environmental loads-wave and wind, inertia loads, snow and ice accumulation. The magnitude of the load shall be considered as “largest expected load” taking into account statistical distribution and reliability of wave data for the area of operation for the yacht.
- d) Deformation loads-temperature expansion, creep. To be considered, when relevant, based on the mechanical characteristics of the material.
- e) Accidental loads-flooding, collision, effects of mal-operation. Basis for calculation is normally the expected value without any safety factor on the loads.
- f) Repeating loads acting on a structure, such as wave loads, may cause fatigue effects and the basis for fatigue calculations shall be the expected load history.

**2.2.2** The degree of uncertainty in the loads used in the calculation is to be reflected in the safety factors.

## **2.3 STRENGTH**

**2.3.1** The strength (R) of structural elements covered by these Regulations is to be higher than the load effect (S) on the same element with a safety margin (SF) reflecting the criticality and degree of uncertainty in the assessment method. Expressed in mathematical terms:  $R > S \cdot SF$ .

**2.3.2** Technical standards used as basis for verification of strength are to be accepted by the UAE National Transport Authority or the RO.

**2.3.3** The strength of the material is to be based on reliable material data. Safety factors used for strength calculations shall reflect the type of structure.

**2.3.4** The strength of a structural element is to reflect the criticality of that element as described below. The more critical elements shall have a higher safety level:

- a) special structural elements where a failure may have immediate catastrophic effect on the yacht;
- b) primary structural elements that are important for the overall safety of the yacht;
- c) secondary structural elements of the hull where a local failure is not immediately critical for the yacht.

**2.3.5** The strength of all fuel tanks shall be documented as they may have severe environmental impact.

**2.3.6** Deformation which may affect the support of machinery, shafts or piping systems shall be based on the expected extreme value.

**2.3.7** Accidental loads may damage the structure, but the following load cases shall be designed for accidents without permanent damage:

- a) flooding;
- b) grounding at moderate speed for sail yachts with keel.

**2.3.8** Structural failure due to fatigue due to repeating loads shall be considered.

## **2.4 MATERIALS**

**2.4.1** All materials used for the construction shall be suited for the purpose.

**2.4.2** The structural verification of the hull is to be based on known mechanical properties of the materials.

**2.4.3** The mechanical properties of the material are to cover ageing effects where this is relevant.

**2.4.4** Steel, aluminium and fibre composites are generally accepted materials for hull construction. The mechanical properties for a specific brand, type and quality need to be documented in each case.

**2.4.5** Yachts for area of operation Polar require material properties to be suited for such conditions.

## **2.5 CONSTRUCTION**

**2.5.1** Construction of the hull and structural elements is to be made under a quality system at a level of ISO9001. Other quality systems at a similar level may be accepted by the UAE National Transport Authority or the RO.

## **Ch. 3 VERIFICATION OF COMPLIANCE**

### **3.1 EXTENT OF VERIFICATION**

**3.1.1** Yachts  $\geq 400$  GT shall be designed, built and certified according to the regulations in applicable class rules. All structural related regulations given in this part are considered to be fulfilled through the class regime.

**3.1.2** For yachts  $< 400$ GT, class certification is not mandatory, and verification of compliance with the yacht regulations can be:

- a) certification by class as for yachts  $\geq 400$  GT; or
- b) according to applicable recognised maritime standards ensuring a equivalent level of safety, and in accordance with the functional tasks of the yacht; or
- c) based on a recognised international code applicable for the yacht.

**3.1.3** Where novel design and new technical solutions are not directly covered by referred rules and standards, compliance with the intentions of these Regulations shall be documented and demonstrated in a structured manner. This includes e.g. documentation of equivalence principles, applicable risk analysis, extended tests and trials etc. When approval of the yachts is based on such considerations, the approach needs to be agreed with the UAE National Transport Authority or the RO acting on its behalf.

**3.1.4** The general principles of verification of compliance consist of the following main steps:

- 1) Approval of overall project documentation;
- 2) Follow-up during construction and installation, including materials used in fabrication, fabrication procedures, fabrication quality with regards to welding, dimensions, alignment etc.;
- 3) Final inspection and tests before delivery including sea trials
- 4) In operation survey.

The above verification shall be conducted by the UAE National Transport Authority or the RO acting on its behalf.

## **3.2 DOCUMENTATION OF STRENGTH**

**3.2.1** The strength of the yacht is to be documented through all steps of the process. This documentation is normally to be compiled and filed by the Yard. This includes:

- a) material properties, datasheets, material certificates;
- b) structural design to be documented through a complete set of structural drawings of the hull;
- c) structural calculations of critical elements;
- d) quality control documents from construction, including material tests, recorded temperature/humidity conditions for Fibre Reinforced Plastics (FRP) construction, welding procedures for critical details; and
- e) quality reports from construction covering repairs, changes etc.

## **3.3 DOCUMENTATION TO BE KEPT ONBOARD THE YACHT**

**3.3.1** The following documents are to be submitted with the delivery of the yacht:

- a) General arrangement, midship section drawings with verification stamp/signature;
- b) Docking plan;
- c) Tank plan;
- d) Operating manual where all operating limitations, loads etc. from design are listed.

## **3.4 EXISTING YACHTS**

**3.4.1** Existing yachts will be considered to be of adequate structural strength if they are in good repair and are:

- a) Built to standards for new yachts and remain in class; or
- b) Built to the standards for new yachts and, where no longer in class, are subject to a full structural survey to determine that the hull is substantially in as-built condition and records indicate satisfactory standard; or
- c) Not built in accordance with standards for new yachts, but where full information, including calculations, drawings and details of materials have been provided and reviewed and the yacht subject to a satisfactory survey is found to be to a satisfactory the standard of these Regulations.

## **PART 4 MACHINERY AND ELECTRICAL INSTALLATIONS**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** The machinery and electrical installations shall be of a design and construction adequate for the service for which they are intended and shall be so installed and protected as to reduce to a minimum any danger to persons onboard. This applies to propulsion, steering and electrical installations with associated auxiliaries and also to any machinery installation regardless of importance.

**1.1.2** The machinery and electrical installations shall ensure that the speed, manoeuvrability and general performance of the yacht are safe and habitable for all persons onboard and provide safe navigation.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** The machinery installations shall provide guests with comfortable conditions while ensuring the ability to move the yacht with sufficient performance and safety margins in accordance with the operational modes defined for the yacht.

**1.2.2** The electrical installations shall ensure sufficient power to meet the needs and ensure power to specified consumers in relevant modes of emergency.

**1.2.3** The bilge system shall be capable discharging necessary volumes overboard in the foreseeable modes of normal and emergency operation.

**1.2.4** All systems and components are to be equipped with adequate control and monitoring devices to ensure reliable and safe operation.

**1.2.5** The machinery installations shall be designed so that any consequence of a single failure is within the acceptance criteria outlined in this Part of these Regulations.

**1.2.6** In an emergency, the comfort aspects shall yield for safety priorities. The fail to safety arrangement shall secure safety in the following order of priority:

- a) Personnel safety;
- b) Environmental safety;
- c) Asset safety.

**1.2.7** All systems and components shall be designed, installed and operated without causing unacceptable hazards to personnel.

### 1.3 DEFINITIONS

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulation:

**Control position:** Means a position equipped with means for control of a component/system/function.

**Failure:** Means a sudden event or deterioration causing loss of function.

**Flammable liquid:** any liquid having a flash point below 60°C at a vapour pressure of less than 60 psi (pounds per square inch) and a mixture of liquids with a component whose flash point is higher than 60°C, and which makes up 99 percent or higher of the total volume of the mixture, is not considered a flammable liquid.

**Local control:** Means control of a system/component from a position in the immediate vicinity of the controlled unit, and independent of the remote control system.

**Normal operational and habitable condition:** Means a condition under which the yacht, as a whole, is in working order and functioning normally. As a minimum, the following functions are considered available: propulsion machinery, steering gear, safe navigation, fire and flooding safety, internal and external communications and signals, means of escape, emergency boat winches, anchor winches and lighting necessary to perform normal operation and maintenance of the yacht. Designed comfortable conditions for habitability shall be provided, including cooking, heating and cooling, air conditioning, domestic refrigeration, mechanical ventilation, sanitary and fresh water. All utility systems for the listed functions shall be included.

**Remote control:** Means control of a system/component from any other position than the local position. The remote control system may be dependent on the local control system.

**Shut down:** Means that a unit is brought to a safe state.

**Single failure:** Means a single event on system or component level rendering the system or component unavailable.

## **Ch. 2 MACHINERY GENERAL**

### **2.1 OPERATIONAL SPECIFICATION**

**2.1.1** An operational specification shall be provided describing the intended operation of the yacht in different modes. Technical solutions and operational procedures implemented onboard shall be adapted to the risk related to the intended operation of the yacht, including area of operation, operational modes, number of persons onboard etc.

**2.1.2** The operational specification shall reflect the complexity of the yacht and the intended operation. For a yacht of traditional design intended for Coastal operation, the operational specification is assumed to be covered by the design specification.

### **2.2 MAIN DESIGN PRINCIPLES**

**2.2.1** All machinery related equipment installed onboard shall be fit for the marine environment.

**2.2.2** Machinery and processes with related automation and safety systems shall be designed with a principle of two independent means to prevent a process condition developing to a hazard.

**2.2.3** Control positions for all machinery onboard shall be arranged at convenient locations where adequate information and user interface is available to ensure safe, efficient and reliable operation. Handling and indication of command rights between control positions shall be unambiguous.

**2.2.4** The different control positions shall be equipped with necessary means for safe operation.

**2.2.5** All machinery necessary for propulsion and steering shall be arranged with means for local control. If the remote control system fails, it shall be possible to control the machinery locally.

**2.2.6** Automation and safety systems for all machinery onboard shall be designed with due regard to the intended operation, ensuring simple, intuitive and unambiguous user interface.

### **2.3 CONSEQUENCE OF FAILURE**

**2.3.1** The fail-to-safe principle shall be applied in the design of machinery systems. In case of a machinery failure, the affected components, systems and consequently the yacht shall transfer to the least hazardous state in accordance with the operational specification.



**2.3.2** Machinery systems shall in general be designed so that no single failure leads to unacceptable consequences. The acceptable consequence of failure depends on the operating mode and the systems affected by the failure.

**2.3.3** The dimensioning single failure scenario to be considered is failure of any machinery component (with the exception of main engine, shafting, transmission and driven unit). The consequence of a single failure shall in general not be loss of a main yacht function, but reduced performance may be acceptable.

**2.3.4** The maximum allowed time to re-establish a main function after single failure, the restoration time, shall be consistent with the operational specification of the yacht. This restoration time directs the need for redundancy in design of machinery systems including auxiliaries like control, power etc.

## **2.4 VERIFICATION OF COMPLIANCE**

**2.4.1** Yachts  $\geq 400$  GT shall be designed, built and certified according to the regulations in applicable class rules. All machinery related regulations given in this part are considered to be fulfilled through the class regime.

**2.4.2** For yachts  $< 400$ GT, class certification is not mandatory, and verification of compliance with these Regulations may be done either by:

- a) certification by class as for yachts  $\geq 400$  GT; or
- b) according to applicable recognised maritime standards ensuring an equivalent level of safety; or
- c) based on a recognised international code applicable for the yacht.

**2.4.3** Where novel design and new technical solutions not directly covered by these Regulations or referred rules and standards are utilised, compliance with the intentions of these Regulations shall be documented and demonstrated in a structured manner. This includes e.g. documentation of equivalence principles, applicable risk analysis, failure mode and effect analysis, tests and trials etc. When approval of the yachts is based on such considerations, the approach needs to be agreed with the Recognised Organisation (RO).

**2.4.4** The general principles of verification of compliance consist of the following main steps:

- 1) Approval of overall project documentation as given in this section.
- 2) Certification including approval of design plans and survey of main equipment.
- 3) Follow-up during construction and installation.
- 4) Final test before delivery including sea trials.
- 5) In operation survey.

The above verification shall be conducted by the UAE National Transport Authority or the RO.

**2.4.5** The following high level documentation shall, in addition to the documentation necessary for component / system approval and certification, be submitted for approval:

- a) Operational Specification - How the yacht is intended to be operated in the various operational modes, means of control, available control positions, transfer between different modes, emergency operation, intended level manning etc.
- b) Failure Mode and Effect Analysis (FMEA) - An FMEA shall be made identifying the possible failure modes in the propulsion and steering systems with necessary auxiliaries. The consequences of the failures shall be analysed, and it shall be demonstrated that the fail-to-safe principle is fulfilled.

These documents shall reflect the complexity of the yacht and the intended operation. For a yacht of traditional design intended for Coastal operation, the documents are assumed to be covered by the design specification.

**2.4.6** These regulations do not impose any limitations on possible design solutions as long as the overall safety aspects are fulfilled and verified.

## **2.5 CERTIFICATION AND SURVEY**

**2.5.1** The machinery installation for yachts with a valid certificate in a recognised class society shall in general comply with the class' survey regime.

**2.5.2** Yachts < 400 GT that do not have a Class Certificate have to undertake necessary verification and tests to document a similar level of compliance every 5 years. The necessary verification and test activities to demonstrate such compliance shall be agreed with the UAE National Transport Authority or the RO.

## **Ch. 3 PROPULSION MACHINERY**

### **3.1 PRINCIPLES**

**3.1.1** Propulsion is considered to be available when it is able to:

- a) move the yacht to the planned port, or to another safe stopping position;
- b) keep the yacht in position in steady Beaufort 8 weather condition;
- c) move the yacht in at least 7 knots speed in calm wind and water.

For yachts with area of operations, Coastal, any suitable anchoring place can be considered as "safe stopping position".

**3.1.2** The yacht is to have a reliable propulsion system for the intended area of operation. The tank capacity and range shall be specified.

**3.1.3** Failure scenarios shall be identified and described. The documentation of single component failure shall identify that all main functions remain available or are restored within acceptable time and that emergency power is available.

**3.1.4** The propulsion unit(s) is (are) to be designed for the marine environment for use onboard yachts exposed to roll, heave and pitch movements in sea conditions.

**3.1.5** The output rating of the propulsion unit is to be documented.

**3.1.6** The type, manufacture and identification number of the propulsion units are to be documented in system documentation carried onboard.

**3.1.7** A single propulsion line is acceptable for such components as main engine, propeller shaft, reduction gear and propeller.

**3.1.8** With the exception of the components specifically mentioned above as acceptable without redundancy, no single failure shall cause the main function “propulsion” to become unavailable.

## **3.2 ENGINES**

**3.2.1** The engines shall be fitted with adequate safety monitoring and control devices with respect to speed, temperature, pressure and other operational functions.

**3.2.2** The engines shall be protected against overspeed, loss of lubricating oil pressure, loss of cooling medium, high temperature, malfunction of moving parts and overload. Safety devices shall not cause complete engine shutdown without prior warning, except in cases where there is a risk for immediate breakdown or explosion.

**3.2.3** All surfaces with temperatures exceeding 220°C shall be insulated where impingement of flammable fluids may occur as result of a system failure. The insulation shall be impervious to flammable liquids and vapours.

**3.2.4** Means shall be provided whereby normal operation of propulsion machinery can be sustained or restored even though one of the auxiliaries becomes inoperative.

**3.2.5** Provision shall be made to facilitate cleaning, inspection and maintenance of main propulsion and auxiliary machinery.

**3.2.6** The exhaust gas pipes shall be arranged so that the risk of fire is kept to a minimum.

**3.2.7** Any engines shall be so installed as to avoid excessive vibration within the yacht.

### 3.3 GAS TURBINES

3.3.1 The requirements given in Ch.3.2 apply also to gas turbines.

3.3.2 In the event of failure of a shaft or weak link, the broken end shall not constitute a hazard to the occupants of the yacht, neither directly nor by damaging the yacht or its systems. Where necessary, protection may be fitted to achieve compliance with these requirements.

### 3.4 SERVICE AND MAINTENANCE

3.4.1 The routine service and maintenance work onboard shall be described in documents kept onboard. The documentation shall comprise service intervals, as well as instructions and guidelines for how to conduct the work.

### 3.5 VERIFICATION OF COMPLIANCE

3.5.1 Verification shall be performed as per Ch.2.

3.5.2 For yachts  $\geq 400$  GT, diesel engines with output power  $> 130$  kW shall be verified and certified for compliance with requirements as specified by the UAE National Transport Authority (<sup>1</sup>).

3.5.3 For equivalent safety to classification product certificates for main engines, maker's test report and type approval certificate for the main engine is accepted upon survey and onboard test of the engine at the yard for engines with power (kW) less than that given in the table below for the given area of operation. For multiple engine installations, the table applies for each engine, regardless of the total installed power.

| AREA OF OPERATION | COASTAL | OCEAN | POLAR |
|-------------------|---------|-------|-------|
| POWER (KW)        | < 1,000 | < 750 | < 500 |

Table 4-1

3.5.4 During sea trials, tests are to be carried out to demonstrate that functional requirements are fulfilled. Performance parameters measured during sea trial shall be included in documentation kept onboard.

---

<sup>1</sup> Compliance with MARPOL Annex VI will be accepted.

## **Ch. 4 MACHINERY PIPING AND BILGE**

### **4.1 GENERAL**

**4.1.1** All systems supporting the machinery installation shall be designed, arranged and installed in a safe and environmental friendly way.

**4.1.2** The systems shall be accessible for necessary service and maintenance.

### **4.2 TANKS AND PIPING**

**4.2.1** Tanks and piping containing flammable fluids with a flash point no lower than 43°C are to be designed and arranged as to minimise any danger to persons or to the yacht.

**4.2.2** Tanks containing flammable fluids are to be separated from persons onboard and baggage compartments by cofferdams or equivalent protection and insulation. Piping conveying flammable fluids is not to be carried through accommodation, service spaces and control spaces (e.g. bridge, radio room, emergency control room etc.).

**4.2.3** Connections to any flammable fluid tanks below the top of the tank are to be provided with shut-off valves fitted directly onto the tank, capable of being remotely closed from a position outside the compartment containing the tank.

**4.2.4** Detachable connections in piping for flammable fluids are to be so located or screened that possible leakage of oil will not reach any hot surfaces, electrical equipment, or other sources of ignition.

**4.2.5** In general, rigid piping is to be used in fuel systems. However, restricted use of flexible pipe will be permitted. Such flexible hoses are to have suitable connections, be resistant to salt, water, oil and vibration, be visible, easily accessible and are not to penetrate watertight bulkheads.

**4.2.6** Tanks containing flammable fluids, and which can be pumped up or filled from shore, are to have air pipes carried up to open air.

### **4.3 BILGE PUMPING SYSTEMS**

**4.3.1** At least one permanently arranged power bilge pump is to be provided in engine rooms.

**4.3.2** The bilge system shall have sufficient capacity to handle all foreseeable leaks plus the water flow capacity of the fire fighting systems.

**4.3.3** Bilge piping is to have an internal diameter sufficiently large to ensure a maximum flow velocity of 2 m/s with the required bilge pump capacity.

**4.3.4** At least one portable, submersible bilge pump is to be provided for emergency bilge pumping in compartments below the bulkhead deck.

#### **4.4 VERIFICATION OF COMPLIANCE**

**4.4.1** Verification shall be performed as per Ch.2.

### **Ch. 5 ELECTRICAL INSTALLATIONS**

#### **5.1 GENERAL**

**5.1.1** The electrical power supply of the yacht is to:

- a) provide necessary electrical power for the propulsion and the habitability including auxiliary and emergency systems;
- b) ensure proper operation of the yacht in all operating modes;
- c) ensure emergency power to consumers required to be available in an emergency situation.

**5.1.2** Electrical systems are to be designed and installed to minimise risk of fire and electric shock.

**5.1.3** Attention is to be paid to the provision of overload and short circuit protection of all circuits, except engine starting circuits supplied from batteries.

**5.1.4** The electrical installations are to be in accordance with accepted marine standards and shall meet the requirements of the RO and relevant parts of the IEC 60092 series of standards for electrical installations and equipment of yachts.

#### **5.2 MAIN POWER**

**5.2.1** The yacht shall be provided with a minimum of two main sources of power. Upon failure of any one generator, transformer or converter, the remaining power shall be sufficient for keeping the yacht in normal operational and habitable condition without recourse to the emergency source of power. Reduction of propulsion performance is accepted.

**5.2.2** For yachts designed for coastal operation only and with maximum 12 guests, only one generator for main source of power is accepted as long as the propulsion and steering can be maintained without available electric power.

**5.2.3** Where the redundancy for main generating sets is waived, any requirement for redundancy in main transforming equipment and/or the main distribution system is also waived.

**5.2.4** The main electrical power supply system shall be so arranged that in case of failure in one main circuit, redundant consumers shall still be available. Any single failure in a distribution circuit shall not render duplicated consumers or services inoperable.

**5.2.5** The main power generating plant shall be equipped with system for automatic starting and connection of a stand by generating set in case of blackout. This system shall also function in case the yacht is being supplied by shore power.

**5.2.6** The electric installation shall enable the yacht, without external aid, to restore the electric power supply and restart propulsion after a dead yacht condition.

### **5.3 EMERGENCY POWER**

**5.3.1** An emergency source of power shall provide electrical power as required in safety mode of operation in case the main generating plant is out of working order.

**5.3.2** The emergency source of power shall constitute a self contained system both with respect to location and to electric installation. There shall be no common failures that will lead to loss of both the main generating station and the emergency source of power.

**5.3.3** The main power generating plant and the emergency source of power shall be so located that a fire or flooding of an engine room will not disable the emergency source of power, and not cut off its access from open deck.

**5.3.4** If the main electrical power plant is arranged as at least two self contained power plants located in different, non-adjacent compartments separated by watertight bulkheads, a dedicated emergency source of power may not be required. In such cases, bus tie breakers with co-ordinated protective functions are required in each main switchboard.

**5.3.5** Where the emergency source of power is a generator, it shall be driven by a suitable prime mover and shall have auxiliary systems, e.g. cooling system, ventilation and lubrication operating independently of the main electrical power system.

**5.3.6** The emergency source of power shall come automatically on-line and automatically supply power to all services required in the safety operating mode.

**5.3.7** The duration of emergency power shall be consistent with the safety philosophy of the yacht and reflect the size, design concept and operating modes. Equivalent level of safety as given in relevant marine standards shall be achieved.

**5.3.8** Yachts < 400 GT and with operating mode Coastal shall be provided with an emergency source of electrical power capable to provide power for the following consumers at maximum output for a period of minimum 3 hours:

- a) Emergency lighting at stowage positions of life saving appliances, at all escape routes, in machinery spaces and the main and emergency generating spaces including their control positions, at control stations, at steering gears.
- b) Main navigation lights and “not under command” lights.
- c) Daylight signalling lamp (intermittent operation).
- d) Electrical internal communication equipment.
- e) Radio facilities (GMDSS).
- f) Yacht’s whistle (intermittent operation).
- g) Fire detection system.
- h) Fire alarm and general alarm system (0.5 hour capacity for the alarms).
- i) Remote control devices of fire-extinguishing systems (if fitted).
- j) Emergency fire pump (if fitted).

**5.3.9** For yachts  $\geq$  400 GT and with operating mode Ocean or Polar the duration of the emergency power shall be aligned with the operational specification.

## **5.4 UNINTERRUPTABLE POWER**

**5.4.1** Where safety systems, control systems and eventually other systems have unacceptable restoration times resulting from interruptions in their power supplies, or where battery power is required for emergency services, battery supported power supplies shall be utilised.

**5.4.2** The arrangement of uninterruptable sources of power shall reflect the required separation between main power generation and distribution system and the emergency source of power and emergency power distribution system. No failure in a battery backed up power supply shall result in loss of functionality in both the main power system and the emergency power system. The arrangement of uninterruptable sources of power shall reflect the required separation between main power system and the emergency power system.

**5.4.3** Areas where electric batteries are installed or stored, including those where uninterruptable sources of power systems are located, shall be provided with adequate ventilation to prevent the accumulation of gas that is emitted from batteries of all types. Equipment installed in these areas shall be explosion proof (Ex-proof) and shall be clearly labelled showing its type designation.

## **5.5 ELECTRIC LIGHTING**

**5.5.1** Lighting circuits shall be distributed so that no control station, engine room, escape ways or public spaces will become dark in case one lighting circuit fails.



**5.5.2** An emergency source of lighting shall be provided in escape ways and public spaces which shall be independent of the general lighting system and sufficient to enable persons to make their way up to the open deck from the accommodations or working spaces and evacuate the yacht if necessary. Emergency lighting shall also be provided at control stations and in engine rooms so that the main generating system or main switchboard may be repaired and brought on line.

**5.5.3** Emergency lighting shall be installed as required by RO requirements or relevant international standards.

## **5.6 SHORE POWER**

**5.6.1** The yacht shall be equipped with facilities for reception of shore power.

**5.6.2** The capacity of the shore power installation onboard shall be suitable for normal operational and habitable conditions of the yacht during stay in port.

**5.6.3** The shore power installation onboard shall be equipped with galvanic isolation between the shore side supply system and the yacht's distribution system.

## **5.7 VERIFICATION OF COMPLIANCE**

**5.7.1** Verification shall be performed as per Ch.2.

**5.7.2** Necessary documentation for verification is single line diagrams and load calculations on a system level, and schematic diagrams, data sheets and rating information for important equipment.

**5.7.3** Hazardous areas shall be identified and electrical equipment, including ventilation fans, arranged so to limit the likelihood of explosion in these areas. Equipment fitted less than 450 mm from the deck is to be certified safe for petrol vapours and, where the equipment is fitted above 450 mm, it shall be explosion proof with a IP rating of 55 (BSEN 60529:1992).

**5.7.4** The yacht shall carry onboard necessary technical documentation for operation and fault finding. Such documentation shall at least be single line diagrams and electrical schematics for the installation.

## **Ch. 6 AUTOMATION AND SAFETY SYSTEMS**

### **6.1 GENERAL**

**6.1.1** The machinery installations shall be equipped with adequate means of control to ensure an efficient, safe and reliable operation from the intended control position.

**6.1.2** Integrated automation systems shall be of a redundant design ensuring that no single failures render more than one system inoperable.

**6.1.3** Machinery installations shall in general have means for local control that may be engaged within a reasonable time upon failure of the remote control system.

**6.1.4** Necessary means of communication shall be provided between relevant compartments to ensure a safe operation even in case of degraded performance of the remote control system.

**6.1.5** Transfer of command between control positions shall be unambiguous, consistent and intuitive.

**6.1.6** Any automation or safety system shall have appropriate self-diagnostics to detect and initiate an alarm upon internal failures.

## **6.2 EMERGENCY OPERATION**

**6.2.1** Sufficient means of control to operate fire fighting systems, ventilation systems, fuel supply systems, electrical ignition sources and emergency stop of main and auxiliary machinery shall be provided from a position outside the affected compartment.

**6.2.2** In case of failure of a remote control system, the means for local control of the machinery installation shall to the extent possible be self-contained and independent of network functionality, remote control systems or other possible sources of failure.

## **6.3 ALARM SYSTEM**

**6.3.1** An alarm system shall be provided ensuring malfunctions, failures or unsafe conditions of the machinery installations to be announced at dedicated manned control positions.

**6.3.2** Alarms shall be announced with audible and visual indication and shall remain active until acknowledged. Alarms shall not be active until normal operating condition has been resumed.

## **6.4 SAFETY SYSTEM**

**6.4.1** Protective safety functions related to critical machinery installations shall normally be implemented in a safety system independent of the control system. Any automatic safety action in the propulsion system that does not lead to immediate breakdown of the propulsion machinery shall be possible to override manually.

## **6.5 VERIFICATION OF COMPLIANCE**

**6.5.1** Verification shall be performed as per Ch.2.

## **PART 5 POLLUTION PREVENTION**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** This Part ensures that all yachts follow best practices for pollution prevention and are in full compliance with relevant mandatory international regulations.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** These Regulations ensure that yachts  $\geq 400$  GT are in full compliance with mandatory international regulations for pollution prevention. In case of conflict, the relevant international regulation shall take precedence.

**1.2.2** There shall be no transfer of Harmful Aquatic Organisms and Pathogens to new environments through the discharge of ballast water and sediments from the yacht.

**1.2.3** The anti-fouling systems used on yachts shall minimise harm to human health and to marine life.

**1.2.4** The discharge of oil to the sea shall not be allowed, except for oily mixtures that have been treated by approved oil filtering equipment.

**1.2.5** The discharge of untreated sewage to the sea shall be limited as far as practicable.

**1.2.6** Emissions to air shall be reduced as far as practicable.

**1.2.7** Yachts under the UAE Register are required to apply a clean sea practice onboard and it is not allowed to litter by throwing anything overboard.

#### **1.3 DEFINITIONS**

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulation:

**Anti-fouling system:** Means a coating, paint, surface treatment, surface, or device used to prevent or control attachment of unwanted organisms to the yacht.

**AFS Convention:** Means the International Convention on the control of harmful Anti-Fouling Systems on yachts, 2001, IMO.

**Ballast water:** Means water with its suspended matter taken onboard a yacht to control its trim, list/heel, draught, stability or loads and stress distribution.

**Ballast water management (BWM):** Means mechanical, physical, chemical, and biological processes, either singularly or in combination used to remove, render harmless, or avoid the uptake or discharge of Harmful Aquatic Organisms and Pathogens within ballast water and sediments.

**BWMS Convention:** Means the International Convention for the Control and Management of Ships' Ballast Water and Sediments (IMO, 2004).

**Emission control area:** Means an area where the adoption of special mandatory measures for emissions from yachts is required to prevent, reduce and control air pollution from NO<sub>x</sub> or SO<sub>x</sub> and particulate matter or all three types of emissions and their attendant adverse impacts on human health and the environment.

**From the nearest land:** Means from the baseline from which the territorial sea of the territory in question is established in accordance with international law.

**Garbage:** Means all kinds of victual, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the yacht and liable to be disposed of continuously or periodically except those substances which are defined or listed in Annexes to MARPOL.

**Harmful aquatic organisms and pathogens:** Means aquatic organisms or pathogens which, if introduced into the sea, estuaries or fresh water courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas.

**Oil filtering equipment:** Means equipment which separates the oil contained in oily mixtures, type approved in accordance with MARPOL Annex I Regulation 14.7.

**Oil fuel:** Means any fuel delivered to and intended for combustion purposes for propulsion or operation onboard a yacht, including distillate and residual fuels.

**Oily mixture:** Means a mixture with any oil content.

**Oil residue (sludge):** Means the residual waste oil products generated during the normal operation of a yacht such as those resulting from the purification of fuel or lubricating oil for main or auxiliary machinery, separated waste oil from oil filtering equipment, waste oil collected in drip trays, and waste hydraulic and lubricating oils.

**Ozone depleting substances:** Means controlled substances defined in paragraph (4) of Article 1 of the Montreal Protocol on Substances that Deplete the Ozone Layer, 1987.

**Parts per million (ppm):** Means parts of oil per million parts of water by volume.

**Sediments:** Means matter settled out of ballast water within a yacht.

**Sewage:** Means:

- a) drainage and other wastes from any form of toilets and urinals;
- b) drainage from medical premises (dispensary, sick bay, etc.) via wash basins, wash tubs and scuppers located in such premises;
- c) drainage from spaces containing living animals; or
- d) other waste waters when mixed with the drainages defined above;
- e) waste water from showers and wash basins;
- f) waste water from galleys.

**Sewage treatment plant:** Means a treatment plant for sewage type approved in accordance with MARPOL Annex IV Regulation 9.1.1.

**Treated sewage:** Means sewage which has been treated by a sewage treatment plant.

## **Ch. 2 BALLAST WATER MANAGEMENT**

### **2.1 GENERAL**

**2.1.1** These Regulations are applicable for all yachts constructed to carry ballast water which are in Coastal, Ocean or Polar areas of operations.

For Coastal yachts of less than 50 meters of length and less than 8 cubic meters of ballast water capacity, these Regulations are not applicable.

All yachts of less than 50 meters of length and with ballast water capacity of less than 8 cubic meters shall comply with the guidelines for ballast water management equivalent compliance (G3) of the BWMS Convention.

**2.1.2** Yachts shall have onboard and implement a yacht-specific Ballast Water Management Plan.

**2.1.3** Yachts shall have a Ballast Water Record Book.

**2.1.4** Yachts shall have type approved Ballast Water Management System implemented onboard.

**2.1.5** Yachts shall conduct Ballast Water Exchange in designated areas.

**2.1.6** All yachts shall remove and dispose sediments safely.

**2.1.7** Officers and crew of all yachts shall be familiar with their duties in the implementation of Ballast Water Management particular to the yacht on which they

serve and shall be familiar with the yacht's Ballast Water Management Plan, as appropriate to their duties.

## **2.2 VERIFICATION OF COMPLIANCE**

**2.2.1** Yachts shall conduct Ballast Water Management, becoming effective at various implementation dates, according to Regulation B-3 of the BWMS Convention.

**2.2.2** Yachts shall have onboard and implement a yacht-specific Ballast Water Management Plan approved by the UAE National Transport Authority as to the Regulation B-1 of the BWMS Convention, further described in Guidelines for ballast water management and development of ballast water management plans (G4) of the BWMS Convention.

**2.2.3** Yachts shall have a Ballast Water Record Book as from Regulation B-2 of the BWMS Convention, to record when ballast is taken onboard; circulated or treated for Ballast Water Management purposes; and discharged into the sea.

**2.2.4** Yachts conducting Ballast Water Exchange shall meet the requirements of Regulation B-4 of the BWMS Convention.

**2.2.5** Yachts shall remove and dispose of sediment according to Regulation B-5 of the BWMS Convention.

**2.2.6** The Ballast Water Treatment System implemented onboard shall be according to Section D of the BWMS Convention. Verification that implemented Ballast Water Treatment System is complying with the Regulation D-2 requirements of the BWMS Convention shall be proved through a Type Approval Certificate, and which shall be issued by the UAE National Transport Authority or by the RO.

**2.2.7** A formal certificate shall be issued for all yachts  $\geq 400$  GT.

## **Ch. 3 ANTI-FOULING SYSTEMS**

### **3.1 GENERAL**

**3.1.1** These Regulations are applicable for all yachts regardless of size and area of operation.

**3.1.2** Anti-fouling systems containing organotin compounds shall not be applied or exposed on the hull, external parts or surfaces of any yacht.

## **3.2 VERIFICATION OF COMPLIANCE**

**3.2.1** It is the responsibility of the Master of the yacht to comply with these Regulations.

**3.2.2** All yachts  $\geq 400$  GT and engaged in international voyages shall keep a valid Certificate ensuring compliance with the AFS Convention, as is further described in Annex 4 of the AFS Convention.

**3.2.3** All yachts  $< 400$  GT engaged in international voyages shall carry a Declaration of Compliance as is further described in Regulation 5, Annex 4 of the AFS Convention.

**3.2.4** All yachts  $\geq 400$  GT shall undertake surveys for verifying compliance with the AFS Convention, as is further described in the Guidelines for survey and certification of anti-fouling systems on yachts, Annex to Res.MEPC.102(48).

## **Ch. 4 OIL DISCHARGE MANAGEMENT**

### **4.1 GENERAL**

**4.1.1** Yachts shall control and limit operational discharges of oily mixtures, as well as incidental discharges of oil and as a minimum have adequate tank capacities to retain all oily bilge water onboard. The oily mixtures and oil residues (sludge) which cannot be discharged into the sea in compliance with these Regulations shall be retained onboard for subsequent discharge to reception facilities.

**4.1.2** All yachts  $\geq 400$  GT shall be fitted with oil filtering equipment and with arrangements to ensure that any discharge of oily mixtures is automatically stopped when the oil content of the effluent from the oil filtering equipment exceeds 15 parts per million. Any discharge into the sea of oil or oily mixtures shall be prohibited except when all the following conditions are satisfied:

- a) the oily mixture is processed through an oil filtering equipment;
- b) the oil content of the effluent without dilution does not exceed 15 parts per million; and
- c) the yacht is underway and not within a special area.

**4.1.3** Yachts  $< 400$  GT need not be fitted with approved oil filtering equipment, in which case they shall have adequate tank capacity to retain all oily mixtures onboard for subsequent discharge to reception facilities. Piping to and from these tanks shall have no direct connection overboard, other than to the standard discharge connection.

**4.1.4** All yachts shall be provided with a tank(s) of adequate capacity, having regard to the type of machinery and length of voyage, to receive the oil residues (sludge) which cannot be dealt with otherwise. Piping to and from these tanks shall



have no direct connection overboard, other than to the standard discharge connection.

**4.1.5** All fuel and lubricating oil tanks shall be equipped with a high level alarm or passive visual inspection systems to prevent overfilling.

**4.1.6** All yachts with an aggregate oil fuel capacity of more than 600m<sup>3</sup> need to have double hull protection around the oil fuel tanks.

**4.1.7** All yachts shall record all machinery space operations related to bunkering of fuel or bulk lubricating oil, discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces, collection and disposal of oil residues, discharge of cleaning water from oil fuel tanks, ballasting or cleaning of oil fuel tanks.

## **4.2 VERIFICATION OF COMPLIANCE**

**4.2.1** All yachts  $\geq$  400 GT are required to comply with MARPOL Annex I, including the survey and certification scheme. Yachts below this limit shall comply with the applicable technical requirements of MARPOL Annex I, but need not follow the survey and certification scheme.

**4.2.2** The oil filtering equipment required by regulation 4.1.2 shall be type approved as required by MARPOL Annex I Regulation 14.7. The type approval certificate shall be retained onboard.

**4.2.3** All yachts of  $\geq$  400 GT are required to hold an International Oil Pollution Prevention Certificate as specified in MARPOL Annex I Regulation 7. Yachts < 400 GT need not hold an International Oil Pollution Prevention Certificate.

**4.2.4** Oil record Book Part I as specified in MARPOL Annex I regulation 17 shall be kept onboard.

**4.2.5** The Shipboard Oil Pollution Emergency Plan (SOPEP) shall be approved by the UAE National Transport Authority or by the RO in accordance with MARPOL Annex I regulation 37 and kept onboard.

## **Ch. 5 SEWAGE TREATMENT**

### **5.1 GENERAL**

**5.1.1** All yachts shall be fitted with an appropriate sewage system.

**5.1.2** Each yacht shall be fitted with a standard discharge connection to enable it to discharge sewage to shore reception facilities.

**5.1.3** Discharge of sewage into the sea is prohibited except when:

- a) the yacht is discharging treated sewage from a sewage treatment plant;
- b) the yacht is discharging comminuted and disinfected sewage from a sewage comminuting and disinfecting system at a distance of more than 3 nautical miles from the nearest land;
- c) the yacht is discharging untreated ground sewage at a distance of more than 12 nautical miles from the nearest land when the yacht is underway.

## **5.2 VERIFICATION OF COMPLIANCE**

**5.2.1** All yachts  $\geq$  400 GT or certified to carry more than 12 persons regardless of size, are required to comply with MARPOL Annex IV, including the survey and certification scheme. Yachts below this limit shall comply with the technical requirements of MARPOL Annex IV, but need not follow the survey and certification scheme.

**5.2.2** As required by MARPOL Annex IV Regulation 9, all yachts  $\geq$  400 GT or certified to carry more than 12 persons shall be fitted with at least one of the following sewage systems:

- a) a sewage treatment plant type approved by the UAE National Transport Authority or by the RO; or
- b) a sewage comminuting and disinfecting system approved by the UAE National Transport Authority or by the RO; or
- c) a holding tank of the capacity to the satisfaction of the UAE National Transport Authority or by the RO for the retention of all sewage, having regard to the operation of the yacht, the number of persons onboard, with a means to indicate visually the amount of its contents. The sewage shall as a minimum be ground prior to storage in the holding tank.

**5.2.3** Yachts  $<$  400 GT shall, as a minimum, be fitted with a holding arrangement with adequate capacity for retention of all sewage.

**5.2.4** All yachts of 400 GT and above or certified to carry more than 12 persons are required to hold an International Sewage Pollution Prevention Certificate, as specified in MARPOL Annex I Regulation 5.

## **Ch. 6 GARBAGE TREATMENT**

### **6.1 GENERAL**

**6.1.1** All yachts  $\geq$  400 GT or certified to carry more than 12 persons shall carry a garbage management plan in accordance with MARPOL Annex V Regulation 9. The plan shall provide written procedures for collecting, storing, processing and disposal of garbage.

**6.1.2** The disposal to sea of all garbage is prohibited, except for food waste which may be disposed at least 12 nautical miles from the nearest land. Food waste which has passed through a comminutor or grinder may be disposed at least 3 nautical miles from the nearest land. Such comminuted or ground garbage shall be capable of passing through a screen with openings no greater than 25mm.

**6.1.3** All yachts  $\geq$  400 GT or certified to carry more than 12 persons shall carry a garbage record book in accordance with MARPOL Annex V Regulation 9. Every discharge operation shall be recorded, including delivery of garbage to shore reception facilities.

## **6.2 VERIFICATION OF COMPLIANCE**

**6.2.1** All yachts are required to comply with these Regulations. No survey and certification scheme is required.

**6.2.2** It is the responsibility of the Master of the yacht to comply with these Regulations.

## **Ch. 7 EMISSIONS TO AIR**

### **7.1 GENERAL**

**7.1.1** No systems containing Ozone Depleting Substances shall be installed onboard yachts with keel laid on or after 2010-01-01, except for permanently sealed equipment, when there are no refrigerant charging connections or potentially removable components containing ozone depleting substances.

**7.1.2** Engines with a power output of more than 130 KW installed in yachts shall have been certified and tested for specific NO<sub>x</sub> emissions as specified by UAE National Transport Authority.

**7.1.3** Emissions to air from SO<sub>x</sub> and PM shall be controlled and limited as far as possible.

**7.1.4** If an incinerator is installed, the installation and operation shall be controlled and with limited impact to the environment. Incineration of oil cargo residues, harmful cargo residues, PCB and PVC is prohibited. A manufacturer's operating manual shall be kept onboard.

**7.1.5** All yachts  $\geq$  400 GT shall retain bunker delivery note and representative sample for each fuel oil delivery. The bunker delivery notes shall be retained onboard for three years, and the sample shall be retained for one year onboard.

## **7.2 VERIFICATION OF COMPLIANCE**

**7.2.1** Yachts  $\geq$  400 GT shall comply with technical, survey and certification requirements for the National Air Pollution Prevention Certificate as specified by the UAE National Transport Authority <sup>(2)</sup>.

**7.2.2** Yachts  $<$  400 GT shall comply with the technical requirements specified by the UAE National Transport Authority, but need not comply the survey and certification requirements <sup>(2)</sup>.

**7.2.3** Yachts with keel laid before 1<sup>st</sup> January 2010 may have existing systems containing Ozone Depleting Substances, in which case <sup>(2)</sup> they shall:

- a) contain hydro-chlorofluorocarbons (HCFC)s; and
- b) allow the substances referred to in this Chapter and equipment containing such substances to be delivered to appropriate reception facilities when removed from yachts.

**7.2.4** No deliberate emissions of Ozone Depleting Substances shall take place. Each yacht is required to maintain a list of equipment containing such substances and an Ozone Depleting Substances Record Book <sup>(2)</sup>. Deliberate emissions include emissions occurring in the course of maintaining, servicing, repairing or disposing of systems or equipment, except that deliberate emissions do not include minimal releases associated with the recapture or recycling of an ozone depleting substance.

**7.2.5** Waste streams from the use of systems and equipment containing Ozone Depleting Substances shall not be discharged into enclosed ports, harbours and estuaries unless it can be thoroughly documented by the ship that such waste streams have no adverse impact on the ecosystems of such enclosed ports, harbours and estuaries, based upon criteria communicated by the authorities of the port State to the Organisation <sup>(2)</sup>.

**7.2.6** The maximum sulphur content of any fuel oil used on board ships shall not exceed 4.5% m/m prior to 1<sup>st</sup> January 2012, 3.5% m/m on and after 1<sup>st</sup> January 2012, and 0.5% m/m on and after 1<sup>st</sup> January 2020, with stricter requirements for SOx Emission Control Areas, where the sulphur content shall not exceed 1.5% m/m prior to 1<sup>st</sup> July 2010, 1.00% m/m on and after 1<sup>st</sup> July 2010 and 0.10% m/m on and after 1<sup>st</sup> January 2015<sup>(2)</sup>.

**7.2.7** The installation and operation of an incinerator shall comply with requirements specified by the UAE National Transport Authority<sup>(2)</sup>.

---

<sup>2</sup> Compliance with MARPOL Annex VI will be accepted.

## **PART 6 ACCOMMODATION, SAFETY, SECURITY AND COMFORT**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** This Part is to ensure that the yacht is equipped with accommodations for guests and crew, providing satisfactory safety, security and comfort.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** Accommodation spaces shall be designed and arranged so as to protect the occupants from unfavourable environmental conditions and to minimise the risk of injury.

**1.2.2** An adequate standard of accommodation shall be provided to ensure the comfort, health and safety of all persons onboard.

**1.2.3** Design and arrangement of the Owner's section shall not interfere with safety related to fire, embarkation of persons in an emergency situation nor any other safety aspect of the yacht or persons onboard.

**1.2.4** Measures shall be taken to prevent shifting of furniture, baggage, stores and provisions, having due regard to accelerations likely to arise, particularly onboard high speed yachts and sailing yachts.

**1.2.5** The persons onboard shall feel that their personal security is well taken care of at all times, and not be affected by the security system more than strictly necessary.

#### **1.3 DEFINITIONS**

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulations:

**Comfort:** Means a "state of physical well being". The appearance, size, escape possibilities, air quality, temperature control, lighting, noise levels, vibration levels and sea motion are all factors that may influence comfort.

**Crew section:** Means a zone indoors or outdoors of the yacht in which the crew shall have unrestricted access.

**ISPS Code:** Means the IMO International Ship and Port facility Security Code.

**Open zone:** Means a zone inside or outside of the yacht in which all people onboard may have access at any time.

**Private section:** Means a zone inside or outside of the yacht in which the Owner and his selected guests only will have unrestricted access.

**Restricted area:** Means an area where only authorised persons shall have access.

**Security cleared:** Means a person or an element who/which are wanted to be onboard the yacht and declared as representing no threat to the security of the yachts or the persons onboard.

**Security level:** Means as defined in the ISPS code. If not expressed otherwise, the term “normal situation” is referring to security level 1.

**Security threat:** Means the probability of an intended undesirable event occurring that may lead to loss of valuables, damage to the yacht or personal injury.

**Special restricted zone:** Means a zone inside or outside of the yacht in which specialist personnel only shall have access in order to carry out their job functions.

**Staff:** Means special personnel necessary to carry out other defined functions onboard (e.g. catering, entertainment etc).

**Thermal comfort:** Means the condition of mind which expresses satisfaction with the thermal environment. This is a subjective definition which will vary from person to person.

**Unauthorised elements:** Means persons, animals, luggage, stores or other goods which are not security cleared.

**Vulnerability:** Means the probability that security measures fail, leading to an undesirable event.

## **Ch. 2 ACCOMMODATION**

### **2.1 GENERAL**

**2.1.1** All sections onboard shall be designed to minimise the risk of personal injury. Open decks shall be equipped with rails, grab rails in corridors and other relevant safety appliances according to relevant standards.

**2.1.2** The accommodation standards shall be equivalent to the standards set by the UAE National Transport Authority <sup>(3)</sup>. When these requirements are neither reasonable nor practicable for the yachts covered by these Regulations, measures taken to ensure an equivalent level of comfort, health and safety shall be agreed with the UAE National Transport Authority or the RO.

**2.1.3** Comfort is important from a safety point of view by enhancing human performance and reducing human errors. Comfort may also be viewed in a luxury context where the level of comfort is increased beyond the minimum level required to ensure acceptable human performance.

Comfort requirements beyond the safety related requirements given in this code are governed by other standards, e.g. the voluntary “Comfort Class” or similar notations offered by the recognised classification societies.

### **2.2 DESIGN**

**2.2.1** The type of rooms, size and construction details shall be designed according to the plan for safe manning.

**2.2.2** The yacht shall provide an adequate standard of accommodation to ensure the comfort, health and safety of all persons onboard.

**2.2.3** Rooms intended for work shall be so designed and equipped so that officers, crew and staff can do their jobs without practical interference or conflicts of interest under operation.

### **2.3 VERIFICATION OF COMPLIANCE**

**2.3.1** For all yachts, the requirements shall be verified through review of yacht drawings and by onboard inspection of the completed yacht.

---

<sup>3</sup> Compliance with the ILO Convention will be accepted.

**2.3.2** The living conditions of crew members shall be inspected and approved by the UAE National Transport Authority or the RO with respect to:

- a) Accommodation;
- b) Open deck facilities;
- c) Machinery spaces;
- d) Control rooms; and
- e) Food and catering facilities.

**2.3.3** For yachts  $\geq 400$  GT, a renewal survey is required at intervals not exceeding 5 years and/or if major re-building or modifications of the accommodation is carried out.

## **Ch. 3 SECURITY**

### **3.1 GENERAL**

**3.1.1** For yachts  $\geq 500$  GT, an ISPS certificate shall be provided.

**3.1.2** For yachts  $< 500$  GT, the Owning Company may decide that the yacht shall fulfil the ISPS Code requirements and be certified on a voluntary basis. If not, the ISPS Code is to be used as guidance and the prescriptive requirements given in this Chapter are to be considered minimum requirements.

**3.1.3** The ISPS Code defines three basic security levels:

- Security level 1: Normal
- Security level 2: Heightened
- Security level 3: Exceptional

**3.1.4** At security level 1, the yacht and port facilities are required to have basic security measures in place. Security level 2 represents a heightened level of threat, and the yacht and port facilities are required to increase their levels of protective security. Security level 3 represents an imminent and specific threat, and the yacht and port facilities will be required to increase security provision still further and respond to instructions from relevant security authorities.

**3.1.5** When in port, the yacht's security shall interface and be co-ordinated with the port security. A Declaration of Security may be required when arriving at an ISPS compliant port facility. The purpose of the Declaration of Security is to ensure that agreement is reached on the respective security measures the yacht and the port will undertake.

**3.1.6** When there is a requirement for a Declaration of Security, the port facility security officer shall provide the relevant procedures to be followed.

**3.1.7** Private property items that are carried with the yacht shall have the same level of protection against loss or damage as if the items were kept ashore.



**3.1.8** The security of the yacht shall in any operating condition be in compliance with the instructions given by the UAE National Transport Authority or via the RO for the yacht.

## **3.2 SECURITY SYSTEM**

**3.2.1** A security policy shall be defined by the Owning Company and a security system shall be established accordingly and documented in a Yacht Security Plan.

**3.2.2** The Owning Company responsible for establishing security awareness onboard shall balance between the needs of security and the requirement to maintain a safe and efficient yacht.

**3.2.3** A Yacht Security Assessment shall be performed in compliance with the ISPS Code covering all relevant security threats.

**3.2.4** Based upon the Yacht Security Assessment, a Yacht Security Plan shall be developed and documented, establishing security procedures for all required security activities and plans for responding to security threats. This shall include defining security measures necessary to discover and deter relevant illicit activities or reduce their consequences. In addition to any relevant security threats defined through the Yacht Security Assessment, the Yacht Security Plan shall include precautions against:

- a) stealing valuable objects and/or money;
- b) stealing documents/information;
- c) making sabotage to the yacht;
- d) making injury to people;
- e) piracy;
- f) bomb threats;
- g) trafficking in drugs and transporting of illicit cargoes / goods; and
- h) stowaways.

**3.2.5** The yacht's security operation shall at least comprise the following:

- a) ensuring the performance of all yacht security duties;
- b) controlling access to the yacht;
- c) controlling the embarkation of persons and their effects;
- d) monitoring restricted areas to ensure that only authorised persons have access;
- e) monitoring of deck areas and areas surrounding the yacht;
- f) supervising the handling of equipment and the yacht's stores; and
- g) ensuring that security communication is readily available.

**3.2.6** The yacht shall be arranged in such a manner that installation and operation of the security equipment can be carried out in compliance with its intended purpose.

**3.2.7** The yacht may be arranged with a secure area. In such case, the secure area shall be specially considered with respect to fire safety and evacuation.

### **3.3 SECURITY MEASURES**

**3.3.1** IMO MSC.1/Circ.1283 (Non-mandatory guidelines on security aspects of the operation of vessels which do not fall within the scope of SOLAS Chapter X1-2 and the ISPS Code) identifies the following focus areas for security measures:

- a) Mitigating the risk of theft, piracy and armed robbery;
- b) vigilance;
- c) 24-hour visual and security watch system;
- d) strengthen night watches;
- e) seal off means of access to the yacht;
- f) establish radio contact;
- g) provide adequate lighting;
- h) evasive manoeuvring;
- i) water hoses and other equipment;
- j) reduce opportunities for theft; and
- k) establish secure area(s).

### **3.4 PERSONS ONBOARD**

**3.4.1** Officers, crew and staff shall be thoroughly security vetted according to generally accepted procedures. They shall be assigned security responsibilities to ensure that all identified security activities are co-ordinated in parallel with other operational activities. All persons onboard shall be familiar with basic security measures applicable to the yacht.

**3.4.2** IMO MSC.1/Circ.1283 recommends the following as good practice in order to verify the identity of persons onboard when operating in a higher risk environment:

- a) All guests shall report to the Master of the yacht, or other responsible persons, to notify them of their arrival and departure. All guests shall have a form of identity, for example an ID card, passport or some other document of identity bearing the individual's photograph.
- b) Additional persons onboard shall have a valid form of identity, such as an ID card, passport or some other form of identification bearing the individual's photograph.

**3.4.3** For officers, crew and staff security test procedures are to be established and followed to ensure that they know their roles in terms of the security of the yacht and people onboard. Basic security familiarisation training is recommended for crew members enabling them to have the capability to respond to security threats. Crew members operating in higher-risk environments can receive additional security familiarisation training to enable them to better respond to specific security threats.

### **3.5 UNAUTHORISED ELEMENTS**

**3.5.1** Planned response shall be developed for:

- a) responding to bomb threats or discovery of suspicious items;
- b) prevention of trafficking in drugs and transportation of illicit cargoes; and
- c) prevention of stowaways.

**3.5.2** In any operating condition the security system shall protect the yacht and the persons onboard and their belongings against entering of any unauthorised elements.

**3.5.3** To avoid any unauthorised elements onboard, procedures for the following shall be established:

- a) access control;
- b) monitoring of restricted areas;
- c) supervision and control during loading of stores and baggage; and
- d) monitoring of deck areas and surrounding waters. Areas to be monitored must be well lit during the hours of darkness.

### **3.6 YACHT SECURITY OFFICER**

**3.6.1** One of the officers onboard shall be designated as Yacht Security Officer and have the necessary training as defined in STCW 95 Regulation VI/5 and Section A-VI/5. If not the Master, the authority of the Yacht Security Officer versus the Master and the other officers shall be defined.

**3.6.2** Responsibilities of the Yacht Security Officer shall be as defined for Ship Security Officers in the ISPS Code.

### **3.7 OTHER SECURITY DUTIES**

**3.7.1** Security responsibilities for other officers, crew and staff shall be clearly defined and documented in the Yacht Security Plan. A system shall be established to ensure that they know their role in terms of the security of the yacht and persons onboard.

### **3.8 OPERATIONAL REQUIREMENTS**

**3.8.1** The security system shall have 24 hour readiness in all operational conditions in accordance with the Yacht Security Plan and be coordinated with any relevant Port Authority.

**3.8.2** When the yacht is not operational / in service (e.g. when alongside with no guests, at yard for maintenance and repair etc.), the yacht security officer shall make sure that the Yacht Security Plan remains implemented onboard. The Yacht Security Plan shall therefore also define procedures for security searches before the yacht enters normal operation after repair or lay up.

**3.8.3** The following additional operational security activities shall be covered by the security system:

- a) regular auditing and review of the security system including amendment of the Yacht Security Plan, when required;
- b) training, drills and exercises for all persons onboard having a security responsibility;
- c) recording of security related activities and information and keeping of records;
- d) inspection, testing, calibration and maintenance of any security equipment;
- e) responding to any security instructions received from the UAE National Transport Authority;
- f) interface and co-operation with port security activities; and
- g) protection of Yacht Security Plan and security records from unauthorised access or disclosure.

**3.8.4** All equipment used for security purposes is to be inspected and maintained in compliance with the manufacturer's instructions.

**3.8.5** Drills and exercises of the different security scenarios (as defined in the Yacht Security Plan) are to be conducted onboard on a regular basis and recorded in the log book.

**3.8.6** All security activities shall be reported and records to be kept in a safe manner according to the Yacht Security Plan.

## **3.9 VERIFICATION OF COMPLIANCE**

**3.9.1** All yachts  $\geq 500$  GT shall fulfil the ISPS Code requirements and be issued with an International Ship Security Certificate, ref. Annex G.

**3.9.2** All yachts  $< 500$  GT are to be issued with a National Yacht Security Certificate, ref. Annex H.

## **Ch. 4 COMFORT**

### **4.1 NOISE**

**4.1.1** Noise may influence comfort as well as create health and safety hazards. High noise levels in a working environment will increase work related stress. Elevated noise levels in control areas may lead to poor intercommunication as well as difficulties in hearing external signals and VHF communication.

**4.1.2** The noise levels in private accommodations can be further restricted by applying the requirements given in the voluntary Class notations offered by the classification societies or through equivalent specifications as specified by the Owning Company of the yacht.

**4.1.3** Yachts with area of operation Ocean and Polar, shall comply with the recommendations in IMO Res.A.468 “Code on Noise Levels on Board Ships”. Noise levels are generally not to exceed limits specified in these Regulations for any normal operational mode.

**4.1.4** For machinery spaces which are not intended to be continuously manned or are attended for short periods only, the recommended noise limit is 110 dB(A).

**4.1.5** For spaces which are manned continuously or for lengthy periods the noise limits are 90 dB(A) for machinery spaces and stores and 85 dB(A) for workshops.

**4.1.6** The noise level in public areas and crew accommodation shall be kept as low as possible to enable safety announcements to be heard, and shall not in general exceed 75 dB(A). Wherever a PA system is present, the system shall be able to operate at a signal to noise ratio exceeding 10 dB(A). General alarm signals shall be heard in all parts of the yacht.

**4.1.7** The maximum noise level in operating compartment and at the yacht bridge shall not in general exceed 65 dB(A) to facilitate communication within the compartment and external radio communications.

**4.1.8** The noise level in cabins shall be kept as low as possible, and shall not exceed 60 dB(A) when the yacht operates continuously day and night. For yachts which are not intended for overnight cruising deviation from this limit is accepted when it can be proved that operational crew will be provided with alternative accommodation satisfying the 60 dB(A) limit when performing overnight transfer voyages. If a yacht is not intended for overnight cruising all cabins shall satisfy the 60 dB(A) limit for the harbour condition.

**4.1.9** The following minimum sound insulation values are required in the accommodation:

| LOCATIONS                | WEIGHTED SOUND INSULATION INDEX $R_w$ (dB) |
|--------------------------|--|
| Cabin to cabin           | 35   |
| Cabin to corridor        | 32   |
| Cabin to machinery space | 45   |

Table 6-1

## 4.2 VIBRATION

**4.2.1** Vibration may influence comfort adversely. High vibration levels in a working environment will increase work related stress. Vibration in the accommodation influences the comfort.

**4.2.2** Vibration in the private section can be further restricted by applying the requirements given in the voluntary Class notations offered by the classification

societies or through equivalent specifications as specified by the Owning Company of the yacht.

**4.2.3** In order to ensure an acceptable comfort level in the accommodation for yachts with area of operation Ocean or Polar, the vibration levels specified as “values above which adverse comments are probable” from ISO 6954:2000 shall not be exceeded. The maximum vibration levels for the accommodation areas will be 214 mm/s<sup>2</sup> (acceleration level) or 6 mm/s (velocity level) overall frequency weighted r.m.s. values in the frequency range 1 Hz - 80 Hz applying the weighting curves and measuring procedure specified in ISO 6954:2000.

**4.2.4** For coastal yachts which are not intended for overnight voyages deviation from the stated vibration limit is accepted provided it can be proved that operational crew will be provided with alternative accommodation satisfying the limit when performing overnight voyages. If a yacht is not intended for overnight voyages all cabins shall satisfy the vibration limit for the harbour condition.

### **4.3 INDOOR CLIMATE**

**4.3.1** Indoor climate in private section can be further controlled by applying the requirements given in the voluntary Class notations offered by the classification societies or through equivalent specifications as specified by the Owning Company of the yacht.

**4.3.2** Mechanical ventilation shall as a minimum be capable of providing six (6) changes of air per hour, when all access and other openings (other than ventilation intakes) to the spaces are closed.

**4.3.3** Air conditioning systems are to provide a minimum of 25 m<sup>3</sup> of fresh air per hour per person accommodated in the ventilated space during normal operating conditions.

**4.3.4** Enclosed galleys shall as a minimum have a mechanical supply of 20 fresh air changes per hour and a mechanical exhaust of 30 air changes per hour.

**4.3.5** It shall be possible to reach an air temperature in the range 22-26°C in any cabins regardless of external environmental conditions during normal operation of the yacht in its normal area of operation.

### **4.4 LIGHTING**

**4.4.1** Marine lighting shall provide adequate illumination and suitable luminance ratios in the visual field. Requirements of the Illuminating Engineering Society of North America, IESNA RP-12-97 “Recommended practice for marine lighting”, shall be satisfied as far as practicable throughout the accommodation and in working areas <sup>(4)</sup>.

---

<sup>4</sup> Compliance with the ILO Convention will be accepted.

**4.4.2** The requirements in IESNA RP-12-97 are based on the seeing tasks encountered in marine applications, safety needs, and on the functional and decorative characteristics of the areas concerned. The values listed are minimum maintained illumination averaged across the task areas, measured without daylight. The tasks and areas considered include both exterior and interior lighting applications as well as those devoted to the safe and effective operation of the yacht.

**4.4.3** In cabins, additional measurements shall be taken with all lights shut off and the available blinds/curtains drawn over portholes or windows. The maximum stray lightning levels at bed locations shall be 30 Lux.

## **4.5 VERIFICATION OF COMPLIANCE**

**4.5.1** The noise and vibration requirements shall be verified through onboard measurements.

**4.5.2** The noise levels shall be measured at the most relevant cruising condition for the yacht or at least at 85% of MCR. For yachts not intended for overnight cruising measurements shall be carried out in the cabins for the in harbour condition with all relevant accommodation systems in normal operation. Measurements shall be carried out according to the procedures in IMO Res.A.468 “Code on Noise Levels on Board Ships” and ISO 2933, Acoustics - Measurements of noise on-board vessels.

**4.5.3** The vibration levels shall be measured at the most relevant cruising condition for the yacht or at least at 85% of MCR. For yachts not intended for overnight cruising measurements shall be carried out in the cabins for the in harbour condition with all relevant accommodation systems in normal operation. Measurements shall be carried out according to the procedures in ISO 6954:2000, the measuring instrumentation shall be comply with the requirements in ISO 8041 “Human response to vibration - Measuring instrumentation”.

**4.5.4** The sound insulation values shall be in accordance with ISO717/1 “Acoustics - rating of sound insulation in buildings and interior elements”. The sound insulation values shall be documented by laboratory test values for the partitions to be used or if such data are unavailable through onboard measurements.

**4.5.5** The climate requirements are to be verified by review of the design specifications for the ventilation systems and if applicable of the heating and/or air-conditioning systems. Check measurements of the temperature in cabins may be required.

**4.5.6** Light measurements should be carried out according to the field measurement methods described in the annexes of IESNA RP-12-97. Measurements should be carried out when all external lights can be blocked out from the vessel, at any convenient operating condition.

## **Ch. 5 SAFETY OF PERSONS**

### **5.1 GUARD RAILS**

**5.1.1** Efficient guard rails and bulwarks shall be fitted on all exposed parts of decks. Alternative arrangements such as safety harnesses and jackstays may be accepted on yachts < 400 GT if they provide an equivalent level of safety.

**5.1.2** The height of the bulwarks or guard rails shall be 1,000 mm on all accessible decks unless a reduced height can be justified.

**5.1.3** Satisfactory means in the form of guard rails and life lines shall be provided under deck for the protection of the persons onboard as appropriate for the intended use of the yacht.

**5.1.4** Grab rails shall be fitted in all corridors and staircases as appropriate.

### **5.2 GANGWAYS AND ACCOMMODATION LADDERS**

**5.2.1** A safe means of access to the yacht is to be provided at all times when in port, either deployed or available for deployment. If the safe means of access is deployed, means of communication from quay to yacht is to be provided.

**5.2.2** When provided, gangways, passerelles and accommodation ladders shall be manufactured to a recognised international standard. They shall be clearly marked with the manufacturer's name, model number, maximum design angle and the maximum safe loading, by weight and by number of persons. Side screens or handrails shall be fitted.

**5.2.3** Where gangways, passerelles or accommodation ladders do not comply with international or national standards, a manufacturer's test load certificate shall be provided. Alternatively practical tests may be carried out to the satisfaction of the UAE National Transport Authority or the RO. In all cases maximum design angle, maximum number of persons and maximum weight shall be clearly marked.

**5.2.4** Access equipment and immediate approaches shall be adequately illuminated.

### **5.3 PILOT TRANSFER**

**5.3.1** Boarding arrangements for pilots on yachts  $\geq 500$  GT are to be in accordance with IMO Res. A889 (21) "Pilot Transfer Arrangements" and International Pilots Association (IMPA) recommendations.



## **5.4 SAILING YACHTS**

**5.4.1** When access to the rig is an operational necessity, provision shall be made to enable persons to work safely aloft and out on the bowsprit.

**5.4.2** The arrangements provided shall be based on established safe working practices for the type of yacht. The arrangements may include, but not limited to:

- a) safety nets below the bowsprit;
- b) safety grab-rails (or jackstays) fixed along the bowsprit to act as handholds and safety points for safety harnesses;
- c) mandatory use of safety harnesses aloft and for work on the bowsprit;
- d) sufficient footropes and horses in wire (or rope) permanently rigged to enable seamen to stand on them while working out on the yards or on the bowsprit;
- e) safety jackstays in metal fixed along the top of the yards, to provide handholds and act as strong points for safety harnesses; or
- f) means of safely climbing aloft, such as fixed metal steps or ladders attached to the mast.

## **5.5 ELEVATORS (LIFTS)**

**5.5.1** For new yachts, lifting devices shall be designed and constructed to recognised international standards.

**5.5.2** Before a lifting device is put into service, it shall be tested and examined, and the safe working load and maximum weight shall be clearly marked on the lift. A manufacturer's certificate shall be issued to the yacht and displayed in the lift.

**5.5.3** For all yachts, regular in service examination according to a manufacturer's maintenance manual shall be carried out and this shall be verified as part of the annual safety inspection, to ensure continuing compliance.

## **5.6 PERSONAL CLOTHING**

**5.6.1** It is the responsibility of the Master to advise on the requirements for items of personal clothing.

**5.6.2** Each person onboard shall have protective clothing appropriate to the prevailing air and sea temperatures, and footwear having non-slip soles shall be worn onboard.

## **5.7 MEDICAL STORES**

**5.7.1** All yachts shall carry medical stores as required by the UAE National Transport Authority.

**5.7.2** Medical training requirements for crew and officers are laid down by the UAE National Transport Authority.

## **5.8 VERIFICATION OF COMPLIANCE**

**5.8.1** Before the Yacht Safety Certificate can be issued, compliance with all regulations in this Chapter shall be documented either by the UAE National Transport Authority or the RO. Bulwark and guard rails shall in general be in accordance with the ICLL.

**5.8.2** By the renewal of the Yacht Safety Certificate compliance with above regulations has to be verified.

**5.8.3** At intermediate surveys and ISM audits, spot checks to the above regulations shall be made.

## **Ch. 6 OPERATIONAL PROVISIONS**

### **6.1 PERSONAL SAFETY EQUIPMENT**

**6.1.1** Personal safety equipment shall be available everywhere it may be needed. Officers, crew and staff who on a regularly basis enter spaces where personal protection equipment should be used, shall have their own personal set of such equipment.

**6.1.2** Inflatable life jackets shall be worn by crew when operating on safety equipment located on external decks and, at all times, by all members of deck crew in normal operations.

### **6.2 EAR PROTECTION**

**6.2.1** Ear protection shall be worn in spaces where the noise level exceeds 85 dB(A). Entrances to such spaces shall be provided with a warning sign stating that high noise levels must be expected and that ear protectors shall be used.

### **6.3 SAFETY AND COMFORT OFFICER**

**6.3.1** One of the officers shall be responsible for the safety, comfort and security for all people onboard and on a regularly basis report observations and necessary actions taken. It should be focused on hygiene, malfunctions of equipment to be corrected, worn out items to be replaced etc. to keep all safety, comfort and security items in perfect condition at all times. Control measurements of noise, vibrations, indoor climate, lighting etc. are to be carried out regularly.

**6.3.2** The safety and comfort officer shall keep a log of all safety, comfort and security items. The log shall be updated at least once a month or whenever an item has to be corrected.

## **PART 7 NAVIGATION AND CONTROL**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** This Part describes minimum requirements for safe navigation of a yacht in all foreseeable operating conditions.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** The safety of navigation of the yacht is to:

- a) provide central functions for accurate steering and manoeuvring;
- b) provide equipment for correct position finding;
- c) provide position to determine the course and keep the course in an accurate way;
- d) observe other yachts and objects and determine their behaviour; and
- e) provide adequate stop and backing capability.

**1.2.2** The navigation and communication systems and equipment on the bridge shall be designed, installed and maintained to:

- a) be aware of all navigation hazards, fixed or moving;
- b) minimise risk of grounding and collision;
- c) receive weather forecasts;
- d) measure and interpret environmental data; and
- e) alert distress and safety messages both externally and internally.

**1.2.3** The navigation, communication and seamanship systems and equipment shall provide high reliability and minimise the risk of mal-operation in all foreseeable operating conditions, accidents and emergencies.

#### **1.3 RESPONSIBILITY**

**1.3.1** The Owing Company has the full responsibility of the yacht in all operating modes towards the UAE National Transport Authority.

**1.3.2** The Owing Company is to delegate the responsibility for the control of the yacht while at quay, at anchor and under way to the Master of the yacht unless the Owner is assigned as the Master of the yacht.

**1.3.3** The Owing Company may delegate the responsibility for the control of the yacht to another person than the Master while the yacht is layed up.

## 1.4 DEFINITIONS

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulations:

**Alternative bridge:** Means a bridge located in a non-conventional location in the yacht.

**Anchoring:** Means holding a stationary position by the use of anchor.

**Berthing:** Means bringing the yacht alongside a quay or pier.

**Mooring:** Means the fastening of a yacht to a fixed object such as a pier, quay or the seabed, or to a floating object such as a mooring buoy.

**Steering:** Means keeping the yacht on the desired course including course changes.

**Towing:** Means to pull other yachts or floating objects lacking propulsion by themselves or being towed by another vessel.

## Ch. 2 ANCHORING, MOORING, TOWING AND BERTHING

### 2.1 GENERAL

**2.1.1** The design and arrangement for anchoring, towing and berthing and the local structure shall be such that the risk to persons carrying out anchoring, towing and berthing procedures are kept to a minimum.

**2.1.2** All anchoring equipment, towing bitts, mooring bollards, fairleads, cleats and eyebolts shall be so constructed and attached to the hull that, in use up to design load, the watertight integrity of the yacht will not be impaired. Design loads and any directional limitations assumed shall be listed in the yacht's operating manual.

**2.1.3** Under any operating load up to the breaking strength of the anchor cable or mooring lines, the loads on the bitts, bollards etc. shall not result in damage to the hull structure that will impair the watertight integrity. A strength margin of at least 20% above the resultant based on the minimum specified breaking strength of the relevant cable or warp shall be required.

**2.1.4** Upon request from the Owner, the UAE National Transport Authority or the RO shall evaluate each individual case with regards to drawings for approval, material certificates and practical tests depending of the yacht's size and planned operational profile. Limitations to be settled and included in the yacht's operating manual.

**2.1.5** Good engineering practice shall be followed in the design of any enclosed space containing the anchor recovery equipment to ensure that persons using the

equipment are not put at risk. Particular care shall be taken with the means of access to such spaces, the walkways, the illumination and protection from the cable and the recovery machinery.

## **2.2 ANCHORING**

**2.2.1** A yacht needs anchoring as temporary mooring, or in combination with fixed mooring (to quay), as a part of the normal usage. The operating condition “at anchor” is regarded as a normal operating condition for a yacht.

**2.2.2** The yacht needs an anchor for emergency use to save the yacht and the persons onboard from disaster in a critical situation.

**2.2.3** The yacht shall be protected so as to minimise the possibility of the anchor and cable damaging the structure during normal operation.

**2.2.4** Adequate arrangements shall be provided for two-way voice communication between the operating compartment and persons engaged in dropping weighting or releasing the anchor.

**2.2.5** The anchoring arrangements shall be such that any surfaces against which the cable may chafe (e.g. hawse pipes and hull obstructions) are designed to prevent the cable from being damaged and fouled. Adequate arrangements shall be provided to secure the anchor under all operating conditions.

## **2.3 TOWING**

**2.3.1** Adequate arrangements shall be provided to enable the yacht to be towed in the worst intended conditions. Where towage is to be from more than one point, a suitable bridle shall be provided.

**2.3.2** The towing arrangement shall be such that any surface against which the towing cable may chafe (e.g. fairleads) is of sufficient radius to prevent the cable being damaged when under load.

## **2.4 BERTHING AND MOORING**

**2.4.1** Suitable fairleads, bitts and mooring ropes shall be provided where necessary.

**2.4.2** Adequate storage space for mooring lines shall be provided such that they are readily available and secured against the high relative wind speeds and accelerations which may be experienced.

## **2.5 VERIFICATION OF COMPLIANCE**

**2.5.1** For yachts  $\geq 400$  GT, documentation as required by the classification society shall be submitted for approval in reasonable time before delivery of the yacht.

**2.5.2** For yachts  $< 400$  GT the UAE National Transport Authority or the RO will require necessary documentation for review and approval to make sure that the arrangement and equipment is of adequate type and not in conflict with any safety aspect.

**2.5.3** Necessary operating manuals shall be worked out and be available on the bridge.

## **Ch. 3 NAVIGATION**

### **3.1 GENERAL**

**3.1.1** The yacht shall have adequate equipment and arrangements for the safety of navigation.

**3.1.2** Unless the yacht is  $< 3,000$  GT and carries 12 persons or less, the design of the work stations shall as far as practicable comply with HSC Code Ch.15.4-6 and 15.9-11.

### **3.2 EQUIPMENT**

**3.2.1** Means shall be provided to read the yacht's compass course, the sea depth, the position, the distance sailed and the rudder angle at the bridge.

**3.2.2** Means shall be provided to identify other ships and/or obstructions during navigation in fog and/or dark.

**3.2.3** All navigation and communication equipment and systems covered by this Chapter shall be safe and suitable for use in the marine environment.

**3.2.4** Yachts  $\geq 500$  GT shall as far as practicable be fitted with navigation equipment covering the functions as listed in:

- a) SOLAS Ch. V, Reg. 18, 19, 20 and 27 for yachts with maximum speed in meters per second (m/s), less than  $3.7 \times \nabla^{0.1667}$  ; where  $\nabla$  = volume of displacement corresponding to the design waterline (m<sup>3</sup>); or
- b) HSC Code Ch.13 for yachts with maximum speed in meters per second (m/s), equal to or exceeding than  $3.7 \times \nabla^{0.1667}$  ; where  $\nabla$  = volume of displacement corresponding to the design waterline (m<sup>3</sup>).

**3.2.5** Yachts of < 500 GT shall at least carry:

- a) a properly adjusted magnetic compass;
- b) an echo sounder;
- c) a GPS;
- d) a distance measuring log;
- e) a gyro compass or spare magnetic compass;
- f) a rudder angle indicator;
- g) an electronic chart system; and
- h) a 9 GHz radar with radar tracking device.

**3.2.6** If the yacht is arranged with an alternative bridge, the navigational equipment in the alternative bridge shall as a minimum include:

- a) GPS;
- b) an electronic chart system which may be a slave;
- c) a compass bearing repeater;
- d) a radar with radar tracking device (the radar may be a slave); and
- e) a rudder angle indicator.

**3.2.7** All yachts shall carry a barometer. All sailing yachts shall carry an anemometer and an inclinometer.

**3.2.8** All yachts of  $\geq 300$  GT shall be fitted with an approved automatic identification system (AIS) in accordance with SOLAS Chapter V, Reg. 19.2.4.

### **3.3 VERIFICATION OF COMPLIANCE**

**3.2.1** The UAE National Transport Authority or the RO shall be provided with necessary documentation for review and approval to make sure the navigational equipment and arrangement is of adequate type and not in conflict with any safety aspect.

**3.2.2** Necessary operating manuals shall be developed, systematically documented and be available on the bridge.

## **Ch. 4 BRIDGE**

### **4.1 BRIDGE VISIBILITY**

**4.1.1** The visibility from the bridge shall be adequate for safe navigation.

### **4.2 WINDOWS**

**4.2.1** Windows may be inclined from the vertical plane provided that, where necessary, appropriate measures are taken to avoid adverse reflections from within.



**4.2.2** Windows to the navigating position shall not be of either polarised or tinted glass. Portable tinted screens may be provided for selected windows.

### **4.3 VERIFICATION OF COMPLIANCE**

**4.3.1** The main bridge arrangement shall as far as practicable comply with HSC Code Ch.15.3 and 15.7.

**4.3.2** If the yacht is < 3,000 GT and carries 12 persons or less, navigation bridge visibility may comply with SOLAS Chapter V, Reg. 22. Yachts less than 45 meters in length shall comply as far as reasonable and practicable.

**4.3.3** The UAE National Transport Authority or the RO shall be provided with necessary documentation for review and approval to make sure the arrangement and equipment is of adequate type and not in conflict with any safety aspect.

## **Ch. 5 STEERING**

### **5.1 GENERAL**

**5.1.1** The yacht shall be provided with means for directional control of adequate strength and suitable design to enable the yacht's heading and direction of travel in open waters and under manoeuvring in narrow waters. SOLAS Chapter II-1 Part C Reg. 29 gives the basic requirements for steering gear installations. These requirements shall be followed for yachts  $\geq 500$  GT, as far as applicable, as if the yacht was a passenger vessel of the same size.

**5.1.2** Adequate indications shall be installed at the navigation position to provide the person controlling the yacht with verification of the correct response of the directional control device to his demand.

**5.1.3** Any single failure in the directional control system or its power supply shall not put the yacht into a situation in which it is impossible to maintain directional control, disregarded from mechanical damage on the rudder or steering gear or corresponding devices.

**5.1.4** Redundancy of steering arrangement can be made by use of one main steering system, capable of steering the yacht at its maximum speed, and a secondary steering system with less capability.

## **5.2 MAIN STEERING**

**5.2.1** All yachts shall have at least a simple conventional main directional control system consisting of one rudder connected to a steering gear, necessary power supply and controls, or other means serving the same purpose.

**5.2.2** If two or more rudders are linked together and connected to one common steering gear, it shall be possible while at sea to release any of the rudders from the other(s) if one of the rudders has become impossible to turn due to any kind of damage.

**5.2.3** The rudder(s) shall give sufficient side lift to create necessary turning moment to change the direction of movement, when the yacht moves forward and backwards from low to maximum speed in all expected loading conditions.

**5.2.4** The steering gear(s) shall be of hydraulic type with sufficient capacity to turn the rudder from side to side at full speed within a reasonable time. It shall be protected against damage in case of external force acting on the rudder.

**5.2.5** Other solutions than the conventional may be considered by the UAE National Transport Authority or the RO if the same functionality and safety can be proven. The main steering of the yacht may be integrated with the main propulsion system(s).

**5.2.6** If the rudder(s) is/are also designed for significant contribution to the side movement (same function as a side thruster) automatic limitation in normal use shall be considered.

## **5.3 EMERGENCY STEERING ARRANGEMENT**

**5.3.1** All yachts with main steering that is not integrated with the propulsion system shall be capable of being directionally controlled in the event of loss of power supply or remote operating control functions.

**5.3.2** In case of electrical failure, switching from main- over to emergency steering shall not take more than 60 seconds. For existing yachts the UAE National Transport Authority, or the RO acting on its behalf, may consider less strict requirements.

**5.3.3** For yachts intended for Polar operations with the emergency steering device located in a steering gear compartment at the stern, the emergency steering shall be operable if the steering gear compartment is filled with water up to a level corresponding to flooding of that watertight compartment solely. If the steering gear compartment is protected so that it cannot be flooded according to the damage stability calculations, this requirement shall be omitted.

## **5.4 ROLL REDUCTION SYSTEMS**

**5.4.1** Roll reduction systems, manually or automatically operated, can be stabilising fins, roll reduction tanks, heeling tanks or similar. Such devices, when in or not in use, shall not affect the yacht's other safety equipment in any aspect in normal or abnormal situations.

**5.4.2** In case of failure in the main power supply of any roll reduction system during operation, it shall be possible to bring the system into neutral or normal inactive mode.

**5.4.3** All roll reduction systems shall be operated from the bridge. Necessary controls and alarms shall be arranged.

## **5.5 THRUSTERS AND DYNAMIC POSITIONING SYSTEMS**

**5.5.1** For all yachts the effects of any equipment intended for improving the manoeuvring flexibility such as side thrusters, azipods etc. are to be predicted for all relevant operating conditions.

**5.5.2** Any yacht  $\geq 400$  GT may be equipped with a dynamic positioning system.

**5.5.3** For unclassified yachts  $< 400$  GT the UAE National Transport Authority or the RO will consider installation of such a dynamic positioning system in each case.

## **5.6 VERIFICATION OF COMPLIANCE**

**5.6.1** For yachts  $\geq 400$  GT, documentation as required by rules of the Classification Society shall be submitted for approval in reasonable time before the yacht is taken into operation.

**5.6.2** For new yachts of  $\geq 400$  GT the characteristics of the hull shall be verified by computer simulation at the design stage and necessary compromises between different requirements or needs shall be particularly considered.

**5.6.3** For unclassified yachts  $< 400$  GT the UAE National Transport Authority or the RO shall be provided with necessary documentation for review and approval to make sure that the equipment is of adequate type and not in conflict with any safety aspect.

**5.6.4** All equipment shall be tested in practical use to the complete satisfaction of the UAE National Transport Authority or the RO acting on its behalf.

**5.6.5** Necessary operating manuals shall be developed, systematically documented and be available on the bridge.

## **Ch. 6 ALERTING OTHER SHIPS**

### **6.1 GENERAL**

**6.1.1** The yacht shall display navigation lights and have sound signals in order for other ships to detect the yacht and understand its navigation.

**6.1.2** Every yacht shall comply with the requirements of the International Regulations For Preventing Collisions At Sea, 1972, as amended.

**6.1.3** According to COLREG Regulation 1 (e), one masthead light only may be regarded as acceptable.

**6.1.4** All navigation lights shall be fed from a distribution panel with both main and emergency power.

**6.1.5** With due regard to accessibility, the requirement for control panel for navigation lights can be replaced by a duplication of navigation lights. For yachts where compliance is impracticable, alternatives may be accepted by the UAE National Transport Authority or the RO.

### **6.2 VERIFICATION OF COMPLIANCE**

**6.2.1** The UAE National Transport Authority or the RO shall be provided with necessary documentation for review and approval to make sure the arrangement and equipment is of adequate type and not in conflict with any safety aspect.

**6.2.2** Necessary operating manuals shall be developed, systematically documented and be available on the bridge.

## **Ch. 7 EXTERNAL GMDSS COMMUNICATION**

### **7.1 GENERAL**

**7.1.1** All yachts, while at sea, shall be capable:

- a) except as provided in SOLAS Ch. V. regulations 8.1.1 and 10.1.4.3, of transmitting ship-to-shore distress alerts by at least two separate and independent means, each using a different radio communication service;
- b) of receiving shore-to-ship distress alerts;
- c) of transmitting and receiving ship-to-ship distress alerts;
- d) of transmitting and receiving search and rescue co-ordinating communications;
- e) of transmitting and receiving on-scene communications;
- f) of transmitting and receiving signals for locating purposes;

- g) of transmitting and receiving maritime safety information;
- h) of transmitting and receiving general radio communications to and from shore-based radio systems or networks subject to SOLAS Ch. V regulation 15.8; and
- i) of transmitting and receiving bridge-to-bridge communications.

**7.1.2** A UAE Radio Station Licence is required on all yachts with a radio station onboard. An appropriately certified radio operator shall be onboard.

**7.1.3** A SOLAS Chapter IV Convention Safety Radio Certificate is required for all yachts of  $\geq 300$  GT which will entail GMDSS compliance and SOLAS Chapter V AIS and LRIT compliance.

## **7.2 RADIO COMMUNICATION**

**7.2.1** The radio communication systems on the main bridge shall comply with:

- a) SOLAS Ch. IV, Regulation 6-15 and Ch. III, Regulation 6.2.1-6.2.3; or
- b) HSC Code Ch.14.6-14.15 and Ch.8.2.1; or
- c) If the yacht is  $< 3,000$  GT and carries 12 guests or less, the following may apply:
  - 1) an approved EPIRB may be installed in an easily accessible position ready to be manually released, capable of being placed in a survival craft and floating free if the yacht sinks. All EPIRBs shall be registered with the UAE National Transport Authority. EPIRBs are to be tested annually and serviced at not more than five-yearly intervals by an approved shore-based maintainer; and
  - 2) the SART is to be stowed in an easily accessible position so that it can rapidly be placed in any survival craft. Means shall be provided so that it can be mounted in the survival craft at a height of at least 1 metre above sea level.

**7.2.3** The radio communication systems in an alternative bridge shall consist of:

- a) a distress panel and distress alarm panel for all GMDSS equipment in the main bridge, which may be slave panels; and
- b) a control of the VHF radiotelephone channels, required for navigational safety and channel 6, 13 and 16

## **7.3 RADIO STATION EQUIPMENT**

**7.3.1** Radio installations to be carried to fulfil the functional requirements when sailing at sea:

- a) General requirements for all sea areas:
  - NAVTEX / EGC
  - SART: 1 for 300-500 GT and 2 when  $\geq 500$  GT, shall be located on the bridge.
  - EPIRB shall be located where it can float freely and is easily accessible
  - Portable VHF: 2 for 300-500 GT and 3 when  $\geq 500$  GT
- b) In addition, specific for each Sea Area:
  - Sea Area A 1: VHF/DSC
  - Sea Area A 2: VHF/DSC + MF/DSC
  - Sea Area A 3:
    - a - two (2) VHF/DSC + MF/DSC + two (2) sets of Inmarsat terminal;
    - or
    - b - two (2) VHF/DSC + Inmarsat terminal + MF / HF / DSC / TELEX.
  - Sea Area A 4: two (2) VHF/DSC + two (2) sets of MF / HF / DSC / TELEX
- c) Secondary means of alerting in case of Sea Areas A1, A2, A3 alternative a and A4: A manual EPIRB or a remote controller to the float free EPIRB shall be provided on the bridge.

**7.3.2** All radio communication equipment shall be of a type that is approved.

**7.3.3** The radio station shall be:

- a) so located to ensure the greatest possible degree of safety and operational availability;
- b) protected against harmful effects of water, extremes of temperature and other adverse environmental conditions; and
- c) clearly marked with the call sign, the yacht station identity and any other codes applicable to the use of the radio station installation.

**7.3.4** There shall be available at all times, while the yacht is at sea, a supply of electrical energy sufficient to operate the radio installations and to charge any batteries used as part of a reserve source or sources of energy for the radio installations.

**7.3.5** A reserve source of energy, independent of the propelling power of the yacht and its electrical system, shall be provided for the purpose of conducting distress and safety radio communication in the event of failure of the yacht's main and emergency sources of electrical power. If emergency AC is also provided and connected to the GMDSS equipment, then the capacity of the reserve source shall be one (1) hour. Otherwise the capacity shall be six (6) hours.

**7.3.6** When a reserve source of energy consists of a rechargeable accumulator battery, a means of automatically charging such batteries shall be provided which is capable of recharging them to minimum capacity requirements within 10 hours.

**7.3.7** The installation of accumulator batteries shall ensure the highest degree of service and safety.

**7.3.8** A yacht, while at sea, shall maintain a continuous watch as follows:

- a) Sea Area A1: Continuous watch on VHF Ch.70,
- b) Sea Area A2: Continuous watch on VHF Ch.70 and MF 2187.5 kHz,
- c) Sea Area A3: Continuous watch on either:
  - VHF Ch.70, MF 2187.5 kHz and Inmarsat C; or
  - VHF Ch.70, MF/HF frequencies 2187.5 kHz + 8414.5 kHz + on at least one of the frequencies 4207.5 kHz, 6312 kHz, 12577 kHz, 16804.5 kHz.
- d) Sea Area A4: Continuous watch on VHF Ch.70, MF/HF frequencies 2187.5 kHz + 8414.5 kHz + on at least one of the frequencies 4207.5 kHz, 6312 kHz, 12577 kHz, 16804.5 kHz.

**7.3.9** A yacht shall carry at least one (1) person qualified for distress and safety radio communication purposes, who shall hold a certificate of competence acceptable to the UAE National Transport Authority.

## **7.4 VERIFICATION OF COMPLIANCE**

**7.4.1** The UAE National Transport Authority or the RO shall be provided with necessary documentation for review and approval to make sure the arrangement and equipment is of adequate type and not in conflict with any safety aspect.

**7.4.2** Necessary operating manuals shall be developed, systematically documented and be available on the bridge.

## **Ch. 8 GENERAL EMERGENCY ALARM**

### **8.1 GENERAL**

**8.1.1** A general emergency alarm system shall enable the notification of all embarked persons in a timely manner that an emergency situation exists.

**8.1.2** The general emergency alarm shall:

- a) be clearly noticeable by all embarked persons;
- b) be easily distinguishable and recognisable;
- c) be continuously available;
- d) be protected from hazards such as fire, vibration, electrical interference and flooding;
- e) be operable from the bridge and one additional strategic position;
- f) have priority over all other alarms, except for public address emergency announcements; and
- g) continue to be broadcasted automatically after public address emergency announcement has been deactivated.

**8.1.3** General emergency alarm shall be audible in all accommodation, crew working spaces, cabins and all other locations where persons have access including open decks.

## **8.2 VERIFICATION OF COMPLIANCE**

**8.2.1** The general emergency alarm shall comply with:

- a) SOLAS Ch. III, Reg. 6.4; or
- b) HSC Code Ch.8.2.2.

**8.2.2** For yachts < 500 GT carrying 12 persons or less, this alarm may consist of the yacht's whistle or siren providing it can be heard in all parts of the yacht.

**8.2.3** For yachts  $\geq$  500 GT carrying 12 persons or less, the requirement of Ch.8.2.2 to be supplemented by an electrically operated bell which is to be powered from the yacht's main supply and also the emergency source of power.

**8.2.4** Unless the yacht is < 3,000 GT and carries 12 guests or less, the general emergency alarm shall comply with IMO Res. A.830(19) and IEC 60945.

**8.2.5** Audibility of loudspeakers and bells shall be verified by test.

## **Ch. 9 EMERGENCY PUBLIC ADDRESS**

### **9.1 GENERAL**

**9.1.1** An emergency public address system shall be available and enable verbal communication to embarked persons of an emergency incident and the actions to be taken.

**9.1.2** The emergency public address system shall:

- a) allow one-way voice communication to embarked persons;
- b) be clearly noticeable by all embarked persons;
- c) be easily distinguishable and recognisable;
- d) be continuously available;
- e) be protected from hazards such as fire, vibration, electrical interference and flooding;
- f) be provided such that any incident which may cause alarm failure shall be guarded against by system or equipment redundancy;
- g) be operable from the bridge and one additional strategic position; and
- h) have priority over all alarms including general emergency alarm and any other input to the system.



**9.1.3** The emergency public address announcements shall be audible and available in all accommodation, crew working spaces, cabins and all other locations where persons have access including open decks.

## **9.2 VERIFICATION OF COMPLIANCE**

**9.2.1** The public address system shall comply with:

- a) SOLAS Ch. III, Reg. 6.5; or
- b) HSC Code Ch.15.8.3.

**9.2.2** Unless the yacht is < 3,000 GT and carries 12 guests or less, the emergency public address shall comply with IMO Res. A.830(19), IMO Res. MSC Circ. 808 and IEC 60945.

**9.2.3** In all areas not exclusive for crew, loudspeakers from two different and independent loops shall be available.

**9.2.4** Audibility of loudspeakers shall be verified by test.

## **Ch. 10 ONBOARD TWO-WAY COMMUNICATION**

### **10.1 GENERAL**

**10.1.1** Onboard two-way communication systems shall enable effective two-way communication between crew members to support navigation, control, escape, evacuation and rescue activities.

**10.1.2** Onboard two-way communication systems shall:

- a) allow clear and distinguishable two-way verbal communication; and
- b) be suitably rated for the environment under which it will operate.

### **10.2 VERIFICATION OF COMPLIANCE**

**10.2.1** The onboard two-way communication system shall comply with:

- a) SOLAS Ch. III, Reg. 6.2.1; or
- b) HSC Code Ch.8.2.1.1 and 15.8.1-2; or
- c) For yachts of  $\geq$  400 GT, six (6) portable UHF radio telephones, provided sufficient coverage of UHF signals in all applicable workstations onboard.

## **Ch. 11 OPERATIONAL PROVISIONS**

### **11.1 MAINTENANCE**

**11.1.1** All equipment of importance for safety and which is fixed to the yacht shall be inspected regularly. Repair or replacement to be made by authorised personnel. New tests may be required by the UAE National Transport Authority or the RO.

**11.1.2** Loose equipment such as ropes etc. shall be regularly inspected and replaced if damaged or worn in a way that may affect its functionality or strength. The manufacturer's guidance shall be available with the operation manual and are to be followed.

**11.1.3** Repair and change of equipment not subject to approval by the UAE National Transport Authority, or the RO acting on its behalf, shall be noted in the yacht's log.

### **11.2 AT ANCHOR**

**11.2.1** When the yacht is moored with anchor, it shall not be left unattended and anchor watch shall be held. Weather forecast and other factors that may cause reduced safety for the yacht and the persons onboard and/or its surroundings shall be paid necessary attention according to good seamanship.

**11.2.2** The yacht shall have the necessary degree of readiness to be moved or secured at any time.

### **11.3 TOWING**

**11.3.1** The maximum permissible speed at which the yacht may be towed shall be included in the operating manual.

**11.3.2** If the yacht shall be used for towing another vessel without being specially designed for such an operation, it is to be regarded as an emergency condition.

## **11.4 MOORING AT QUAY OR OTHER FIXED POINTS**

**11.4.1** Plans for safe mooring and berthing under different conditions shall be worked out and the deck crew to be well drilled.

**11.4.2** If not moored just for short temporary purposes, the yacht shall be fixed moored in such a way that loosing or break in one of the lines will not result in significant change in the yacht's position, causing damage to itself and/or its surroundings.

## **PART 8 FIRE SAFETY**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** This Part is to ensure a consistent level of fire protection for yachts which are not required to have fire safety in compliance with international regulations.

**1.1.2** All fire safety equipment and systems covered by this Part shall be safe and suitable for use in the marine environment.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** The risk of ignition of combustible materials shall be prevented. Accumulation of flammable liquids and vapours shall be controlled and dangerous goods shall be adequately separated from ignition sources.

**1.2.2** Equipment to detect a fire in the space of origin and to provide for alarm for fire-fighting activities shall be installed and shall be suitable to the nature of the space they are fitted in.

**1.2.3** Provisions shall be available to limit air supply to spaces with high fire risk.

**1.2.4** Onboard fire in machinery spaces and spaces with high fire risk shall be contained by subdivision and by thermal and structural boundaries. Thermal insulation of such boundaries shall have due regard to the fire risk of the space of origin and the evacuation time of the yacht.

**1.2.5** A fire control plan shall be readily available for Master, crew and shore fire fighters and shall describe the principal fire prevention, protection equipment and structural fire prevention time of boundaries.

**1.2.6** Fire fighting systems and equipment shall be able to suppress, contain and quickly and effectively extinguish fires onboard.

**1.2.7** Safe escape and evacuation shall be possible from any space in the yacht by day and night and before a fire renders it impossible to be onboard.

**1.2.8** Fire-protection and fire-fighting systems and appliances shall be functional, in good working order and ready for use when the yacht is in operation.

## 1.3 APPLICABILITY

**1.3.1** The requirements for fire protection in this Part apply to yachts that are made of steel, aluminium, fibre-reinforced plastic (FRP) or a combination of these materials. The UAE National Transport Authority or the Recognised Organisation (RO) will give specific consideration to yachts made of other materials.

**1.3.2** Fire safety equipment shall be certified according to IMO Fire Systems Safety Code (FSS Code) Res. MSC 98(73) as amended and according to IMO Fire Test Procedures Code (FTP Code) Res. MSC 61(67) as amended.

## 1.4 DEFINITIONS

Definitions in SOLAS Ch. II-2 apply. In addition, the following definitions, in alphabetical order, are applicable throughout this Part of the Regulations:

**Dangerous goods:** Means solids, liquids, or gases that can harm people, other living organisms, property or the environment (ref. IMDG Code for details).

**Flammable liquids:** Means a liquid which may catch fire easily or with a flashpoint below 38°C (~100°F).

**Flammable vapour:** Means the vapour resulting from the vaporisation of a flammable liquid.

**Yacht not in operation:** Means a yacht which is:

- a) in port / in dry-dock for repairs or lay-up; and
- b) declared not in operation by the Owning Company or its representative.

## Ch. 2 FIRE SAFETY LEVEL

### 2.1 MINIMUM REQUIREMENTS

**2.1.1** The fire safety level of these Regulations is based on the international fire safety level for shipping in accordance to the table 8-1 for minimum compliance. Yachts shall comply with the Statutory Instruments as described by table 8.1.

**2.1.2** The yacht can comply with any higher level of fire safety than the minimum for the area of operation and number of persons onboard.

**2.1.3** The definitions in SOLAS Ch. II-2 shall be used. When the HSC Code is referred to, the corresponding definition shall be used.

| <b>AREA OF OPERATION AND GUESTS ONBOARD</b>  | <b>SAFETY LEVEL</b>  |
|--|--|
| Polar operation and > 60 guests  | SOLAS Regulations for Passenger Ship   |
| Polar operation and 12–60 guests<br>Ocean operation and > 60 guests                                      | HSC Regulations for High Speed Passenger Craft, Category B, where accommodation is as for “crew accommodation”   |
| Polar operation and < 12 guests<br>Ocean operation and 12–60 guests<br>Coastal operation and > 60 guests | For each option and as appropriate:<br>- SOLAS Regulations for Cargo Ships<br>- HSC Regulations for High Speed Cargo Craft when accommodation is as for “crew accommodation” SPS Regulations for Special Purpose Ships |
| Ocean operation and < 12 guests<br>Coastal operation and < 60 guests                                     | Prescriptive requirements in this Part of the UAE Yacht Regulations  |

Table 8-1 Relation between safety level and area of operation and guest onboard.

## **Ch. 3 RISK OF IGNITION**

### **3.1 GENERAL**

**3.1.1** Means shall be provided to detect and control leaks of flammable liquids and limit the accumulation of flammable vapour.

**3.1.2** Ignition sources shall be restricted and separated from combustible materials and flammable liquids if practically possible.

**3.1.3** Dangerous goods shall be adequately separated from ignition sources. Dangerous goods shall be packed and stowed according to the International Maritime Dangerous Goods Code (IMDG Code).

**3.1.4** Means shall be provided to isolate any source of fuel that may feed a fire in an engine space. A fuel shut-off valve(s) shall be provided and capable of being closed from a position outside the engine space. The valve(s) shall be fitted as close as possible to the fuel tank(s).

**3.1.5** Fuel tanks and associated pipes and fittings shall be located to reduce to a minimum the risk of fire or explosion.

**3.1.6** If the yacht’s propulsion system is based on gas, the storage of this gas shall comply with the International Gas Code (IGC).

## **3.2 SPECIAL CATEGORY SPACES**

**3.2.1** Enclosed spaces designated for the safe carriage of petrol/ similar fuel or vehicles with fuel in their tanks shall be fitted with:

- a) a mechanical exhaust ventilation system which is isolated from other ventilated spaces, and provides at least 6 air changes per hour;
- b) all electrical equipment located up to 450 mm above the deck shall be certified safe for petrol vapours and equipment located higher shall be to IP55 standards of construction (IEC Publication 529 - Classification of Degree of Protection Provided by Enclosures); and
- c) gas detection and alarm system.

## **3.3 GAS INSTALLATIONS**

**3.3.1** Where gaseous fuel is used for domestic purposes, the storage, distribution and utilisation of the fuel is to be such that, having regarded the hazards of fire and explosion which the use of such fuel may entail, the safety of the yacht and the persons onboard is preserved. The installation is to be in accordance with recognised National or International Standards. Hydrocarbon gas detectors and carbon monoxide detectors shall be provided.

**3.3.2** Gas cylinders, regulators and safety devices shall be stowed on the open deck where leakage will not accumulate or in a compartment that is vapour tight to the yacht's interior and fitted with a vent and drain, so that any gas which may leak can disperse overboard.

**3.3.3** Any open flame gas appliance provided for cooking, heating or pleasure shall comply with the requirements of EC Directive 90/396/EEC or equivalent.

## **3.4 SAUNAS**

**3.4.1** Wooden linings on bulkheads and ceilings are permitted. The ceiling above the oven shall be lined with a non-combustible plate with an air gap of at least 30 mm. The distance from the hot surfaces to combustible materials shall be at least 500 mm or the combustible materials shall be protected.

**3.4.2** Wooden benches are permitted.

**3.4.3** Electrically heated ovens shall be provided with a timer.

## **3.5 DEEP FAT FRYING EQUIPMENT**

**3.5.1** Deep fat frying equipment shall comply with the SOLAS II-2 / 10.6.4.

## **3.6 VERIFICATION OF COMPLIANCE**

**3.6.1** Documentation of any installation with high risk of ignition shall be provided to the UAE National Transport Authority or the RO for approval and survey.

## **Ch. 4 FIRE GROWTH CONTROL**

### **4.1 MATERIALS**

**4.1.1** The following surface materials shall be low flame spread:

- a) exposed surfaces in corridors and stairway enclosures, and of bulkheads, wall and ceiling linings in all service spaces and control stations; and
- b) concealed or inaccessible spaces in accommodation, service spaces and control stations.

**4.1.2** As an alternative to Ch.4.1.1, these spaces may contain surfaces that are not low flame spread, provided these spaces are protected by a fixed fire extinguishing system and a fire detection system.

**4.1.3** Primary deck coverings within accommodation spaces, service spaces and control stations are to be of a type which will not readily ignite, or give rise to toxic or explosive hazards at elevated temperatures.

**4.1.4** Except when a fixed fire extinguishing system is provided, upholstery composites (fabric in association with any backing or padding material) used throughout the yacht, bedding components, suspended textile materials such as curtains and drapes, shall be approved in accordance with the IMO FTP Code or an equivalent standard.

### **4.2 TOXICITY**

**4.2.1** To reduce the hazard to life deriving from smoke and toxic products generated during a fire in spaces where people work, live and may have access to, fire detection and alarm equipment shall be installed.

**4.2.2** The quantity of smoke and toxic products released from any combustible material during fire shall be limited.

**4.2.3** Materials used within accommodation areas, service spaces, escape routes and control stations shall not generate excessive quantities of smoke or toxic products, nor shall they constitute explosive hazards at elevated temperatures.



### **4.3 VERIFICATION OF COMPLIANCE**

**4.3.1** An inventory list of materials used onboard and the low flame spread, smoke and toxicity documentation of the materials shall be provided to the UAE National Transport Authority or the RO.

## **Ch. 5 FIRE DETECTION AND ALARM**

### **5.1 GENERAL**

**5.1.1** Equipment to detect a fire in the space of origin and to provide for alarm for safe escape and fire-fighting activity shall be installed as appropriate.

**5.1.2** Fixed fire detection and fire alarm system installations shall be suitable for the nature of the space, fire growth potential and potential generation of smoke and gases.

**5.1.3** Manually operated call points shall be installed throughout the accommodation spaces, service spaces and control stations.

**5.1.4** Arrangements shall provide effective means of detecting and locating fires and alerting those on watch, in continuously manned control stations and in the fire-fighting team.

**5.1.5** A fixed fire detection and fire alarm system shall be installed in all enclosed service, machinery and other spaces except those containing no significant fire risk. Void spaces, toilets and bathrooms below 10 m<sup>2</sup> are considered to be spaces with no significant fire risk.

**5.1.6** Suitable detectors shall be installed in proximity of special property items.

**5.1.7** Special category spaces shall be fitted with fixed fire and gas detection and alarm system complying with the requirements of SOLAS regulations II-2/Part A / Fire Safety Systems Code Chapter IX.

**5.1.8** Electrically heated ovens for saunas are to be protected by a fire detection and alarm system.

### **5.2 VERIFICATION OF COMPLIANCE**

**5.2.1** Arrangement and particulars of fire detection systems and relevant drawings shall be submitted to the UAE National Transport Authority or the RO for approval.

## Ch. 6 STRUCTURAL FIRE PROTECTION

### 6.1 CONTAINMENT OF FIRE AND STRUCTURAL PROTECTION

**6.1.1** Fire onboard in machinery spaces and other spaces with high fire risk shall be contained by subdivision and by thermal and structural boundaries.

**6.1.2** Structural integrity of the fire boundaries shall prevent partial or whole collapse of the structures due to strength deterioration by heat. For this purpose, the yacht's structure of fire boundaries shall ensure that the structural integrity is not degraded due to fire, and the boundaries shall be satisfactory insulated.

**6.1.3** Thermal insulation of boundaries shall have due regard to the fire risk of the space and its adjacent spaces and avoid fire from spreading.

**6.1.4** The fire integrity of the divisions shall be maintained at openings and penetrations.

**6.1.5** Special category spaces shall be fitted with structural fire protection of 60 minutes.

**6.1.6** Saunas shall have boundaries with 60 minutes structural fire protection.

### 6.2 BOUNDARIES TO MACHINERY

**6.2.1** The boundaries of a space containing internal combustion propulsion machinery shall be:

- a) gas tight;
- b) capable of preventing the passage of smoke and flame to the end of the standard fire test for:

|                                    |            |
|------------------------------------|------------|
| Coastal operation and 12-60 guests | 30 minutes |
| Coastal operation and < 12 guests  | 15 minutes |

Table 8-2

- c) and insulated, where necessary, with a suitable non-combustible material capable of maintaining the average temperature on the unexposed side of the division below 139°C above the initial temperature within a period as required under b) when the division is exposed to a standard fire test.

### 6.3 VENTILATION

**6.3.1** Ventilation fans for machinery spaces and enclosed galleys are to be capable of being stopped and main inlets and outlets of ventilation systems closed, from outside the spaces being served.

**6.3.2** In a yacht provided with an approved gas extinguishing system within an enclosed machinery space, arrangements shall be provided for the closure of all openings to the machinery space that can admit air. Additionally, means shall be provided for stopping all ventilation fans supplying the machinery space in the event of a fire within the machinery space.

**6.3.3** The ventilation system for engine room, galleys and accommodation shall be separated from each other.

**6.3.4** Approved penetrations shall be provided where the ventilation ducts penetrate fire resting division and any smoke tight divisions.

**6.3.5** If a ventilation duct to or from machinery spaces, galleys and/or special category spaces passes through accommodation, service spaces and/or control stations, automatic fire dampers shall be fitted close to the boundaries penetrated.

**6.3.6** If a ventilation duct to or from accommodation, service spaces and/or control stations passes through machinery spaces, galleys and/or special category spaces, automatic fire dampers shall be fitted close to the boundaries penetrated.

**6.3.7** As an alternative to 6.3.5/6.3.6 the entire ventilation duct may be insulated throughout the spaces not being served to maintain the structural fire integrity.

**6.3.8** Ventilation ducts close to fire dampers shall be insulated to a point at least 5 m beyond each fire damper to maintain the structural fire integrity.

## **6.4 INSULATION**

**6.4.1** Thermal or acoustic insulation fitted shall be of a type that is not readily ignitable and, where fitted within a machinery space that contains either internal combustion propulsion machinery or oil-fired boilers, the surface of the insulation is to be impervious to oil and oil vapour.

**6.4.2** Insulation provided within a machinery space where the boundary is required to stand 30 minutes and more shall be of a non-combustible type as defined by SOLAS.

## **6.5 VERIFICATION OF COMPLIANCE**

**6.5.1** A Structural Fire Protection Plan and relevant drawings shall be submitted to the UAE National Transport Authority or the RO for approval. Drawings shall detail the classification of spaces and location of fire resisting divisions with minutes of protection, including smoke divisions, draught stops, details of structural fire protection systems and penetrations (e.g. doors, cable, pipe, hatches).

**6.5.2** Documentation of the fire insulation material applied shall be provided to the UAE National Transport Authority or the RO.

## **Ch. 7 FIRE CONTROL PLAN**

### **7.1 GENERAL**

**7.1.1** A fire control plan(s) shall be permanently exhibited for the guidance of the Master and crew of the yacht and for shore fire fighters by the gangway in weathertight enclosure on each side of the yacht. The content of the plan(s) shall show and describe the principal fire prevention and protection equipment. The fire control plan may be a combined Fire & Safety Plan, which shall show the positions of stowage of the life-saving and fire appliances.

**7.1.2** For each deck, the plan(s) shall show the position of:

- a) control stations;
- b) sections of the yacht which are enclosed by structural fire prevention boundaries with protection time in minutes;
- c) location of flammable liquid storage;
- d) locations of fire alarms, fire detection systems, sprinkler installations, fixed and portable fire extinguishing appliances;
- e) fireman's outfit and equipment;
- f) emergency escapes for compartments and decks;
- g) locations and means of control of systems and openings which shall be closed down in a fire emergency; and
- h) emergency evacuation breathing apparatus.

**7.1.3** The plan(s) shall be kept up to date. Updating alterations shall be applied to all copies of the plan(s) without delay. Each plan shall include a list of alterations and the date on which each alteration was applied.

**7.1.4** Symbols used on the plans shall be in accordance with IMO Res. A.952(23), graphical symbols for fire control plans, as amended.

### **7.2 VERIFICATION OF COMPLIANCE**

**7.2.1** The fire control plan and relevant drawings shall be submitted to the UAE National Transport Authority or the RO for approval.

## **Ch. 8 FIRE FIGHTING**

### **8.1 GENERAL**

**8.1.1** Fixed fire fighting systems installed and portable fire fighting equipment shall suppress, contain and quickly and effectively extinguish fires, having due regard to the fire growth potential of the protected spaces.

**8.1.2** Fire extinguishing appliances shall be readily available.

**8.1.3** Special property items shall be fitted with an additional, appropriate and local fire protection and fixed fire extinguishing system.

## **8.2 PORTABLE FIRE EXTINGUISHERS**

**8.2.1** Portable fire extinguishers shall be installed and the number, location, fire extinguishing medium type and capacity shall be selected according to the perceived fire risk in the space.

**8.2.2** In any case, portable fire extinguishers for extinguishing oil fires shall be fitted:

- a) in machinery spaces;
- b) in a boiler room;
- c) in a space containing any part of an oil fuel installation;
- d) in any space with cooking facilities; and
- e) close to helicopter deck.

**8.2.3** In accommodation, the number, location, fire extinguishing medium type and capacity shall be selected according to the perceived fire risk, but for each deck, one portable extinguisher shall be available for use within a distance of 10m from any location. A minimum of 3 portable fire extinguishers shall be provided.

**8.2.4** The portable fire extinguishers shall be of approved type and have sufficient capacity.

## **8.3 FIXED FIRE EXTINGUISHING SYSTEM**

**8.3.1** Fixed fire extinguishing system shall be installed in all accommodation and service spaces for:

- a) yachts carrying more than 60 guests; and
- b) yachts carrying 12-60 guests and fitted with accommodation without documented fire safety of surface and interior materials.

**8.3.2** The system shall comply with recognised maritime standards.

**8.3.3** Barbeques, fire places and other fixed, open fires shall be fitted with an appropriate additional, fixed fire extinguishing system.

**8.3.4** All sauna and thermal suite spaces are to be protected by a fixed system.

**8.3.5** Machinery spaces shall be protected by a fixed fire extinguishing system when:

- a) containing internal combustion machinery used for main propulsion or internal combustion machinery used for other purposes where such machinery has a total power output of not less than 375 kW;

- b) containing oil-fired boiler or other oil-fired equipment, including incinerators.

**8.3.6** Spaces containing vehicles or craft with fuel in their tanks (such as tenders or water craft), lockers storing such fuels, special category spaces and garage spaces shall be protected by a fixed fire extinguishing system.

**8.3.7** Helidecks shall be fitted with a suitable foam application system complying with SOLAS Ch. II-2 reg. 18.5 or equivalent.

**8.3.8** Electrically heated ovens for saunas are to be protected by a fixed fire extinguishing system.

## **8.4 FIRE FIGHTER OUTFITS**

**8.4.1** The number of fire fighter outfit sets shall be:

- a) four (4) for yachts carrying more than 60 guests;
- b) two (2) for yachts carrying between 12 and 60 guests.

**8.4.2** The fire fighter outfit sets, spares and storage shall comply with SOLAS Ch. II-2 Reg.10.10.

## **8.5 FIRE MAIN AND HYDRANTS**

**8.5.1** A fire main, water service pipes and fire hydrants shall be fitted. At least one jet of water from a single length of hose shall be able to reach any part of the yacht while in operation.

**8.5.2** The fire main and water service pipe connections to the hydrants shall be sized for the maximum discharge rate of the pump(s) connected to the main.

**8.5.3** The fire main, water service pipes and fire hydrants shall be constructed such that they will:

- a) not be rendered ineffective by heat;
- b) not readily corrode; and
- c) be protected against freezing.

**8.5.4** Fire hoses shall not exceed 18 meters in length and shall be kept in readily accessible and known locations, close to the hydrants or connections on which they will be used. Hoses supplied from a powered pump shall have jet/spray nozzles.

## **8.6 VERIFICATION OF COMPLIANCE**

**8.6.1** Documentation and drawings for the fire main systems shall include capacity calculations and be submitted to the UAE National Transport Authority or the RO for approval.

**8.6.2** Drawings of fixed fire extinguishing systems in engine rooms and any other area of major fire hazard, including any deep fat cooking equipment and tender spaces, shall be submitted to the UAE National Transport Authority or the RO for approval.

**8.6.3** When fixed fire extinguishing systems for accommodation and service spaces is provided, documentation of installation and certification shall be submitted to the UAE National Transport Authority or the RO for approval.

## **Ch. 9 MEANS OF ESCAPE**

### **9.1 GENERAL**

**9.1.1** Safe escape to the muster station(s) and the embarkation station(s) shall be possible from any space in the yacht by day and night.

**9.1.2** It shall be possible to evacuate the yacht before a fire renders it impossible to be onboard.

**9.1.3** All exits, together with their means of opening, shall be adequately marked for the guidance of the persons onboard and visible in case of an emergency.

**9.1.4** All yachts shall carry at least two Emergency Escape Breathing Devices (EEBDs) within accommodation spaces, and at least two EEBDs should be carried in each main vertical zone. Within the machinery spaces, EEBDs shall be situated ready for use at easily visible locations, which can be reached quickly and easily at any time in the event of fire. The number and location shall take into account the layout of the machinery space and the number of persons normally working in the space. At least one spare EEBD shall be kept onboard.

**9.1.5** In saunas, doors shall open outwards.

### **9.2 EVACUATION TIME**

**9.2.1** The provisions for evacuation shall be designed such that the yacht can be evacuated under controlled conditions in one third of the structural fire protection time (SFP) provided for areas of major fire hazard areas after subtracting a period of 7 minutes for initial detection and extinguishing action.

Evacuation time =  $SFP - 7 / 3$  minutes, where SFP is the structural fire protection time expressed in minutes.

**9.2.2** In determining the evacuation time, all means of escape are to be considered serviceable and need not be dimensioned to take into account any additional number of persons that might be diverted from other means of escape if one or more of those other means of escape are lost or rendered unserviceable.

## **9.3 VERIFICATION OF COMPLIANCE**

**9.3.1** The escape routes shall be demonstrated to comply with the evacuation time for the yacht.

**9.3.2** The theoretical evacuation time may be calculated according to IMO MSC Circ. 1033, as amended, as documentation and demonstration of the evacuation time.

## **Ch. 10 OPERATIONAL PROVISIONS**

### **10.1 OPERATIONAL READINESS AND MAINTENANCE**

**10.1.1** Fire protection systems and fire fighting systems and appliances shall be functional and ready for use when the yacht is in operation.

**10.1.2** All fire protection systems shall be kept in good order so as to ensure their required performance if a fire occurs, including:

- a) Structural fire protection including fire resisting divisions, and protection of openings and penetrations in these divisions;
- b) fire detection and fire alarm systems;
- c) means of escape systems and appliances; and
- d) fire-fighting systems and appliances.

**10.1.3** Portable extinguishers which have been discharged shall be immediately recharged or replaced with an equivalent unit.

### **10.2 MAINTENANCE, TESTING AND INSPECTION**

**10.2.1** Fire protection systems and fire fighting systems and appliances shall be maintained ready for use and shall be properly tested and inspected.

**10.2.2** Maintenance, testing and inspections shall be carried out based on the IMO Guidelines on maintenance and inspection of fire protection systems and appliances MSC/Circ.850 as amended and in a manner having due regard to ensuring the reliability of fire-fighting systems and appliances.

### **10.3 MAINTENANCE PLAN**

**10.3.1** A maintenance plan shall be kept onboard the yacht and shall be available for inspection whenever required by the UAE National Transport Authority or the RO.



**10.3.2** A maintenance plan shall include at least the following fire protection systems and fire-fighting systems and appliances, where installed:

- a) fire mains, fire pumps and hydrants including hoses and nozzles;
- b) fixed fire detection and fire alarm systems;
- c) fixed fire extinguishing systems and other fire extinguishing appliances;
- d) ventilation systems including fire and smoke dampers, fans and their controls;
- e) emergency shut down of fuel supply;
- f) fire doors including their controls;
- g) general emergency alarm systems;
- h) emergency escape breathing devices (EEBD);
- i) portable fire extinguishers including space charges;
- j) fire fighter outfits; and
- k) low-location's lighting and public address systems.

## **10.4 INSTRUCTIONS AND ORGANISATION**

**10.4.1** Crew assigned to duties in fire fighting shall know how to effectively fight a fire and mitigate the consequences of fire.

**10.4.2** Crew members shall receive instruction on fire safety onboard the yacht and their assigned duties.

**10.4.3** Parties responsible for fire extinguishing shall be organised. These parties shall have the capability to complete their duties at all times while the yacht is in operation.

## **10.5 ONBOARD TRAINING AND DRILLS**

**10.5.1** Crew members shall be trained to be familiar with the arrangements of the yacht as well as the location and operation of any fire fighting systems and appliances that they may be called upon to use.

**10.5.2** Performance of crew members' assigned fire fighting duties shall be periodically evaluated by conducting onboard training and drills to identify areas in need of improvement, to ensure competency in fire fighting skills is maintained and to ensure the operational readiness of the fire fighting organisation.

**10.5.3** Onboard training in the use of the yacht's fire extinguishing systems and appliances shall be planned, conducted and recorded.

## **10.6 TRAINING MANUALS**

**10.6.1** A training manual shall be provided in English and translated into the working language of the yacht.

**10.6.2** The training manual shall contain necessary instructions and information in easily understood terms and illustrated wherever possible. Any part of such information may be provided in the form of audio-visual aides in lieu of the manual.

**10.6.3** The training manual shall explain the following in detail:

- a) general fire safety practice and precautions related to the dangers of smoking, electrical hazards, flammable liquids and similar common shipboard hazards;
- b) general instructions on fire fighting activities and fire fighting procedures including procedures for notification of a fire and use of manually operated call points;
- c) meanings of the yacht's alarms;
- d) operation and use of fire fighting systems and appliances;
- e) operation and use of fire doors;
- f) operation and use of fire and smoke dampers; and
- g) escape systems and appliances.

## **10.7 HELICOPTER OPERATIONS**

**10.7.1** Each helicopter facility shall have an operations manual, including a description and a checklist of safety precautions, procedures and equipment requirements. This manual may be part of the yacht's emergency response procedures.

**10.7.2** The procedures and precautions to be followed during refuelling operations shall be in accordance with recognised safe practices and contained in the operations manual if applicable.

**10.7.3** Fire-fighting personnel consisting of at least two persons trained for rescue and fire-fighting duties and fire-fighting equipment shall be immediately available at all times when helicopter operations are expected.

**10.7.4** Fire-fighting personnel shall be present during refuelling operations if applicable. However, the fire-fighting personnel shall not be involved with refuelling activities.

**10.7.5** Onboard training shall be carried out and additional supplies of fire-fighting media shall be provided for training and testing of the equipment.

## **PART 9 LIFE SAVING**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** Life saving appliances shall provide equivalent safety and functionality as for life saving appliances in accordance with relevant IMO instruments.

**1.1.2** The yacht shall be safe following any extreme event, for at least the duration required to evacuate all persons onboard using the yacht's own escape and evacuation systems.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** The escape and evacuation time for the yacht shall be based on the structural fire protection time for the machinery spaces onboard with an adequate safety margin related to the size of the yacht and the number of persons onboard.

**1.2.2** All life saving equipment covered by this Part shall be safe to operate and use and suitable for the marine environment.

**1.2.3** When safety equipment is provided for use in recreational water-sport activities, arrangements for its stowage shall ensure that it will not be used as life saving equipment in an emergency situation, unless it is also certified as a life saving appliance.

**1.2.4** All life saving appliances shall be in good working order and be ready for immediate use at all times when the yacht is in operation.

**1.2.5** If compliance with IMO instruments is not pursued for the application of life saving appliances, compliance with these Regulations shall consider these four emergency scenarios:

- a) the construction material of the yacht shall be taken into considerations with respect to fire onboard;
- b) the maximum speed of the yacht shall be considered with respect to collision and acceleration forces;
- c) the size of the yacht shall be considered with respect to the time to sink;
- d) the type and lines of the yacht shall be considered in combination with the redundancy of the propulsion plant with respect to extensive rolling in beam sea without propulsive power.

**1.2.6** Life jackets provided for the rescue boat crew and to operators of MES shall be of the inflatable type.

**1.2.7** When life rafts are installed onboard they shall at least be equipped with SOLAS A-pack for navigation in Ocean or Polar areas of operation and SOLAS B-pack for navigation in Coastal areas of operation.

### **1.3 DEFINITIONS**

The following definitions, in alphabetical order, are applicable throughout this Part of these Regulations:

**Embarkation station:** Means the defined location from where it is possible to safely get onboard the survival craft.

**Evacuation:** Means getting from a muster station to the embarkation station, boarding the survival craft and releasing it free from the yacht or getting from a muster station into the water by any other means.

**Evacuation capacity:** Means that the survival craft capacity can accommodate the maximum number of persons onboard as defined by the Yacht Safety Certificate.

**Evacuation time:** Means the time necessary to prepare, embark and launch all survival craft necessary to evacuate the maximum number of persons onboard.

**Life boat:** Means a craft complying with LSA Code Ch.4.2 or Ch.4.3.

**Life raft:** Means a craft complying with LSA Code Ch.4.5, Ch.4.6, or Ch.4.7.

**Life Saving Appliance (LSA):** Means an appliance complying with the standards defined by Chapter III of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended.

**MES (Marine Evacuation System):** Means a system consisting of a pre-arranged slide or chute pre-arranged for directly accessing a survival craft from the yacht.

**Muster station:** Means an area where guests can be gathered in the event of an emergency, given instructions and prepared to abandon the yacht, if necessary. The guest spaces may serve as assembly stations if all guests can be instructed there and prepared to abandon the yacht.

**Rescue:** Means that the survival craft is free from its yacht or that a person is in the water and the survival craft is retained by another ship, persons in the water are retrieved or the survival craft or the person reaches the shore by own means.

**Rescue boat:** Means a boat designed to rescue person in distress and to marshal survival craft.

**Survival craft:** Means a craft capable of sustaining the lives of persons in distress from the time of abandoning the yacht to that of being rescued as defined in SOLAS (i.e. lifeboat or life raft).

## **Ch. 2 ESCAPE AND EVACUATION**

### **2.1 EVACUATION TIME**

**2.1.1** The maximum evacuation time to prepare, embark and launch all survival craft necessary to evacuate all onboard persons shall be not more than the least between:

- a) the duration of fire structural fire protection; or
- b) the duration of stability or watertight integrity.

**2.1.2** The actual escape and evacuation time shall be verified with a full scale test or a combination of several component tests. The persons attending the test may be trained for the escape. For yachts with more than 12 guests, the full scale test may be carried out on one side only provided the space used and the numbers attending the test is downscaled accordingly.

If more than one survival craft is placed on the same side of the yacht, the test may be carried out by limiting the space used and the numbers attending the test to the highest number of evacuees the lifesaving appliance is designed to take and only use test this survival craft system.

**2.1.3** If the test is made on a similar yacht, the verification can be based on functional testing of the launching of survival craft.

### **2.2 MARKING AND SIGNS**

**2.2.1** If marking and/or signs are hidden in normal operating mode, they shall automatically be displayed in case of emergency. A manual override system to display the hidden markings and signs shall be available in all control stations.

**2.2.2** Posters and/or signs shall be provided on or in the vicinity of survival craft and their launching controls and shall:

- a) illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions or warnings; and
- b) be easily seen under emergency lighting conditions.

### **2.3 OPERATIONAL INFORMATION**

**2.3.1** A personal leaflet and book describing the escape, evacuation and rescue shall be provided to all persons onboard and placed in their cabin.

**2.3.2** Posters and signs describing the location and use of the life saving equipment shall be provided and visible in case of an emergency.

**2.3.3** The leaflets located in the cabins shall provide a quick overview of the necessary actions to take and minimum safety measures available in case of an emergency.

**2.3.4** The leaflet shall provide information about escape, evacuation and rescue measures, including but not limited to the use of personal equipment, escape routes, muster stations, the use of survival craft and how the Master and crew may handle different scenarios.

**2.3.5** All persons onboard shall be informed and explained the content of the leaflet and guided to their life saving appliances prior to departure or when entering onboard.

## **2.4 VERIFICATION OF COMPLIANCE**

**2.4.1** All equipment shall be certified according to the following alternatives:

- a) IMO Life Saving Appliances Code (LSA Code), Res. MSC.48(66) as amended and according to IMO revised recommendation on testing of life saving appliances in Res. MSC.81(70) as amended;
- b) IMO Code of practice for the evaluation, testing and acceptance of prototype novel life saving appliances and arrangements Annex to resolution A.520(13) as amended;
- c) if navigating in Polar areas, the additional requirements stated in MSC/Circ.1056 and MEPC/Circ.399 Guidelines for ships operating in arctic ice-covered waters as amended;
- d) Appropriate ISO certification standard for yacht and recreational boat equipment, subject to prior agreement with the UAE National Transport Authority or the RO.

**2.4.2** Symbols used shall be in accordance with IMO Res. A.760(18) as amended.

## **Ch. 3 STOWAGE AND MUSTERING**

### **3.1 STOWAGE**

**3.1.1** All life saving equipment shall be stowed taking into account:

- a) the effects of the marine environment;
- b) accessibility and usability, when deployed;
- c) interference with the operation of other life saving arrangements;
- d) distance from rudder(s), propeller(s), stabilising fins and any other hazard;
- e) the effects of fire and/or explosion; and
- f) the effects of discharges into survival craft when launched.

**3.1.2** The stowage position shall be in a secure and sheltered space and protected from heavy seas.

**3.1.3** The survival craft in its stowed position shall not interfere with the operation of any other life saving appliance. It shall be possible to launch each survival craft independently from all other.

**3.1.4** LSAs can be integrated with and concealed in a yacht's accessory and does not need to be visible.

## **3.2 MUSTER OF PERSONS**

**3.2.1** Muster station(s) shall be located close to the survival craft and allow easy access to the survival craft.

**3.2.2** Sufficient space at the muster station(s) shall be available. Sufficient floor space at muster stations means at least 1 m<sup>2</sup> per person, including the space occupied by loose furniture.

**3.2.3** In the event that the main muster station(s) is not available, alternative muster station(s) shall be available.

**3.2.4** Muster stations shall be equipped with emergency lighting supplied by the emergency source of power.

## **3.3 VERIFICATION OF COMPLIANCE**

**3.3.1** All equipment shall be verified according to the alternatives in Ch.3.1.

## **Ch. 4 EVACUATION**

### **4.1 EVACUATION FROM MUSTER STATION**

**4.1.1** The evacuation arrangements shall be based on the principle that no person shall need to go into the sea to enter a survival craft. Embarkation height less than one meter is considered dry-shod and need no arrangement for entering survival craft.

**4.1.2** Embarkation ladders complying with the LSA Code requirements shall be provided at each or at every two adjacent embarkation station/s for davit-launched survival craft unless a MES according to the LSA Code is provided for all survival craft. At least one embarkation ladder shall be available on each side of the yacht.

**4.1.3** Embarkation stations shall be supplied with emergency lighting supplied by the emergency source of power and the effectiveness of emergency power lighting shall be demonstrated by tests.

## 4.2 LAUNCHING CAPACITY

4.2.1 Safety arrangements shall be appropriate to the operating mode as follows:

- a) Moored at quay, in port  
The yacht shall be arranged to evacuate the maximum number of persons onboard from the yacht onto quay, to another ship or to a survival craft or to a combination of these.
- b) At anchor  
The yacht shall have survival craft capacity for the maximum number of persons onboard.
- c) Coastal Operation  
The yacht shall have survival craft capacity for the maximum number of persons onboard on each side.
- d) Ocean Operation  
The yacht shall have capacity of enclosed survival craft for the maximum number of persons onboard on each side even in the event of any one survival craft or any entire MES being lost or rendered unserviceable. If life rafts are used, they shall be self-righting or canopied reversible type.
- e) Polar Operation  
The yacht shall have capacity of enclosed survival craft for the maximum number of persons onboard on each side even in the event of any one survival craft or any entire MES being lost or rendered unserviceable. The survival craft shall be ice resistant, self propelled and equipped for use in Polar areas. Survival craft and launching arrangements shall have a de-ice function in stowed position. Ice resistant means that the craft has a rigid GRP, aluminium or steel hull.

Requirements for safety arrangements relevant to the yacht's operating mode are described in Tab 9-1.

|   | MOORED AT QUAY, IN PORT  | AT ANCHOR                | COASTAL OPERATION                     | OCEAN OPERATION   | POLAR OPERATION  |
|---|--|--------------------------|---------------------------------------|---|--|
| <b>SURVIVAL CRAFT</b>   | 100% evacuation capacity<br><br>From the yacht onto quay, to another ship or to a survival craft or to a combination of these. | 100% evacuation capacity | 100% evacuation capacity on each side | 100% evacuation capacity on each side<br><br>Even if any one survival craft or any entire MES has been lost or rendered unserviceable.<br><br>Survival craft: enclosed if life rafts, then: self-righting or canopied reversible type.<br><br>If life rafts, then: self-righting or canopied reversible type. | 100% evacuation capacity on each side<br><br>Even if any one survival craft or any entire MES has been lost or rendered unserviceable.<br><br>Survival craft: -ice resistant, enclosed, self propelled and equipped for use in Polar areas.<br><br>De-ice function in stowed position. |
| <b>LAUNCHING ARRANGEMENT</b>  |  |                          |                                       |   | De-ice function in stowed position.  |
| "100% evacuation capacity" means that the survival craft capacity can accommodate the maximum number of persons onboard as defined in the Yacht Safety Certificate. |  |                          |                                       |   |  |

Tab 9-1 Overview of survival craft and launching arrangement requirements.



**4.2.2** In case an incident isolates persons in one location of a large yacht a survival craft shall still be available for these persons. Yachts more than 100 meters shall carry a life raft stowed as far forward and aft as is reasonable and practicable. Such life rafts need not be of the type which can be launched from an approved launching device.

**4.2.3** Except when moored at quay, survival craft for the maximum number of persons onboard shall float free in the event that the yacht sinks.

**4.2.4** All survival craft launching appliances shall function with the yacht heel and trim angles according to stability calculations. All survival craft launching appliances shall be functional in all operational conditions and also in all conditions of flooding after damage to the extent prescribed in Part 2.

**4.2.5** Launching stations shall be supplied with over-board emergency lighting supplied by the emergency source of power.

### **4.3 VERIFICATION OF COMPLIANCE**

**4.3.1** Sufficient life saving capacity may be obtained by transferring life rafts from side to side. Where life rafts are transferable, this requirement may be met by the ability of the rafts to be transferred within 5 minutes by:

- a) 2 persons, for life rafts of less than or equal to 15 persons capacity, or
- b) 4 persons, for life rafts of more than 15 person's capacity.

**4.3.2** The ability to float free is to be shown in drawings and surveyed.

**4.3.3** The ability to launch the survival craft in heel and trim conditions is to be shown in drawings and surveyed.

**4.3.4** Yachts in which the horizontal distance from the extreme end of the stem or stern of the yacht to the nearest end of the closest survival craft is more than 100 meters shall additionally carry a life raft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable.

Such life raft or life rafts may be securely fastened so as to permit manual release and need not be of the type which can be launched from an approved launching device.

**4.3.5** The effectiveness of overboard emergency lighting shall be demonstrated by tests.

**4.3.6** Ice resistant means that the fully loaded craft has a rigid GRP, aluminium or steel hull able:

- a) to navigate into broken ice at 2 knots speed without being structurally damaged; and
- b) not to be structurally damaged by continuous navigation at 2 knots speed in broken ice for 24 hours.

## **Ch. 5 PERSONAL LIFE SAVING**

### **5.1 AVAILABILITY OF LIFE JACKETS AND IMMERSION SUITS**

**5.1.1** Life jackets and immersion suits shall be available as follows:

- a) Moored at quay, in port or at anchor  
The yacht shall be arranged with life jackets for all persons onboard, even in excess of the maximum number in the Yacht Safety Certificate (e.g. in Event Mode).
- b) Coastal Operation  
The yacht shall be arranged with life jackets for the maximum number of persons onboard as given by the Yacht Safety Certificate.
- c) Ocean Operation  
The yacht shall be arranged with 125% life jackets onboard.
- d) Polar Operation  
The yacht shall be arranged with life jackets and insulated immersion suits for the maximum number of persons onboard. At least one life jacket and one immersion suit shall be available for each person even in the event of a fire taking place in any one enclosed space of the yacht.

**5.1.2** Instructions on how to use life jackets and immersion suits shall be available where these are stowed.

### **5.2 LOCATION OF LIFE JACKETS AND IMMERSION SUITS**

**5.2.1** Additional life jackets for use when moored at quay, in port, or at anchor shall be stowed close to the embarkation station.

**5.2.2** Life jackets and immersion suits in accordance with the maximum number of persons in the Yacht Safety Certificate shall be stowed close to the muster station(s) or in cabins, or in a combination close to muster station(s) and cabins.

### **5.3 LOCATION OF LIFE BUOYS**

**5.3.1** Life buoys shall be provided as follows:

- a) The minimum number of life buoys carried by a yacht shall be 2 for every 20m of yacht length or part thereof, with a minimum of 4.
- b) Life buoys shall be distributed as to be readily available on both sides of the yacht and, as far as practicable, on all open decks extending to the yacht's side; at least one shall be placed in the vicinity of the stern.
- c) All life buoys shall be mounted in such a position that they can be released rapidly from their stowage to fall unobstructed into the sea, or easily cast into the sea to give a seamark by day or night. They shall not be permanently secured in any way.
- d) At least one life buoy on each side of the yacht shall be fitted with buoyant lines of length not less than twice the height at which it is stowed above

the waterline in the lightest seagoing condition, or 30 meters, whichever is the greatest.

- e) Not less than half the total number of life buoys shall be provided with life buoy self-igniting lights; not less than two of these shall also be provided with life buoy self-activating smoke signals and be capable of quick release from the navigation bridge. Life buoys with lights and those with lights and smoke signals shall be equally distributed on both sides of the yacht and shall not be the life buoys provided with life lines in compliance with the requirements of paragraph d).
- f) Each life buoy shall be marked in block capitals of the Roman alphabet with the name of the yacht.

## **5.4 VERIFICATION OF COMPLIANCE**

**5.4.1** All equipment shall be certified according to the alternatives in Ch.3.1.

## **Ch. 6 RESCUE**

### **6.1 RESCUE**

**6.1.1** The yacht shall be arranged with a rescue boat capable of bringing persons back onboard after a man overboard situation.

**6.1.2** The yacht shall be arranged with rescue boat(s) capable of assisting and handling all floating and non-propelled survival craft.

**6.1.3** The rescue arrangements shall function so that the time to prepare, embark and launch all rescue boats is not more than 5 minutes.

**6.1.4** All rescue boats shall function with the yacht heel and trim angles according to the damage stability calculations.

**6.1.5** All survival craft shall be arranged for safe rescue from the craft to another ship, boat and helicopter.

**6.1.6** Every yacht shall be provided with equipment to efficiently search for and rescue persons who falls overboard.

## **6.2 TOWING CAPACITY**

**6.2.1** The bollard pull for the rescue boat shall exceed the required towing force for towing at 2 knots speed any fully loaded non-self-propelled survival craft installed onboard.

**6.2.2** The number of non-self-propelled survival craft assigned to each rescue boat shall not exceed 6.

## **6.3 RESCUE BOATS**

**6.3.1** Rescue boats may be of any colour if they are designed and manufactured to include a high-visibility cover which is available onboard the rescue boat and easily and readily deployable for immediate display.

**6.3.2** Every yacht shall carry an efficient fixed or portable searchlight suitable for man overboard search and rescue operations.

**6.3.3** Time for preparation, embarkation and launching of rescue boat shall be demonstrated by a full scale test.

## **6.4 VERIFICATION OF COMPLIANCE**

**6.4.1** The ability to launch rescue boats in heel and trim conditions shall be shown by appropriate documentation which shall be submitted to the UAE National Transport Authority or to the RO for approval according to these Regulations.

## **Ch. 7 OPERATIONAL PROVISIONS**

### **7.1 PROCEDURES**

**7.1.1** Escape, evacuation and rescue emergency procedures shall enable assigned crew members to perform their assigned escape, evacuation and rescue tasks effectively.

**7.1.2** A muster list describing the duties of the Master, officers and crew in an emergency shall be available onboard.

**7.1.3** An easy-to-use decision support system for emergency management shall be provided to support the commanding officers in handling any foreseeable combination of emergency scenarios.

**7.1.4** The muster list shall:

- a) cover all duties in the escape, evacuation and rescue procedures;
- b) be clear and unambiguous;
- c) incorporate redundancy of tasks;
- d) be provided with instructions which specify details of actions to be taken onboard by the crew when the general emergency alarm is sounded and shall specify how the order to evacuate yacht will be given. It shall identify the duties assigned to the different members of the crew including, but not limited to:
  - Closing of watertight doors, fire doors, valves, scuppers, sidescuttles, skylights, portholes and other similar openings in the yacht;
  - Equipping and preparation of survival craft and other escape, evacuation and rescue equipment;
  - Mustering those persons that need to be mustered;
  - Use of communication equipment.
- e) specify substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions.
- f) show the duties assigned to crew members in relation to persons who are unfamiliar with the yacht in case of an emergency. These duties shall include:
  - Warning and instructing persons who are unfamiliar with the yacht;
  - Seeing that they are suitably clad and have donned their life jackets and personal thermal protection suits correctly;
  - Assembling persons that need to be mustered at muster stations;
  - Controlling the movements of persons unfamiliar to the yacht.
- g) be prepared before the yacht proceeds to sea. If any change takes place which necessitates an alteration in the escape, evacuation and rescue emergency procedures, the muster list shall be revised or new procedures shall be prepared before the yacht proceeds to sea.

**7.1.5** The decision support system shall, consist of a printed emergency plan or plans. All foreseeable emergency scenarios shall be identified in the emergency plan or plans, including, but not limited to, the following main groups of emergencies:

- a) fire;
- b) damage to yacht;
- c) pollution;
- d) unlawful acts threatening the safety of the yacht and the security of the persons onboard;
- e) personnel accidents; and
- f) emergency assistance to other ships.

## **7.2 INSPECTION AND MAINTENANCE**

**7.2.1** All life saving equipment shall be inspected and maintained onboard regularly.

**7.2.2** Inflatable life saving equipment and hydrostatic release units shall be annually serviced by approved service stations and in accordance with IMO Res. A.761(18).

**7.2.3** If fitted onboard, on-load hooks and life saving launching appliances shall be regularly examined and tested by competent persons familiar with the system and follow intervals in SOLAS Ch. III, Reg. 20.11 and be carried out according to IMO MSC.1/Circ. 1206 Measures to prevent accidents with life boats.

**7.2.4** A plan for the onboard inspection and maintenance shall be available onboard.

**7.2.5** Examination and tests of on-load hooks and launching appliances shall be available onboard.

**7.2.6** Falls for launching devices are to comply with the IMO Life saving Appliances Code. When falls are of stainless steel, they shall be renewed at intervals not exceeding the service life recommended by the manufacturer, or where no service life is stated be treated as galvanised steel falls. Falls of alternative materials may be considered by the UAE National Transport Authority or by the RO.

### **7.3 TRAINING AND DRILLS**

**7.3.1** Crew assigned to duties within life saving scenarios shall have received proper training.

**7.3.2** Drills using the life saving equipment shall be carried out regularly by the crew assigned to duties within life saving scenarios.

**7.3.3** A plan for conducting the onboard training and drills shall be available onboard. Training and drill procedures shall:

- a) ensure that all embarked persons are able to conduct basic tasks;
- b) ensure that assigned persons are able to conduct their duties;
- c) be available for all persons assigned with duties;
- d) not impose unacceptable risk to the yacht or the embarked persons.

**7.3.4** If the voyage is intended to be more than 24 hours, all persons onboard shall receive personal instructions on how to use their life saving appliances and emergency scenario procedures. Such instructions shall be given within the first 24 hours after boarding.

**7.3.5** Escape, evacuation and rescue drills shall, as far as practicable, be conducted as if there were an actual emergency.

**7.3.6** The details of all onboard escape, evacuation and rescue related training shall be recorded in a log-book.

**7.3.7** Procedures shall be provided to ensure that equipment used during escape, evacuation and rescue training is immediately brought back to its fully operational condition and any faults and defects discovered during this training shall be remedied as soon as possible.

**7.3.8** The basic training for voyages more than 24 hours shall include ,but not necessarily be limited to:

- a) essential actions each person shall take in an emergency;
- b) the alarm and main broadcasting signals;
- c) location, operation and use of the yacht's personal safety equipment; and
- d) location of the muster station(s) and evacuation stations.

**7.3.9** Training procedures for personnel assigned to duties shall include, but not be limited to:

- a) operation of main broadcast system, alarm system and other communication equipment;
- b) operation of electrically powered way finding system and emergency lighting;
- c) operation and launching of evacuation and rescue equipment (including retraction of stabiliser wings if and when necessary);
- d) rescue operations;
- e) operating the engine of survival craft and carrying out minor adjustments (at least two persons for every motorised survival craft);
- f) distress and safety radio communication;
- g) use of first aid kits and stretchers;
- h) mustering and assisting persons who are not familiar with the safety measures during emergency scenarios.

**7.3.10** Frequency of crew training

- a) Procedures shall be provided to ensure that every embarked person is given training at intervals of no more than two months, which shall include but not necessarily be limited to:
  - Location, operation and use of the yacht's personal life saving equipment;
  - Location of the muster stations and evacuation stations;
  - Problems of sea survival; in particular cold shock, hypothermia, first-aid treatment for hypothermia and other appropriate first-aid procedures.
- b) Additional procedures shall be provided to ensure that every embarked person with assigned duties in an emergency is given training at intervals of not more than two months, which shall include:
- c) Training in performing their assigned duties;
- d) Special instructions necessary for use of the yacht's evacuation and rescue equipment in severe weather and severe sea conditions.

**7.3.11** For rescue craft, procedures shall be provided to ensure that:

- a) Rescue craft crew are trained and drilled regularly in the use of the rescue craft where fitted. This training shall include all aspects of rescue, handling, manoeuvring, operating these craft in various conditions and righting them after capsize;
- b) As far as is reasonable and practicable, rescue craft other than life boats which are also rescue craft, are launched each month with their assigned crew onboard and manoeuvred in the water. In all cases this requirement shall be complied with at least once every three months;
- c) If rescue craft launching drills are carried out with the yacht making headway, such drills shall, because of the dangers involved, be practiced in sheltered waters only and under the supervision of an officer experienced in such drills. Refer to IMO A.624(15).

### **7.3.12 Survival craft, MES, davit life rafts**

- a) For survival craft, procedures shall be provided to ensure that yachts fitted with life boats launch each life boat and manoeuvre it in the water at least once every three months, during training.
- b) For MES, the following applies:
  - Every yacht fitted with a MES shall be provided with onboard training aids in the use of the system;
  - Training procedures shall include exercising of the procedures required for the deployment of such a system up to the point immediately preceding the actual deployment of the system;
  - Additional procedures shall be provided to ensure that every MES party member is trained in the full deployment of a similar system into water, either onboard a yacht or ashore, at intervals of no more than three years.
  - For davit-launched life rafts, procedures shall be provided to ensure that onboard training in the use of davit-launched life rafts takes place at intervals of no more than four months. Whenever practicable this shall include the inflation and lowering of a life raft. This may be a special life raft intended for training purposes only, which is not part of the yacht's safety equipment; such a special life raft shall be conspicuously marked.

## **7.4 VERIFICATION OF COMPLIANCE**

**7.4.1** Verification of compliance shall be performed based on drawings, manuals and onboard inspections showing and demonstrating compliance with these Regulations.

**7.4.2** Drawings and manuals shall be submitted to the UAE National Transport Authority or to the RO for approval according to these Regulations.



## **PART 10 EQUIPMENT CARRIED ONBOARD**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** This Part is to ensure that the equipment carried onboard for the pleasure and convenience of all persons onboard is safe and, if properly used, will not cause any harm to the user or those handling the equipment.

**1.1.2** The equipment shall be stored onboard in areas adapted for its storage. These may be either open decks or in garages.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** Any equipment carried onboard, such as boats, cars, helicopters etc., shall be regarded as cargo and safe transportation shall be provided.

**1.2.2** Any equipment shall be safe for use within its design parameters.

**1.2.3** Any equipment carrying petrol in tanks shall be stored either on the open deck or in garages designed for this purpose.

**1.2.4** All equipment carried onboard shall be delivered with instructions to the yacht crew for their handling and storage.

#### **1.3 APPLICABILITY**

**1.3.1** This Part applies to motor yachts  $\geq 400$  GT.

**1.3.2** For motor yachts  $< 400$  GT and sailing yachts, adapted equivalent solutions will be considered by the UAE National Transport Authority or the Recognised Organisation (RO) acting on its behalf.

**1.3.3** Equipment or part of the equipment may be carried onboard supply yachts. In such case these Regulations shall apply.

#### **1.4 RESPONSIBILITY**

**1.4.1** The Master has the responsibility for the safe storage and handling of the equipment carried onboard.

**1.4.2** The Master has the responsibility to ensure that the crew members have been given adequate training in handling and stowage of all equipment carried onboard. Helicopters, seaplanes, submarines etc., which require specialised operators shall not be handled by the yacht crew unless specially qualified.

## **1.5 DEFINITIONS**

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulations:

**Equipment:** Has in this Part the meaning of equipment and water-sport equipment carried onboard for the convenience of persons onboard.

**Helicopter deck:** A fully equipped flight deck able to withstand the full weight of a loaded helicopter, including dynamic forces / loads, equipped with lighting and railing, marked with an H and inscribed in a circle. The helicopter can be stopped and stored on the helicopter deck.

## **Ch. 2 BOATS AND WATER-SPORT EQUIPMENT**

### **2.1 GENERAL**

**2.1.1** Any boat carried onboard the yacht can be part of the life saving appliances, provided that the boat meets the regulations for such appliances.

**2.1.2** A tender or other type of boat which is carried onboard in addition to what is required for life saving appliances is to be of a suitable type for its intended use.

**2.1.3** Safety equipment such as inflatable life jackets for crew and guests shall be provided in each tender as appropriate to its intended range and area of operation.

**2.1.4** Tenders shall be clearly marked with the name of the parent yacht.

**2.1.5** Inflatable tenders shall be of types which have a minimum of three (3) buoyancy compartments built into them.

**2.1.6** Water-sport equipment carried onboard need not be identified with the name of the parent yacht.

**2.1.7** If the yacht has an inside docking area for a submarine or large tender, documentation shall be provided to establish the maximum sea state for its safe operation.

## **2.2 STORAGE OF BOATS WITH PETROL ENGINES**

**2.2.1** The boat garage shall be equipped with a high pressure water spray system giving a coverage of 3.5 ltr/m<sup>2</sup> per minute over the entire garage area. If a deluge system is provided, adequate drainage overboard shall be arranged.

**2.2.2** The boat garage shall have a fixed fire detection and alarm system complying with SOLAS Regulation II-2/Part A.

**2.2.3** The boat garage shall have ducted mechanical exhaust ventilation, isolated from other ventilated spaces and giving at least six (6) air changes per hour. A reduction in the air flow shall give an audible and visible alarm on the bridge.

**2.2.4** The boat garage shall be provided with a gas detection system with audible and visible alarm in the garage as well as in the wheelhouse.

**2.2.5** All electrical equipment up to 450mm above the deck shall be certified safe for petrol vapours. Equipment located higher above the deck shall be certified IP55.

**2.2.6** The following equipment in the boat garage shall be certified safe for flammable vapours:

- a) Gas detection system;
- b) Bilge alarm;
- c) Fire detection system;
- d) At least one light circuit on a dedicated circuit, possibly emergency.

## **2.3 CRANES AND DAVITS**

**2.3.1** Any crane or davit fitted on the yacht to move, launch and recover boats and water-sport equipment shall be approved and marked with a Safe Working Load (SWL).

**2.3.2** Cranes and davits are part of the yacht's permanent equipment and shall be maintained and inspected periodically under the Yacht Safety Certificate.

## **2.4 VERIFICATION OF COMPLIANCE**

**2.4.1** It shall be documented that instructions for handling and storage of boats and water-sport equipment are onboard.

**2.4.2** It shall be verified that the crew members assigned to this duty have been given proper training.

**2.4.3** It shall be verified that the handling and storage of equipment is properly maintained.

## **Ch. 3 CARS AND MOTORCYCLES**

### **3.1 GENERAL**

**3.1.1** Cars and motorcycles, jet skies and small tenders, which carry petrol in the tanks, shall be stored in dedicated and special category spaces onboard prepared for such storage.

### **3.2 STORAGE OF PETROL ONBOARD**

**3.2.1** The quantity of petrol carried onboard shall be limited.

**3.2.2** Containers used for the carriage of flammable liquids shall be constructed to a recognised standard appropriate to their content and clearly marked to indicate their content.

**3.2.3** Petrol in portable containers, which may be transported from time to time, shall be stored in:

- a) recessed stowage with overboard chutes;
- b) lockers on deck, fully ventilated and with fixed fire suppression system;
- c) internal lockers with fixed fire suppression system.

**3.2.4** Means of securing fuel containers shall be provided.

**3.2.5** For a space in which the provision of a deluge or water spray system would be impractical, alternative equivalent provisions shall be made to the satisfaction of the UAE National Transport Authority or the RO acting on its behalf.

### **3.3 SPECIAL CATEGORY SPACE**

**3.3.1** Enclosed spaces designated for the carriage of petrol, or vehicles with petrol in their tanks, shall be fitted with the following:

- a) A fixed fire detection and fire alarm system complying with the requirements of SOLAS;
- b) A manually activated deluge water spray system of capacity to cover the total area of deck at a rate of 3.5 ltr/m<sup>2</sup> per minute, or a high pressure water spray system;
- c) Adequate provisions for drainage of water introduced to the space. Drainage shall not lead to machinery or other spaces where a source of ignition may exist;
- d) A ducted mechanical continuous supply of air ventilation, which is isolated from other ventilated spaces, to provide at least six (6) air changes per hour and for which reduction of the airflow shall be signalled by an audible and visual alarm on the bridge and when navigating, at anchor or in port at the control station(s). The ventilation system shall be capable of rapid shut down and effective closure in the event of fire;

- e) Electrical equipment shall be located well clear of those areas where flammable gases are likely to accumulate within the space and be so constructed as to prevent the escape of sparks. Electrical equipments not so located or constructed shall each be provided with an easily accessible and identified means of double pole isolation outside the space, with a fixed flammable gas detector(s) fitted in the compartment and comprising alarm features on the bridge and elsewhere in the accommodation.
- f) The location of petrol storage, quantities of petrol stored and procedures to be followed in an emergency shall be approved by the UAE National Transport Authority, or by a RO on its behalf, and recorded on the fire safety plan and/or safety manual, as appropriate.

### **3.4 RAMPS**

**3.4.1** Any ramps or lifting appliances for cars and motorcycles shall be approved and tested for Safe Working Load (SWL) which shall be displayed on the

**3.4.2** The ramp shall be periodically tested and tests shall be recorded in the cargo gear logbook.

### **3.5 VERIFICATION OF COMPLIANCE**

**3.5.1** Drawing showing the arrangement of the garage including ventilation, alarms and electrical fixtures shall be provided to the RO for survey and approval.

**3.5.2** Drawing showing the arrangement of petrol storage in larger and smaller quantities shall be provided to the RO for survey and approval.

**3.5.3** Structural drawings of the ramp together with the lifting appliance shall be provided to the RO for survey and approval.

**3.5.4** Testing of ramps shall be verified.

## **Ch. 4 HELICOPTERS**

### **4.1 HELICOPTER DECK**

**4.1.1** Helicopter decks shall be clearly marked and located at a safe distance from the yacht structures, masts and rigging.

**4.1.2** The Owning Company shall select the adequate Class notation according to the intended use e.g. weather restrictions, day and night operation, carried permanently, refuelling etc.

**4.1.3** The helicopter deck shall be marked with a white H and a white ring around it according to international regulations.

**4.1.4** For yachts  $\geq 500$  GT the requirements of SOLAS Chapter II -2 Regulation 18 shall apply.

**4.1.5** No refuelling shall be carried out on the yacht except if this is provided for within the class notation.

**4.1.6** If the helicopter is to be carried permanently, the yacht is to be arranged with a hangar and refuelling facility.

**4.1.7** Larger quantities of petrol in tanks for refuelling of e.g. helicopter, seaplane etc. shall be of stainless steel fitted inside a structural tank surrounded by a cofferdam of minimum 800 mm. The cofferdam shall have a continuous flow of inert gas and be fitted with a gas detection system. The tank shall be ventilated through a pressure vacuum valve at least 2.5 meters above deck away from any high risk areas.

## **4.2 VERIFICATION OF COMPLIANCE**

**4.2.1** For a helicopter deck the documentation required for the relevant Class notation is to be submitted to the RO for approval.

**4.2.2** The helicopter deck is to be surveyed for the renewal of the Yacht Safety Certificate.

## **PART 11 MANNING**

### **Ch. 1 GENERAL**

#### **1.1 PURPOSE**

**1.1.1** This Part of the Regulations is to ensure that all yachts under these Regulations carry an appropriate number of qualified officers and yacht ratings, and that all officers and crew are provided with acceptable working and living conditions to ensure safe operation of the yacht.

#### **1.2 FUNCTIONAL REQUIREMENTS**

**1.2.1** All yachts shall carry a sufficient number of qualified Officers and Yacht Ratings to ensure a degree of safety at least equivalent to that established by IMO guidelines.

**1.2.2** Any yacht shall be designed to accommodate for the required manning levels to ensure that the yacht can be operated safely, efficiently and with due regard to security.

**1.2.3** Acceptable working and living conditions for crew members working onboard yachts shall be provided to ensure safe operation of the yacht.

**1.2.4** A crew member shall hold a valid medical certificate, be above the minimum age and be provided with sufficient quantity and quality of food, water and medical treatment necessary.

**1.2.5** All who work onboard shall have a valid employment agreement documenting the employment relations and employment conditions onboard.

#### **1.3 APPLICABILITY**

**1.3.1** The IMO Guidelines to safe manning applies to all yachts under these Regulations. Requirements to manning practices are found in the following international conventions and resolutions:

- a) IMO Resolution A.890(21) - Defines the principles of Safe Manning to which the Convention applies.
- b) The Maritime Labour Convention - Defines requirements for crew members' working and living conditions. Until the Maritime Labour Convention enters into force these matters are regulated in many existing Conventions.
- c) The STCW Convention - Sets requirements for hours of work and health certification.

## **1.4 RESPONSIBILITY**

**1.4.1** The Owing Company of the yacht shall ensure that the necessary resources are available to man the yacht so that the limits on hours of work and rest can be complied with.

**1.4.2** The Owing Company is responsible for the implementation of measures to ensure occupational safety and health protection, including risk evaluation as well as training and instructions of crew members. Reasonable precautions to prevent occupational accidents, injuries and diseases onboard yachts, including measures to reduce and prevent the risk of exposure to harmful levels of ambient factors and chemicals as well as the risk of injury or disease that may arise from working onboard, including the use of equipment and machinery onboard, shall be considered.

**1.4.3** The Master is responsible for ensuring compliance with the applicable requirements.

**1.4.4** It is the responsibility of all crew members to ensure that they are properly rested when they begin duty on the yacht and that they obtain adequate rest when not on duty.

## **1.5 DEFINITIONS**

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulations:

**Compensatory rest:** Means when the normal periods of rest are disturbed by a callout, compensatory rest is the extra rest given to compensate for that disturbance.

**Hours of rest:** Means when a crew member is not on duty carrying out his/her activities onboard and is able to rest or sleep so as to avoid fatigue.

**Hours of work:** Means when a crew member is at his/her employers' disposal and carrying out his/her duties or activities.

## **Ch. 2 SAFE MANNING**

### **2.1 SAFE MANNING LEVEL**

**2.1.1** In determining the safe manning the UAE National Transport Authority or the Recognised Organisation (RO) will ensure that the yacht has a sufficient number of crew members onboard to operate safely, efficiently and with due regard to security. Every yacht shall be manned by a crew that is adequate, in terms of size and qualifications, to ensure the safety and security of the yacht and its personnel, under all operating conditions.



**2.1.2** The Master of the yacht shall propose the safe manning level for the specific yacht based on the following factors:

- a) Area of Operation for the yacht;
- b) Size of the yacht (in GT);
- c) Number of persons onboard;
- d) Length of voyages and the frequency of port calls;
- e) The type of operations in which the yacht is to be involved and any special requirements to these operations;
- f) Construction and technical equipment onboard that needs to be operated, including monitoring and control equipment relevant for the safe operation of the yacht - one of the required engineers shall be also a qualified electrician;
- g) Configuration of the propulsion system and auxiliaries;
- h) Maintenance philosophy (onboard and/or yard refit);
- i) Marine engineering tasks and duties, including the operation and monitoring of the yacht's main propulsion and auxiliary machinery and in maintaining a safe engineering watch;
- j) Personnel needs for maintaining life saving, fire safety and other systems in operational condition; and
- k) Special security precautions.

**2.1.3** The proposal is to be approved by the UAE National Transport Authority or the RO, and is processed into the Safe Manning Document for the yacht.

## 2.2 MANNING LEVEL WHEN < 12 GUESTS

2.2.1 Table 11.1 gives minimum manning levels for yachts of various sizes and in different areas of operation when carrying less than 12 guests / persons in addition to the permanent crew.

2.2.2 Special considerations shall be presented to get acceptance for less crew.

| Area of operation | Crew               | Yacht type |                |            |
|-------------------|--------------------|------------|----------------|------------|
|                   |                    | < 500 GT   | 500 – 3,000 GT | > 3,000 GT |
| In port           | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | -          | -              | -          |
|                   | Navigation officer | -          | -              | -          |
|                   | Chief engineer     | -          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | 1              | 1          |
|                   | Yacht rating       | -          | 1              | 2          |
| <b>Total</b>      | <b>2</b>           | <b>5</b>   | <b>6</b>       |            |
| At anchor         | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Navigation officer | -          | -              | -          |
|                   | Chief engineer     | -          | 1              | 1          |
|                   | Second engineer    | 1          | 1              | 1          |
|                   | Assistant engineer | -          | -              | -          |
|                   | Yacht rating       | 1          | 2              | 3          |
| <b>Total</b>      | <b>4</b>           | <b>6</b>   | <b>7</b>       |            |
| Coastal           | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Navigation officer | -          | -              | -          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | -          |
|                   | Yacht rating       | 2          | 3              | 4          |
| <b>Total</b>      | <b>6</b>           | <b>7</b>   | <b>8</b>       |            |
| Ocean             | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Navigation officer | 1          | 1              | 2          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | 1          |
|                   | Yacht rating       | 2          | 3              | 4          |
| <b>Total</b>      | <b>7</b>           | <b>8</b>   | <b>11</b>      |            |
| Polar             | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Navigation officer | 1          | 1              | 2          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | 2          |
|                   | Yacht rating       | 3          | 4              | 5          |
| <b>Total</b>      | <b>8</b>           | <b>9</b>   | <b>13</b>      |            |

Table 11-1 Minimum manning levels when < 12 guests

## 2.3 MANNING LEVEL WHEN 12 TO 60 GUESTS

2.3.1 Table 11.2 gives minimum manning levels for yachts of various sizes and in different areas of operation when carrying 12 to 60 persons in addition to the permanent crew.

2.3.2 Special considerations shall be presented to get acceptance for less crew.

| Area of operation | Crew               | Yacht type |                |            |
|-------------------|--------------------|------------|----------------|------------|
|                   |                    | < 500 GT   | 500 – 3,000 GT | > 3,000 GT |
| In port           | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | -          | -              | -          |
|                   | Chief engineer     | -          | -              | -          |
|                   | Second engineer    | -          | -              | -          |
|                   | Assistant engineer | 1          | 1              | 1          |
|                   | Yacht rating       | 1          | 2              | 3          |
|                   | <b>Total</b>       | <b>4</b>   | <b>5</b>       | <b>6</b>   |
| At anchor         | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 1          | 1              | 1          |
|                   | Chief engineer     | -          | -              | -          |
|                   | Second engineer    | 1          | 1              | 1          |
|                   | Assistant engineer | -          | -              | -          |
|                   | Yacht rating       | 2          | 3              | 4          |
|                   | <b>Total</b>       | <b>6</b>   | <b>7</b>       | <b>8</b>   |
| Coastal           | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 1          | 1              | 1          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | -          |
|                   | Yacht rating       | 3          | 4              | 5          |
|                   | <b>Total</b>       | <b>8</b>   | <b>9</b>       | <b>10</b>  |
| Ocean             | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 2          | 2              | 2          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | 1          |
|                   | Yacht rating       | 3          | 4              | 5          |
|                   | <b>Total</b>       | <b>9</b>   | <b>10</b>      | <b>12</b>  |
| Polar             | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 2          | 2              | 2          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | 1          |
|                   | Yacht rating       | 4          | 5              | 6          |
|                   | <b>Total</b>       | <b>10</b>  | <b>11</b>      | <b>13</b>  |

Table 11-2 Minimum manning levels when 12 to 60 guests

## 2.4 MANNING LEVEL WHEN > 60 GUESTS

2.4.1 Table 11.3 gives minimum manning levels for yachts of various sizes and in different areas of operation when carrying more than 60 persons in addition to the permanent crew.

2.4.2 Special considerations shall be presented to get acceptance for less crew.

| Area of operation | Crew               | Yacht type |                |            |
|-------------------|--------------------|------------|----------------|------------|
|                   |                    | < 500 GT   | 500 – 3,000 GT | > 3,000 GT |
| <b>In port</b>    | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 1          | 1              | 1          |
|                   | Chief engineer     | -          | -              | -          |
|                   | Second engineer    | -          | -              | -          |
|                   | Assistant engineer | 1          | 1              | 1          |
|                   | Yacht rating       | 3          | 4              | 5          |
|                   | <b>Total</b>       | <b>7</b>   | <b>8</b>       | <b>9</b>   |
| <b>At anchor</b>  | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 2          | 2              | 2          |
|                   | Chief engineer     | -          | -              | -          |
|                   | Second engineer    | 1          | 1              | 1          |
|                   | Assistant engineer | -          | -              | -          |
|                   | Yacht rating       | 4          | 5              | 6          |
|                   | <b>Total</b>       | <b>9</b>   | <b>10</b>      | <b>11</b>  |
| <b>Coastal</b>    | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 2          | 2              | 2          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | -          |
|                   | Yacht rating       | 5          | 6              | 7          |
|                   | <b>Total</b>       | <b>11</b>  | <b>12</b>      | <b>13</b>  |
| <b>Ocean</b>      | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 2          | 2              | 2          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | 1          |
|                   | Yacht rating       | 5          | 6              | 7          |
|                   | <b>Total</b>       | <b>11</b>  | <b>12</b>      | <b>14</b>  |
| <b>Polar</b>      | Master             | 1          | 1              | 1          |
|                   | Chief Officer      | 1          | 1              | 1          |
|                   | Second officer     | 2          | 2              | 2          |
|                   | Chief engineer     | 1          | 1              | 1          |
|                   | Second engineer    | -          | 1              | 1          |
|                   | Assistant engineer | 1          | -              | 1          |
|                   | Yacht rating       | 6          | 7              | 8          |
|                   | <b>Total</b>       | <b>12</b>  | <b>13</b>      | <b>15</b>  |

Table 11-3 Minimum manning levels when > 60 guests

## **2.5 ADDITIONAL CREW**

**2.5.1** For sailing yachts, depending of the type of rig and level of automation, additional manning might be required to operate the rig.

**2.5.2** The navigational duties and responsibilities as required by STCW 95 shall apply and shall be given consideration in deciding the manning requirement.

**2.5.3** The security duties, obligations and responsibilities as required by the ISPS Code shall apply and shall be given consideration in deciding the manning requirement.

## **2.6 VERIFICATION OF COMPLIANCE**

**2.6.1** In determining what constitutes a minimum safe manning level, risk and hazard management tools such as formal safety assessment may be used to verify that the selected manning level is considered safe for all reasonably foreseeable circumstances and working conditions, including emergency situations.

**2.6.2** The Owning Company is responsible for compliance and for a management system with procedures to ensure ongoing compliance. Internal audits shall be done in accordance with ISM (ISPS).

**2.6.3** Verification of compliance with ISM / ISPS shall be done initially and with intervals of five (5) years with an intermediate inspection between year 2 and 3.

## **Ch. 3 SAFE MANNING DOCUMENT**

### **3.1 GENERAL**

**3.1.1** All yachts under these Regulations shall carry a Safe Manning Document considering:

- a) the Area of Operation; and
- b) the number of persons onboard.

**3.1.2** The Safe Manning Document shall be retained onboard and be available for inspection by an authorised person, whenever required.

**3.1.3** In the event of any change in equipment, construction or use of the yacht, which may affect the safe manning level, the Owning Company shall make an application for the issue of a new Safe Manning Document.

**3.1.4** A Safe Manning Document of a yacht may be withdrawn if the Owning Company fails to submit a new proposal where a yacht changes its:

- a) area of operation;
- b) construction;
- c) machinery or equipment; or
- d) method of maintenance.

## **3.2 VERIFICATION OF COMPLIANCE**

**3.2.1** Proposal for the Safe Manning Document shall be made by the Owing Company, or a person authorised to act on its behalf, and forwarded to the UAE National Transport Authority or the RO. The Safe Manning Document shall include a clear and concise explanation of how:

- a) the proposed manning level has been determined;
- b) it takes account of the guidance given by the minimum manning scales;
- c) it takes account of the hours of work provisions.

**3.2.2** Verification of compliance shall be made by the UAE National Transport Authority, or the RO acting on its behalf, prior to the issue of the Safe Manning Document.

## **Ch. 4 COMPETENCE AND EXPERIENCE**

### **4.1 SAFE EXPERIENCE**

**4.1.1** It shall be ensured that crew required for the safe operation of the yacht have recent and relevant experience of the type and size of yacht, and the type of operation in which it is engaged.

**4.1.2** It is the responsibility of the Owing Company or managing agent to ensure that the crew have recent and relevant experience of the type and size of yacht, and the type of operation in which it is engaged.

### **4.2 TRAINING AND QUALIFICATIONS**

**4.2.1** Yachts shall be manned with crew of appropriate grades who have been properly trained and certificated. The numbers of certificated officers and certificated and non-certificated ratings shall be sufficient to ensure safe and efficient operation of the yacht at all times.

**4.2.2** More than one crew member shall be trained to perform all essential operational tasks in both normal and emergency situations.

**4.2.3** The Master shall specify an appropriate period of operational training for each member of the crew and, if necessary, the periods at which appropriate retraining shall be carried out.

### **4.3 CREW LICENCE**

**4.3.1** A valid certificate of competency and a valid [UAE Crew Licence] appropriately endorsed in accordance with the provisions of STCW 1978, as

amended, held by the crew members, shall be evidence of satisfactory training and qualifications of the yacht crew to the Port Authority of the country in which the yacht is to call.

**4.3.2** In accordance with the STCW Code the UAE National Transport Authority issue or endorse certificates of competency for those working onboard the yachts to maintain the [UAE Crew Licence].

**4.3.3** Crew members from foreign countries are required to hold a Certificate of Receipt of Application allowing them to sail onboard for a period while their application is being reviewed.

**4.3.4** The Certificate of Receipt of Application is issued upon receipt of a formal application with a copy of the competency certificate conforming to STCW requirements and a health certificate conforming to the UAE National Transport Authority requirements.

**4.3.5** The Owing Company shall have measures in place to ensure compliance for all crew members including Masters. The Master or a person designated by him shall be given the responsibility of ensuring that those who work onboard have valid certificates and [UAE Crew Licence] as required by the UAE National Transport Authority.

#### **4.4 CREW ID**

**4.4.1** All crew members shall have an [ID] in accordance with UAE National Transport Authority requirements.

### **Ch. 5 HOURS OF WORK AND REST**

#### **5.1 GENERAL**

**5.1.1** Crew members shall have rest as required, i.e. minimum hours of rest shall not be less than:

- a) ten hours in any 24-hour period; and
- b) 77 hours in any seven-day period.

**5.1.2** The Owing Company shall ensure that the yacht is sufficiently manned to avoid the need for excessive hours of work.

**5.1.3** Hours of rest may be divided into no more than 2 periods; one of which should be at least 6 hours long, and the interval should not exceed 14 hours.

**5.1.4** Exemption to the minimum hours of rest may be considered as long as they are agreed between the Master and crew members, and provided that their health and safety, and the safety of the yacht, is not compromised.

## **5.2 SCHEDULE OF DUTIES**

**5.2.1** The Master shall ensure that a schedule of duties is drawn up setting out the hours of work and rest periods for each of the crew members. A copy of the schedule should be made available to all members of the crew.

**5.2.2** The table or schedule shall be in a similar format to that detailed in Annex A of MSN 1767, and show:

- a) the schedule of duties at sea and duties in port; and
- b) the minimum hours of rest as defined by the guidelines.

## **5.3 EMERGENCY DRILLS AND COMPENSATORY REST**

**5.3.1** The Master shall as far as practicable arrange for conducting emergency drills in a way which minimises the disturbance to rest periods and provide compensatory rest for crew members whose normal rest is disturbed by such drills.

## **Ch. 6 WORKING CONDITIONS**

### **6.1 GENERAL**

**6.1.1** Employment, engagement or work onboard any yacht of any person under the age of 16 is prohibited. For persons between 16 and 18 there should be some restriction on work.

**6.1.2** All working onboard must hold a valid medical certificate attesting that they are medically fit to perform the duties they are to carry out at sea and that their health will not be a danger to others onboard.

**6.1.3** All who work onboard shall have a crew members' employment agreement.

**6.1.4** Measures shall be taken to ensure the quality of food and drinking water onboard. Standards should be set and frequent documented inspections should be carried out onboard, by or under the authority of the Master, with respect to:

- a) supplies of food and drinking water;
- b) all spaces and equipment used for the storage and handling of food and drinking water; and
- c) galley and other equipment for the preparation and service of meals.

**6.1.5** It shall be ensured that crew members who are engaged as ships' cooks are trained, qualified and found competent for the position. Training shall as a minimum comprise practical cookery, food and personal hygiene, food storage, stock control, and environmental protection and catering health and safety.

**6.1.6** For the safety of all onboard there shall be a qualified person to administer first aid, medicines, medical equipment and a medical guide book. Special



considerations shall be given to medical care onboard yachts with area of operation Ocean and Polar to ensure that those onboard are able to seek medical assistance by radio or satellite communication.

**6.1.7** Reasonable precautions to prevent occupational accidents, injuries and diseases onboard, including measures to reduce and prevent the risk of exposure to harmful levels of ambient factors and chemicals as well as the risk of injury or disease that may arise from working onboard, including the use of equipment and machinery onboard shall be considered.

## **PART 12 SURVEYS AND CERTIFICATION**

### **Ch. 1 GENERAL**

#### **1.1 YACHT CERTIFICATES**

**1.1.1** The provisions of this Part apply to required yacht certificates listed in Pt.1 Ch.1.3.1. These certificates are to be issued upon compliance with the provisions of these Regulations and other referred regulations.

**1.1.2** All certificates issued under these Regulations, or certified copies thereof, shall be carried on all yachts.

**1.1.3** For maintenance and renewal of certificates, periodical and renewal surveys as specified are to be completed satisfactorily within the specified survey range and the certificate shall be endorsed or renewed accordingly.

**1.1.4** Possible deficiencies are to be rectified promptly and satisfactorily.

**1.1.5** All certificates, as applicable, shall be satisfactorily maintained as all certificates support the Yacht Safety Certificate.

**1.1.6** If the Yacht Safety Certificate becomes invalid, the UAE Yacht Certificate of Registry is to be withdrawn.

#### **1.2 SURVEYS**

**1.2.1** For issuance and maintenance of any certificate, the yacht shall be subject to the following surveys:

- a) An initial survey before the yacht is taken into operation or before the certificate is issued for the first time;
- b) A renewal survey at intervals not exceeding 5 years;
- c) A periodical (annual) survey within the anniversary range of the certificate;
- d) An intermediate survey/audit within 2-3 years before the expiry date of the certificate. This is valid only for Safety Management and Security certificates where no annual surveys are required;
- e) An additional occasional survey due to damage or modifications of the yacht.

### 1.3 DEFINITIONS

The following definitions, in alphabetical order, are applicable throughout this Part of the Regulations:

**Anniversary date:** Means the day and the month of each year which will correspond to the date of expiry of the certificate.

**Anniversary range:** Means the period between three months before and three months after the anniversary date of the certificate.

**Certificate:** Means the Yacht Safety Certificate that confirms the yacht is in compliance with the requirements of these Regulations.

**Expiry date:** Means the date at which a certificate period expires.

**Initial survey:** Means the survey to verify that the yacht is in compliance with the requirements of applicable regulations in order to issue the relevant certificate for the first time for maximum 5 years validity.

**Intermediate survey/audit:** Means a survey or audit required to be carried out at the middle of certificate period, i.e. 2 ½ years before the expiry date of the certificate with a survey range 6 months before and 6 months after. Such survey/audit is required in connection with Safety Management and Security certificates.

**Periodical survey:** Is the survey to be carried out upon anniversary date of current certificate to verify that the yacht, its components, equipment and documentation are operated, maintained and managed adequately since the initial survey, in order to endorse the certificate.

**Renewal survey:** Means the survey to be carried out upon expiry of current certificate to verify that the yacht, its components, equipment and documentation are operated, maintained and managed adequately since the initial survey, in order to renew the certificate for maximum 5 years validity.

**Survey range:** corresponds to the anniversary range for periodical/annual surveys and 3 months before the expiry date of the certificate for renewal survey.

## **Ch. 2 SURVEY SCOPE**

### **2.1 INITIAL SURVEY**

**2.1.1** The Initial Survey scope consists of:

- a) an appraisal of the assumptions made and limitations proposed in relation to loadings, environment, speed and manoeuvrability;
- b) an appraisal of the data supporting the safety of the design, obtained, as appropriate, from calculations, tests and trials;
- c) an investigation into the adequacy of the various manuals to be supplied with the yacht;
- d) a complete survey of the structure, safety equipment, radio installations and other equipment, fittings, arrangements and materials to ensure that they are in full compliance with the technical requirements in these Regulations, are in satisfactory condition and are fit for the operation for which the yacht is intended; and
- e) verification that the yacht is built according to approved drawings.

### **2.2 RENEWAL SURVEY**

**2.2.1** The renewal survey shall include a complete inspection/survey of the structure, including the outside of the yacht's bottom and related items, safety equipment, radio installations and other equipment to ensure that they comply with the requirements of the applicable regulations, are in satisfactory condition and are fit for the area of operation for which the yacht is intended. The survey of the yacht's bottom shall be conducted with the yacht out of the water under suitable conditions for close-up examination of any damage or problem.

### **2.3 PERIODICAL SURVEY**

**2.3.1** The periodical survey (annual survey) is similar to renewal survey except that the survey of the yacht's bottom is not required. The survey is not as extensive as the renewal survey as random selection of survey items is done.

### **2.4 INTERMEDIATE SURVEY / AUDIT**

**2.4.1** The intermediate audit is similar to renewal audit. Such an audit is required in connection with Safety Management and Security certificates.

## **2.5 OCCASIONAL SURVEY**

**2.5.1** An additional occasional survey, either general or partial according to the circumstances, shall be made upon a damage and repairs or renewals are made or upon observing serious deficiencies in connection with periodical surveys or port state control. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory, and that the yacht complies in all respects with the requirements of these Regulations.

**2.5.2** It is the responsibility of the Master of the yacht to apply for an Occasional Survey in case of damage or if modifications of the yacht are made.

## **2.6 ENDORSEMENT**

**2.6.1** The periodical surveys shall be endorsed in the relevant certificate.

**2.6.2** The survey of the yacht, as far as regards the enforcement of the provisions of the applicable regulations, shall be carried out by officers of the UAE National Transport Authority. The UAE National Transport Authority may delegate the surveys to RO.

**2.6.3** RO to conduct surveys shall be empowered to require repairs to a yacht. The UAE National Transport Authority shall notify the specific responsibilities and conditions of the authority delegated to RO.

**2.6.4** When a RO determines that the condition of the yacht or its equipment does not correspond with the particulars of the Certificate or is such that the yacht is not fit to operate without danger to persons onboard, to the environment or to the yacht, the RO shall immediately ensure that corrective action is taken. If such corrective action is not taken, the Certificate shall be withdrawn and the UAE National Transport Authority shall be notified.

## **2.7 YACHT SAFETY MANAGEMENT**

**2.7.1** Yachts of  $\geq 500$  GT shall comply with the requirements of the International Ship Safety Management (ISM) Code and shall be issued with an International Ship Safety Management Certificate accordingly. Intermediate and renewal audits shall be performed onboard in order to maintain the validity of the certificate.

**2.7.2** The Owing Company or the management company shall comply with the company related ISM requirements and shall be issued with a Document of Compliance accordingly. Periodical audits shall be performed at the company ashore in order to maintain the validity of the certificate.

**2.7.3** Yachts < 500 GT shall comply with the requirements of International Ship Safety Management (ISM) Code as far as practicable and shall be issued with a [UAE Yacht Safety Management Certificate] accordingly. Intermediate and renewal audits shall be performed onboard in order to maintain the validity of the certificate. As minimum, ISM requirements related to the following shall be complied with:

- a) Employment of qualified and certified personnel onboard;
- b) Maintenance of valid certificates and documentation onboard;
- c) Maintenance routines and records of the yacht and equipment;
- d) Onboard operations, e.g. navigation, port entry and clearance etc.;
- e) Emergency preparedness and procedures.

## **Ch. 3 YACHT SAFETY CERTIFICATE**

### **3.1 GENERAL**

**3.1.1** A Yacht Safety Certificate is issued after completion of an initial or renewal survey to a yacht which complies with the requirements of these Regulations. The certificate shall be issued or endorsed either by the UAE National Transport Authority or by a RO on its behalf. In every case, the UAE National Transport Authority assumes full responsibility for the Certificate.

**3.1.2** In order to maintain the validity of the certificate, annual surveys and endorsement shall be carried out within the specified anniversary range.

### **3.2 CERTIFICATE LANGUAGE**

**3.2.1** For international voyages the certificate shall be in English. Translation into Arabic, French, Spanish or other languages can be made when found appropriate for the operation of the yacht.

### **3.3 CERTIFICATE PERIOD**

**3.3.1** The Yacht Safety Certificate shall be issued for a period specified by the UAE National Transport Authority which shall not exceed 5 years.

**3.3.2** When the renewal survey is completed within three months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding 5 years from the date of expiry of the existing Certificate.

**3.3.3** When the renewal survey is completed after the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the

renewal survey to a date not exceeding 5 years from the date of expiry of the existing Certificate.

**3.3.4** When the renewal survey is completed more than 3 months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding 5 years from the date of completion of the renewal survey.

**3.3.5** If a Certificate is issued for a period of less than 5 years, the UAE National Transport Authority may extend the validity of the Certificate beyond the expiry date to the maximum period, provided that the surveys when a Certificate is issued for a period of 5 years are carried out.

**3.3.6** If a renewal survey has been completed and a new Certificate cannot be issued or placed onboard the yacht before the expiry date of the existing Certificate, the RO authorised by the UAE National Transport Authority may endorse the existing Certificate and such a Certificate shall be accepted as valid for a further period which shall not exceed 5 months from the expiry date.

**3.3.7** If a yacht, at the time when a Certificate expires, is not in the place in which it is to be surveyed, the UAE National Transport Authority may extend the period of validity of the Certificate but this extension shall be granted only for the purpose of allowing the yacht to proceed to the place in which it is to be surveyed, and then only in cases where it appears proper and reasonable to do so. No Certificate shall be extended for a period longer than one month, and a yacht to which an extension is granted shall not, on its arrival in the place in which it is to be surveyed, be entitled by virtue of such extension to leave that place without having a new Certificate. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding 5 years from the date of expiry of the existing Certificate before the extension was granted.

**3.3.8** In connection with re-issuance of a Certificate, e.g. in case of loss or correction of certificate or in case of change of certificate data such as yacht name, port of registry or operator name, a new Certificate shall be valid to a date not exceeding 5 years from the date of completion of the renewal survey or the expiry date of the existing certificate.

### **3.4 VALIDITY OF THE CERTIFICATE**

**3.4.1** A Certificate issued shall cease to be valid in any of the following cases:

- a) If the relevant surveys are not completed within the period;
- b) If the Certificate is not endorsed;
- c) Upon transfer of the yacht to the flag of another State;
- d) If any of the other mandatory certificates becomes invalid;
- e) If any information given in the Certificate is changed, in which case a new Certificate shall be issued;
- f) If damage or deficiency has taken place that could endanger the life of persons onboard or the environment or the yacht;

- g) If the yacht, its equipment, fittings or environment, significantly deviate from the requirements of these Regulations;
- h) If the safety or security management significantly deviates from the requirements of the ISM Code or the ISPS Code;
- i) If maintenance of condition after survey is not complied with;
- j) If the yacht is not operated within the governing parameters and outside the worst intended operational conditions.

**3.4.2** The privileges of these Regulations may not be claimed in favour of any yacht unless it holds a valid Certificate.

## **Ch. 4 YACHT CONSTRUCTION CERTIFICATE**

### **4.1 GENERAL**

**4.1.1** For yachts < 400 GT, where a Classification Certificate is not required or provided, a Yacht Construction Certificate shall be issued after completion of an initial or renewal survey. The certificate shall be issued after verification of compliance with the requirements of these Regulations, i.e. Part 3 (Structural Integrity), Part 4 (Machinery and Electrical Installations) and Part 7 (Navigation and Control), as applicable. The Certificate shall be issued or endorsed either by the UAE National Transport Authority or by a RO on its behalf.

### **4.2 CERTIFICATE LANGUAGE**

**4.2.1** For international voyages the certificate shall be in English. Translation into Arabic, French, Spanish or other languages can be made when found appropriate for the operation of the yacht.

### **4.3 CERTIFICATE PERIOD**

**4.3.1** The Yacht Construction Certificate shall be issued for a period specified by the UAE National Transport Authority which shall not exceed 5 years.

**4.3.2** No annual surveys and endorsement are required in order to maintain the validity of the certificate within the five (5) year period.

**4.3.3** Renewal of the Certificate shall be carried out in accordance with the provisions of Ch.3.3.



## **Ch. 5 MAINTENANCE OF CONDITION AFTER SURVEY**

### **5.1 MAINTENANCE**

**5.1.1** The condition of the yacht and its equipment shall be maintained in accordance with the maintenance manual to conform with the provisions of these Regulations, in order to ensure that the yacht in all respects will remain fit to operate without danger to the persons onboard, to the environment or to the yacht.

### **5.2 ALTERATIONS**

**5.2.1** After any survey of the yacht has been completed, no change shall be made to structure, equipment, fittings, arrangements and materials covered by the survey, without the sanction of the UAE National Transport Authority or the RO acting on its behalf.

### **5.3 ACCIDENTS**

**5.3.1** Whenever an accident occurs or a defect is discovered, either of which affects the safety of the yacht or the efficiency or completeness of structure, equipment, fittings, arrangements and materials, the person in charge or the Owning Company of the yacht shall report at the earliest opportunity to the UAE National Transport Authority and the RO responsible, who shall cause investigations to be initiated to determine whether an occasional survey is necessary.

**5.3.2** If the yacht is in an area under the jurisdiction of another Government, the person in charge or the Owning Company shall also report immediately to the appropriate authorities of the Port State and the RO shall ascertain that such a report has been made.

# ANNEXES

## **ANNEX A - VERIFICATION OF COMPLIANCE: RISK ASSESSMENT**

Risk Assessment is to be used for verification of compliance with the functional requirements of these Regulations when novel and / or alternative designs, equipment, systems or operations are introduced to a yacht and when these novel / alternative features are not sufficiently covered by the prescriptive regulations in these Regulations or compliance can not be showed through analysis or demonstration.

The objective of verification by Risk Assessment is to show that the risks associated with a novel / alternative design, equipment, system or operations is equivalent or lower to that of a similar yacht which complies with a prescriptive regime. This shall be documented by conducting a comparative risk assessment between the two solutions

A Risk Assessment involves assessing the likelihood and consequence for events which may have negative and undesired effects on the safety of people, environment and / or property (ref. ISO/FDIS 31000 Risk Management). A Risk Assessment consists of three key steps which must be performed and documented to use Risk Assessment for verification of compliance in relation to these Regulations:

### **1. Risk Identification**

The objective of the first step is the identification of hazards (risk sources), accidental events, their causes and potential consequences (ref. ISO 31000). All risks associated with a certain novel and / or alternative design, equipment, system or operations must be identified in order to make sure that all relevant hazards will be evaluated.

The risk identification process shall be carried out by the use of recognised hazard and risk identification methods (e.g. HAZID) at a risk identification workshop. The identification team shall consist of persons with adequate design, equipment, system and operational knowledge and relevant experience in aspects such as yacht design and operation. The composition of the group must cover both theoretical and practical aspects. Techniques and general guidance in Risk Identification can be found in IMO MSC/Circ. 1023 (Formal Safety Assessment Guidelines)

### **2. Risk Analysis**

The identified risks shall be analysed and the level of risk must be estimated and determined. This process can in general be either quantitative or qualitative.

If a quantitative approach is chosen, recognised tools shall be used (e.g. Risk Contribution Trees, ref. FSA Guidelines, IMO MSC/Circ. 1023). A quantitative risk assessment consists of both frequency / probability assessments and consequence analyses of the identified hazards.

If a qualitative risk assessment approach is used it must be carried out using a suitable risk assessment matrix and a risk assessment team with the correct composition. The IMO matrix defined in the FSA Guidelines (IMO MSC/Circ. 1023) is well suited for this purpose. The requirements for the risk analysis team shall be the same as for the risk identification team.

### 3. Risk Evaluation

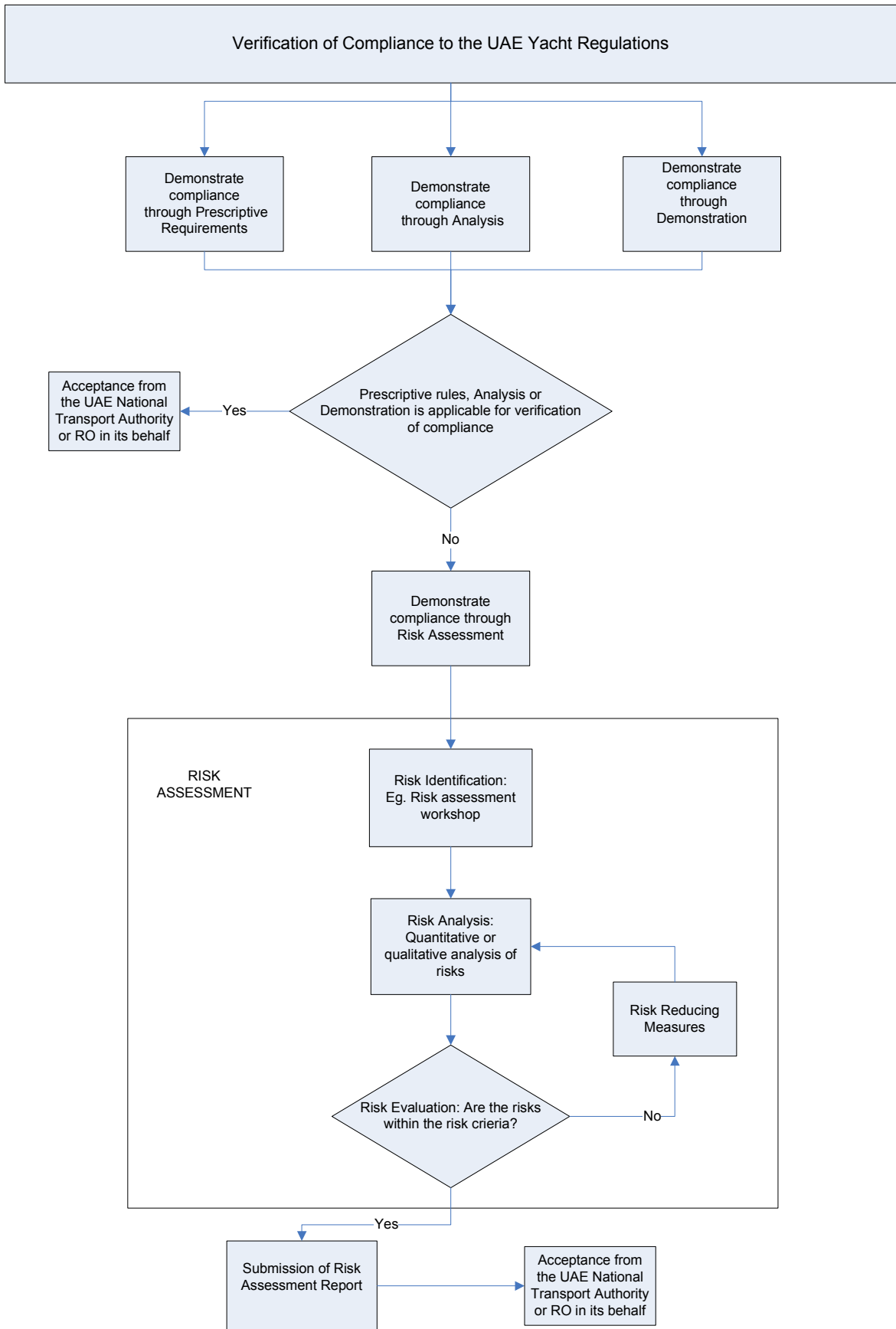
Risk Evaluation is the process of comparing the results of the risk analysis with the determined risk criteria. In the context of verifying compliance with the functional requirements of these Regulations the objective is to demonstrate that any additional risks introduced are acceptable or tolerable.

The objective of the Risk Assessment process is to show safety equivalence such that the risks associated with a novel / alternative design, equipment, system or operation are on the same level as when demonstrating compliance through prescriptive rules. The output of the Risk Evaluation shall be a comparison between the risks identified for the specific novel design, equipment, system or operation and the result of a generic risk assessment when using the prescriptive requirements of these Regulations. If risks are higher, measures shall be implemented to reduce risks to a level equivalent with that of using the prescriptive requirements.

The verification of compliance of the novel / alternative design, equipment, system or operations with regard to the functional requirements of these Regulations using Risk Assessment shall be demonstrated by a technical report to be approved by the UAE National Transport Authority or a Recognised Organisation (RO) on its behalf. The Risk Assessment report shall explain all methods used and assumptions made throughout the assessment process.

The Risk Assessment report shall include, as a minimum:

- a) detailed explanation of why Risk Assessment is required to verify compliance with the functional requirements of these Regulations;
- b) description of novel / alternative design items, equipment, system or operation not sufficiently covered by the prescriptive requirements of these Regulations;
- c) reference to relevant functional requirements that are to be complied with as well as the prescriptive requirements of these Regulations that cannot be met;
- d) a comprehensive list of hazards (risk sources) identified and their associated scenarios;
- e) a description of causes and effects;
- f) explanations of all assumptions and decisions made in the risk assessment process;
- g) presentation of risk influencing factors;
- h) presentation of the distribution of risks;
- i) if quantitative risk assessment is performed: sources of accident and reliability statistics;
- j) if qualitative risk assessment is performed: composition of risk assessment workgroup, including their expertise and roles, and risk matrix;
- k) presentation of risk assessment results and comparison with generic risk assessment;
- l) description of risk mitigating measures suggested for implementation for risk reduction to a safety level equivalent to that of a yacht using the prescriptive requirements of these Regulations;
- m) residual risk level after the implementation of risk mitigating measures.



# ANNEX B - UAE YACHT CERTIFICATE OF REGISTRY



UAE National Transport Authority

Certificate No:

YACHT CERTIFICATE OF REGISTRY

Date of issue:  
(yyyy-mm-dd)

FOR NON-COMMERCIAL AND PRIVATE OPERATION

Issued under the authority of the government of  
**THE UNITED ARAB EMIRATES**  
by UAE National Transport Authority

Name of yacht: " "-----  
 Official No.: ----- Port of registry: -----  
 Distinctive number or letters: ----- IMO number: -----

THIS IS TO CERTIFY, pursuant to the provisions of the [United Arab Maritime Act], and submitted declaration of ownership, that:

Name of UAE Owner (citizen / national) or -----  
 Name of UAE registered entity: -----  
 Address of Owner / Entity (as applicable): -----  
 Entity identification number (if applicable): -----

is the owner of the above named yacht.

**Particulars of Yacht:**

Former name " "-----  
 Gross tonnage: ----- Net tonnage: -----  
 Classification Society: ----- Place / country built: -----  
 Built by: ----- Year built / Yard no. yyyy / # -----  
 Engine manufacturer: ----- Hull material: -----  
 No. and type of engines: ----- Propulsion power: -----  
 Number of masts: ----- Number of decks: -----  
 Length: ----- Breadth: -----  
 Depth: ----- Height: -----

The UAE National Transport Authority has, on behalf of the Government of the United Arab Emirates approved the application of the aforesaid owner for registration of the yacht and whereas the owner has complied with the requirements for registration, the yacht is therefore duly registered under the Laws and Flag of the United Arab Emirates.

This Certificate of Registry and all rights and privileges accorded there under, shall remain valid on a continuous basis, provided the owner has complied with the requirements for revalidation and a copy of the current year's confirmation of registry from UAE National Transport Authority is attached hereto.

for UAE National Transport Authority

(place)  
-----  
(yyyy-mm-dd)

-----  
(name)  
Director General

# ANNEX C - UAE YACHT SAFETY CERTIFICATE



**UAE National Transport Authority**

Certificate No:

## YACHT SAFETY CERTIFICATE

Date of issue:  
(yyyy-mm-dd)

This Certificate shall be supplemented by a Record of Equipment

Issued under the provisions of the UAE Yacht Regulations

under the authority of the government of

**THE UNITED ARAB EMIRATES**

by UAE National Transport Authority

### Particulars of Yacht

Name of yacht: " "-----  
 Distinctive number or letters: -----  
 Port of registry: -----  
 Gross tonnage: -----  
 IMO number: -----

Date on which keel was laid or yacht was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced: (yyyy-mm-dd)

### THIS IS TO CERTIFY:

1. That the yacht has been surveyed in accordance with the requirements of Part 12 of the UAE Yacht Regulations.
2. That the survey showed that the condition of the stability, accommodation safety, navigation, fire protection, lifesaving appliances and equipment as defined in the above regulation was satisfactory and the yacht complied with the relevant requirements of Parts 1, 2, 6, 7, 8 and 9 of the UAE Yacht Regulations, as applicable, was satisfactory
3. That an Exemption Certificate has been issued

### Certified max number of people onboard

| Yacht Operational Profile | Max number of persons onboard |
|---------------------------|-------------------------------|
| Coastal Operation         | -----                         |
| Ocean Operation           | -----                         |
| Polar Operation           | -----                         |

Service and operational limitations, if any: .

This Certificate is valid until (yyyy-mm-dd)

Completion date of survey on which this Certificate is based: (yyyy-mm-dd)

Issued at

for UAE National Transport Authority

(place)  
(yyyy-mm-dd)

-----  
(name)  
Surveyor

Certificate No:

Date of issue: (yyyy-mm-dd)

**Mandatory annual surveys**

THIS IS TO CERTIFY:

that the yacht has been surveyed in accordance with Part 12 of the UAE Yacht Regulations

Due date:  Range:   
1st mandatory annual survey: Place:  Date:

Signature: \_\_\_\_\_  
Stamp \_\_\_\_\_ Surveyor, UAE National Transport Authority

2nd mandatory annual survey: Place:  Date:

Signature: \_\_\_\_\_  
Stamp \_\_\_\_\_ Surveyor, UAE National Transport Authority

3rd mandatory annual survey: Place:  Date:

Signature: \_\_\_\_\_  
Stamp \_\_\_\_\_ Surveyor, UAE National Transport Authority

4th mandatory annual survey: Place:  Date:

Signature: \_\_\_\_\_  
Stamp \_\_\_\_\_ Surveyor, UAE National Transport Authority

**Intermediate survey**

Due date:  Range:   
Intermediate survey: Place:  Date:

Signature: \_\_\_\_\_  
Stamp \_\_\_\_\_ Surveyor, UAE National Transport Authority



**ANNEX D - INTERNATIONAL TONNAGE CERTIFICATE**



**UAE National Transport Authority**

Certificate No:

**INTERNATIONAL TONNAGE  
CERTIFICATE (1969)**

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the INTERNATIONAL CONVENTION ON TONNAGE OF SHIPS, 1969,

under the authority of the government of

**THE UNITED ARAB EMIRATES**

for which the Convention came into force on 18th July 1982

by UAE National Transport Authority

**Particulars of Yacht**

Name of yacht: " "-----  
 Distinctive number or letters: -----  
 Port of registry: -----  
 Date on which keel was laid<sup>1</sup>: (yyyy-mm-dd)-----  
 IMO number: -----

**Main Dimensions**

Length (Article 2(8)): -----  
 Breadth (Regulation 2(3)): -----  
 Moulded Depth amidships to Upper Deck  
 (Regulation 2(2)): -----

**The Tonnages of the yacht are:**

Gross tonnage: -----  
 Net tonnage: -----

**THIS IS TO CERTIFY:**

that the tonnages of this yacht have been determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.

Issued at

The undersigned declares that he is duly authorized by the said Government to issue this Certificate.

for UAE National Transport Authority

(place)

(yyyy-mm-dd)

(name)

Surveyor

1 Date on which the keel was laid or the yacht was at a similar stage of construction (Article 2(6)), or date on which the yacht underwent alterations or modifications of a major character (Article 3(2)(b)), as appropriate.

**ANNEX E - INTERNATIONAL LOAD LINE CERTIFICATE**



**UAE National Transport Authority**

Certificate No:

**INTERNATIONAL LOAD LINE  
CERTIFICATE**

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of THE INTERNATIONAL CONVENTION ON LOAD LINES, 1966, as modified by the Protocol of 1988 relating thereto,

under the authority of the government of

**THE UNITED ARAB EMIRATES**

by UAE National Transport Authority

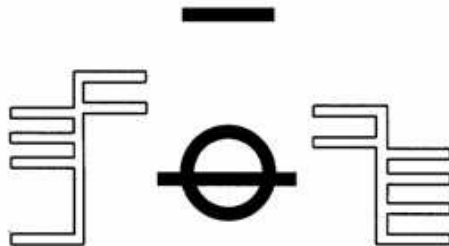
**Particulars of Yacht**

Name of yacht: " " \_\_\_\_\_  
 Distinctive number or letters: \_\_\_\_\_  
 Port of registry: \_\_\_\_\_  
 Length (L) as defined in article 2(8): \_\_\_\_\_ m  
 IMO number: \_\_\_\_\_

Freeboard assigned as:  A new yacht  An existing yacht  
 Type of yacht:  Type "A"  Type "B" with reduced freeboard  
 Type "B"  Type "B" with increased freeboard

Freeboard from deck line: Load line:  
 Tropical ..... - mm (T) ..... mm above (S)  
 Summer ..... mm (S) Upper edge of line through centre of ring  
 Winter ..... - mm (W) ..... mm below (S)  
 Winter North Atlantic ..... - mm (WNA) ..... mm below (S)  
 Timber tropical ..... - mm (LT) ..... mm above (LS)  
 Timber summer ..... - mm (LS) ..... mm above (S)  
 Timber winter ..... - mm (LW) ..... mm below (LS)  
 Timber winter North Atlantic ..... - mm (LWNA) ..... mm below (LS)

Allowance for fresh water for all freeboards other than timber: mm.  
 Allowance for fresh water for timber freeboards: mm.  
 The upper edge of the deck line from which these freeboards are measured is mm deck at side.



Name of yacht: " "

Certificate No:  
Date of issue: (yyyy-mm-dd)

THIS IS TO CERTIFY<sup>1 2</sup>:

1. That the yacht has been surveyed in accordance with the requirements of article 14 of the Convention.
2. That the survey showed that the freeboards have been assigned and load lines shown above have been marked in accordance with the Convention.

Completion date of survey on which this Certificate is based: (yyyy-mm-dd)

This Certificate is valid until (yyyy-mm-dd), subject to annual surveys in accordance with article 14 (1) (c) of the Convention.

Issued at

for UAE National Transport Authority

(place)

(yyyy-mm-dd)

-----  
(name)

Surveyor

<sup>1</sup> When a yacht departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.

<sup>2</sup> When a yacht is in fresh water of unit density the appropriate load line may be submerged by the amount of the fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.

## ANNEX F - CLASSIFICATION CERTIFICATE

|   |                |
|---|----------------|
| <hr/> <b>‘CLASSIFICATION SOCIETY’</b> <hr/>   |                |
| <b>CLASSIFICATION CERTIFICATE</b> <hr/>   |                |
| Issued under the provisions of the Rules of ‘Classification Society’  |                |
| <b>Particulars of Yacht</b>   |                |
| Name of yacht:  | “ [REDACTED] ” |
| IMO number:   | [REDACTED]     |
| Builder:  | [REDACTED]     |
| Yard No:  | [REDACTED]     |
| Owner:  | [REDACTED]     |
| ‘Class Society’ yacht Id No.:   | [REDACTED]     |
| <p>THIS IS TO CERTIFY<br/>that the above-mentioned yacht has been surveyed by ‘Classification Society’ according to the Society’s Rules and that upon completion of the survey on the <b>(yyyy-mm-dd)</b> the administration of the Society is satisfied that the condition of the hull, machinery and equipment was in compliance with the applicable Rule requirements for the following class notation:</p> <p style="text-align: center;">[REDACTED]</p> <p>Important assumptions and conditions related to maintenance and handling of the yacht are found in the yacht’s Appendix to the Classification Certificate. Current status of surveys and conditions of class is given in the Class status issued by the Society.</p> <p>This Certificate is valid until <b>(yyyy-mm-dd)</b> provided the requirements for the retention of class in the Rules will be complied with, and unless the class has been suspended or withdrawn.</p> <p style="text-align: center;">‘Classification Society’, <b>(place)</b> <span style="float: right;">Date: <b>(yyyy-mm-dd)</b></span></p> <p style="text-align: center;">-----<br/><b>(name)</b><br/><b>(title)</b></p> <hr/> |                |

Name of yacht: " "

'Class Society' Id No:  
Date of issue: (yyyy-mm-dd)

**SUPPLEMENT TO THE CLASSIFICATION CERTIFICATE**

**Endorsement for annual and intermediate surveys**

THIS IS TO CERTIFY that, at a survey required by 'Classification Society' Rules, the yacht was found to comply with the relevant requirements of the Rules.

Annual survey: Place: \_\_\_\_\_ Date: \_\_\_\_\_

Stamp \_\_\_\_\_ Signature: \_\_\_\_\_  
Surveyor, 'Classification Society'

Annual/intermediate<sup>1</sup> survey: Place: \_\_\_\_\_ Date: \_\_\_\_\_

Stamp \_\_\_\_\_ Signature: \_\_\_\_\_  
Surveyor, 'Classification Society'

Annual/intermediate<sup>1</sup> survey: Place: \_\_\_\_\_ Date: \_\_\_\_\_

Stamp \_\_\_\_\_ Signature: \_\_\_\_\_  
Surveyor, 'Classification Society'

Annual survey: Place: \_\_\_\_\_ Date: \_\_\_\_\_

Stamp \_\_\_\_\_ Signature: \_\_\_\_\_  
Surveyor, 'Classification Society'

**Endorsement for advancement of anniversary date**

In accordance with 'Classification Society' Rules, the new anniversary date is..... \_\_\_\_\_

Place: \_\_\_\_\_ Date: \_\_\_\_\_

Stamp \_\_\_\_\_ Signature: \_\_\_\_\_  
Surveyor, 'Classification Society'

**Endorsement to extend the validity of the Certificate until reaching the port of survey**

This Certificate shall, in accordance with 'Classification Society' Rules, be accepted as valid until..... \_\_\_\_\_

Place: \_\_\_\_\_ Date: \_\_\_\_\_

Stamp \_\_\_\_\_ Signature: \_\_\_\_\_  
Surveyor, 'Classification Society'

**Endorsement where the renewal survey has been completed**

THIS IS TO CERTIFY that, at a survey required by 'Classification Society' Rules, the yacht was found to comply with the relevant requirements of the Rules.

This Certificate shall be accepted valid until..... \_\_\_\_\_

Place: \_\_\_\_\_ Date: \_\_\_\_\_

Stamp \_\_\_\_\_ Signature: \_\_\_\_\_  
Surveyor, 'Classification Society'

<sup>1</sup> Delete as appropriate.

# ANNEX G - YACHT CONSTRUCTION CERTIFICATE



## UAE National Transport Authority YACHT CONSTRUCTION CERTIFICATE

Certificate No: \_\_\_\_\_

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the UAE Yacht Regulations  
under the authority of the government of  
**THE UNITED ARAB EMIRATES**  
by UAE National Transport Authority

**Particulars of Yacht**

Name of yacht: \_\_\_\_\_

Distinctive number or letters: \_\_\_\_\_

Port of registry: \_\_\_\_\_

Gross tonnage: \_\_\_\_\_

IMO number: \_\_\_\_\_

Date on which keel was laid or yacht was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced: (yyyy-mm-dd) \_\_\_\_\_

THIS IS TO CERTIFY:

- That the yacht has been surveyed in accordance with the requirements of Part 12 of the UAE Yacht Regulations.
- That the survey showed that the condition of the structure, machinery and equipment as defined in the above regulation was satisfactory and the yacht complied with the relevant requirements of Parts 3, 4 and 7 of the UAE Yacht Regulations, as applicable, was satisfactory
- That an Exemption Certificate has been issued

Service and operational limitations, if any: \_\_\_\_\_.

This Certificate is valid until (yyyy-mm-dd) contingent upon satisfactory maintenance, operation and safety management of the yacht and its equipment.

Completion date of survey on which this Certificate is based: (yyyy-mm-dd) \_\_\_\_\_

Issued at \_\_\_\_\_

for UAE National Transport Authority

(place) \_\_\_\_\_

(yyyy-mm-dd) \_\_\_\_\_

-----

(name)  
Surveyor

# ANNEX H - INTERNATIONAL SHIP SECURITY CERTIFICATE



## UAE National Transport Authority INTERNATIONAL SHIP SECURITY CERTIFICATE

Certificate No:

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the government of

**THE UNITED ARAB EMIRATES**

by UAE National Transport Authority

### Particulars of Yacht

Name of yacht: " "-----  
UAE yacht Id No.: -----  
Distinctive number or letters: -----  
Port of registry: -----  
Type of yacht: -----  
Gross tonnage: -----  
IMO number: -----

### Particulars of Company

Company name: -----  
Company address: -----  
Company identification number: -----

### THIS IS TO CERTIFY:

1. that the security system and any associated security equipment of the yacht has been verified in accordance with section 19.1 of part A of the ISPS Code;
2. that the verification showed that the security system and any associated security equipment of the yacht is in all respects satisfactory and that the yacht complies with the applicable requirements of chapter XI-2 of the Convention and part A of the ISPS Code;
3. that the yacht is provided with an approved Yacht Security Plan.

Date of initial / renewal verification on which this Certificate is based: (yyyy-mm-dd)

This Certificate is valid until (yyyy-mm-dd), subject to verifications in accordance with section 19.1.1 of part A of the ISPS Code.

Issued at

for UAE National Transport Authority

(place)

(yyyy-mm-dd)

-----  
(name)  
Surveyor

# ANNEX I - NATIONAL YACHT SECURITY CERTIFICATE



UAE National Transport Authority

Certificate No:

## NATIONAL YACHT SECURITY CERTIFICATE

Date of issue.:  
(yyyy-mm-dd)

Issued under the provisions of the INTERNATIONAL CODE FOR THE SECURITY OF SHIPS AND OF PORT FACILITIES  
(ISPS CODE)

under the authority of the government of

THE UNITED ARAB EMIRATES

by UAE National Transport Authority

### Particulars of Yacht

Name of yacht: -----  
Distinctive number or letters: -----  
Port of registry: -----  
Type of yacht: -----  
Gross tonnage: -----  
IMO number: -----

### Particulars of Company

Company name: -----  
Company address: -----  
Company identification number: -----

### THIS IS TO CERTIFY:

1. that the security system and any associated security equipment of the yacht has been verified in accordance with section 19.1 of part A of the ISPS Code;
2. that the verification showed that the security system and any associated security equipment of the yacht is in all respects satisfactory and that the yacht complies with the applicable requirements of chapter XI-2 of the Convention and part A of the ISPS Code;
3. that the yacht is provided with an approved Yacht Security Plan.

Date of initial / renewal verification on which this certificate is based: (yyyy-mm-dd)

This Certificate is valid until (yyyy-mm-dd), subject to verifications in accordance with section 19.1.1 of part A of the ISPS Code.

Issued at

(place)

(yyyy-mm-dd)

(name)

(Signature)

(Seal or stamp of issuing authority, as appropriate)



# ANNEX J - DOCUMENT OF COMPLIANCE



UAE National Transport Authority

Certificate No:

## DOCUMENT OF COMPLIANCE

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the government of

**THE UNITED ARAB EMIRATES**

by UAE National Transport Authority

### Particulars of Company

Company name  
(as per ISM Code sec. 1.1.2): [redacted]-----  
Company address  
(as per ISM Code sec. 1.1.2): [redacted]-----  
Company identification number:  
(as per ISM Code sec. 1.1.2) [redacted]-----

THIS IS TO CERTIFY:  
that the safety management system of the Company has been audited and that it complies with the requirements of the International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code), for the types of yachts listed below:

This Document of Compliance is valid until: (yyyy-mm-dd)

Completion date of audit on which this Certificate is based: (yyyy-mm-dd)

Issued at

for UAE National Transport Authority

(place)

(yyyy-mm-dd)

-----  
(name)

Surveyor

# ANNEX K - SAFETY MANAGEMENT CERTIFICATE



UAE National Transport Authority

Certificate No:

SAFETY MANAGEMENT CERTIFICATE

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the government of

THE UNITED ARAB EMIRATES

by UAE National Transport Authority

### Particulars of Yacht

Name of yacht: " [redacted] "  
-----  
Distinctive number or letters: [redacted]  
-----  
Port of registry: [redacted]  
-----  
Type of yacht: [redacted]  
-----  
Gross tonnage: [redacted]  
-----  
IMO number: [redacted]  
-----

### Particulars of Company

Company name: [redacted]  
-----  
Company address: [redacted]  
-----  
Company identification number: [redacted]  
-----

### THIS IS TO CERTIFY:

that the safety management system of the yacht has been audited and that it complies with the requirements of the International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code), following verification that the Document of Compliance for the Company is applicable to this type of yacht.

This Safety Management Certificate is valid until: (yyyy-mm-dd), subject to periodical verification and the validity of the Document of Compliance remaining valid.

Completion date of audit on which this Certificate is based: (yyyy-mm-dd)

Issued at

for UAE National Transport Authority

(place)

(yyyy-mm-dd)

(name)

Surveyor

**ANNEX L - NATIONAL YACHT SAFETY MANAGEMENT CERTIFICATE**



**UAE National Transport Authority**

Certificate No:

**NATIONAL YACHT SAFETY  
MANAGEMENT CERTIFICATE**

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the International Safety Management (ISM) Code

under the authority of the government of

**THE UNITED ARAB EMIRATES**

by UAE National Transport Authority

**Particulars of Yacht**

Name of yacht: " "-----

Distinctive number or letters: -----

Port of registry: -----

Type of yacht : -----

Gross tonnage: -----

IMO number: -----

**Particulars of Company**

Company name: -----

Company address: -----

Company identification number: -----

THIS IS TO CERTIFY:  
that the safety management system of the yacht has been audited and that it complies with the requirements of the International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code), following verification that the Document of Compliance for the Company is applicable to this type of yacht.

This Safety Management Certificate is valid until: (yyyy-mm-dd), contingent upon the terms and conditions as described below, and at least one intermediate audit endorsed as carried out between the second and third anniversaries of validity.

Issued at

for UAE National Transport Authority

(place)

(yyyy-mm-dd)

-----

(name)  
Surveyor

# ANNEX M - INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE



UAE National Transport Authority

## INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE

This Certificate shall be supplemented by Record of Construction and Equipment

Certificate No:

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, as modified by the Protocol of 1978 relating thereto, as amended, (hereinafter referred to as "the Convention")

under the authority of the government of

**THE UNITED ARAB EMIRATES**

by UAE National Transport Authority

### Particulars of Yacht

Name of yacht: " [redacted] "

Distinctive number or letters: [redacted]

Port of registry: [redacted]

Gross tonnage: [redacted]

IMO number: [redacted]

- Type of yacht:  Motor yacht  
 Sailing yacht  
 Expedition yacht

### THIS IS TO CERTIFY:

- that the yacht has been surveyed in accordance with Regulation 6 of Annex I of the Convention.
- that the survey shows that the structure, equipment, systems, fittings, arrangements and material of the yacht and the condition thereof are in all respects satisfactory and that the yacht complies with the applicable requirements of Annex I of the Convention.

### Remarks/Recommendations:

[redacted]

This Certificate is valid until (yyyy-mm-dd)<sup>1</sup>, subject to surveys in accordance with Regulation 6 of Annex I of the Convention.

Completion date of survey on which this Certificate is based: (yyyy-mm-dd)

Issued at

for UAE National Transport Authority

(place)  
(yyyy-mm-dd)

-----  
(name)  
Surveyor

<sup>1</sup> Insert the date of expiry as specified by the Administration in accordance with Regulation 10.1 of Annex I of the Convention. The day and the month of this date correspond to anniversary date as defined in Regulation 1.27 of Annex I of the Convention, unless amended in accordance with Regulation 10.8 of Annex I of the Convention

**ANNEX N - INTERNATIONAL SEWAGE POLLUTION PREVENTION CERTIFICATE**



**UAE National Transport Authority**  
**INTERNATIONAL SEWAGE POLLUTION PREVENTION CERTIFICATE**

Certificate No:

Date of issue:  
 (yyyy-mm-dd)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, as modified by the Protocol of 1978 relating thereto, as amended, (hereinafter referred to as "the Convention")

under the authority of the government of

**THE UNITED ARAB EMIRATES**

by UAE National Transport Authority

**Particulars of Yacht**

Name of yacht: " "-----  
 Distinctive number or letters: -----  
 Port of registry: -----  
 Gross tonnage: -----  
 IMO number: -----  
 Number of persons which the yacht is certified to carry: -----  
 Date of building contract: (yyyy-mm-dd)-----  
 Date on which keel was laid or yacht was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced: (yyyy-mm-dd)-----  
 Date of delivery: (yyyy-mm-dd)-----

- Existing yacht
- New yacht

Remarks/Recommendations:

-----

Name of yacht: " "

Certificate No:  
Date of issue: (yyyy-mm-dd)

THIS IS TO CERTIFY:

1 That the yacht is equipped with:

- Sewage Treatment Plant\*
- Sewage Comminuter\*
- Sewage Holding Tank\*
- Pipeline for the discharge to a reception facility\*

1.1 Description of the sewage treatment plant:

Type of sewage treatment plant \_\_\_\_\_

Name of manufacturer \_\_\_\_\_

The sewage treatment plant is certified by the Administration to meet the effluent standards as provided for in resolution MEPC.2(VI).

1.2 Description of comminuter:

Type of comminuter \_\_\_\_\_

Name of manufacturer \_\_\_\_\_

Standard of sewage after disinfection \_\_\_\_\_

1.3 Description of sewage holding tank equipment:

Total capacity of the holding tank \_\_\_\_\_ m3

Location \_\_\_\_\_

1.4 A pipeline for the discharge of sewage to a reception facility, fitted with a standard shore connection.

2 That the yacht has been surveyed in accordance with Regulation 4 of Annex IV of the Convention.

3 That the survey shows that the structure, equipment, systems, fittings, arrangements and materials of the yacht and the condition thereof are in all respects satisfactory and that the yacht complies with the applicable requirements of Annex IV of the Convention.

This Certificate is valid until (yyyy-mm-dd)<sup>1</sup>, subject to surveys in accordance with Regulation 4 of Annex IV of the Convention.

Completion date of survey on which this Certificate is based: (yyyy-mm-dd)

Issued at

for UAE National Transport Authority

(place)

(yyyy-mm-dd)

-----  
(name)

Surveyor

\* Entries in boxes shall be made by inserting either a cross (x) for the answers 'yes' and 'applicable' or a dash (-) for the answers 'no' and 'not applicable' as appropriate.

<sup>1</sup> Insert the date of expiry as specified by the Administration in accordance with Regulation 8.1 of Annex IV of the Convention. The day and the month of this date correspond to the anniversary date as defined in Regulation 1.8 of Annex IV of the Convention.

**ANNEX O - NATIONAL AIR POLLUTION PREVENTION CERTIFICATE**



**UAE National Transport Authority**

Certificate No:

**NATIONAL AIR POLLUTION  
PREVENTION CERTIFICATE**

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the UAE National Regulations  
under the authority of the government of  
**THE UNITED ARAB EMIRATES**  
by UAE National Transport Authority

**Particulars of Yacht**

Name of yacht: " "-----  
Distinctive number or letters: -----  
IMO number: -----  
Port of registry: -----  
Gross tonnage: -----

**THIS IS TO CERTIFY:**

1. That the yacht has been surveyed in accordance with regulation 5 of Annex VI of the Convention; and
2. That the survey shows that the equipment, systems, fittings, arrangements and materials fully comply with the applicable requirements of Annex VI of the Convention.

Remarks/Recommendations:  
-----

This Certificate is valid until (yyyy-mm-dd) subject to surveys in accordance with Regulation 5 of Annex VI of the Convention.

Completion date of survey on which this Certificate is based: (yyyy-mm-dd)

Issued at  
  
(place)  
  
(yyyy-mm-dd)

for UAE National Transport Authority  
  
-----  
(name)  
Surveyor

# ANNEX P - INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE



UAE National Transport Authority

Certificate No:

## INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE

Date of issue:  
(yyyy-mm-dd)

Issued under the provisions of the INTERNATIONAL CONVENTION ON THE CONTROL OF HARMFUL ANTI-FOULING SYSTEMS ON SHIPS (THE CONVENTION)

under the authority of the government of

**THE UNITED ARAB EMIRATES**

by UAE National Transport Authority

**Particulars of Yacht**

Name of yacht: " "-----

Distinctive number or letters: -----

Port of registry: -----

Gross tonnage: -----

IMO number: -----

When a Certificate has been previously issued, this Certificate replaces the Certificate dated: -----

An Anti-Fouling System controlled under Annex 1 to the Convention has not been applied during or after construction of this yacht

An Anti-Fouling System controlled under Annex 1 to the Convention has been applied on this yacht previously, but has been removed by (name of the facility) on (date)

An Anti-Fouling System controlled under Annex 1 to the Convention has been applied on this yacht previously, but has been covered with a sealer coat applied by (name of the facility) on (date)

An Anti-Fouling System controlled under Annex 1 to the Convention was applied on this yacht prior to (date)<sup>1</sup> but will be removed or covered with a sealer coat prior to (date)<sup>2</sup>

THIS IS TO CERTIFY:

- the yacht has been surveyed in accordance with regulation 1 of Annex 4 to the Convention, and
- the survey shows that the anti-fouling system on the yacht complies with the applicable requirements of Annex 1 to the Convention.

Completion date of survey on which this Certificate is based: (yyyy-mm-dd)

Issued at

(place)

(yyyy-mm-dd)

for UAE National Transport Authority

-----

(name)  
Surveyor

---

<sup>1</sup> Date of entry into force of the control measure.

<sup>2</sup> Date of expiration of any implementation period specified in article 4(2) or Annex 1.