Department of Transport
An Roinn Iompair

COMMERCIAL SAILING CRAFT - PASSENGER BOAT LICENCE - RULES OF EQUIVALANCY.

(COMSAIL Rules)

Rules of Equivalency for Commercially Operating Sailing craft less than 24m and 80 GT engaged in Sail training to operate as a P6 ComSail Passenger Boat.
(COMSAIL RULES)

August 2008

Maritime Safety Directorate

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1.0 General

1.1 S.I. No. 273 of 2002, Merchant Shipping (Passenger Boat) Regulations 2002, as amended, provides for the licensing of passenger boats in Irish waters.

1.2 Regulation 2(a) of S.I. No. 648 of 2003, Merchant Shipping (Passenger Boat) (Amendment) Regulations 2003, which amended S.I. No. 273 of 2002, allows the Minister to approve equivalent hull, machinery, and equipment specifications, provided he is satisfied that such alternative measures are at least as effective as those provided for under the above regulations.

1.3 This Marine Notice specifies the Rules of Equivalency, for Commercial Operated Sail Craft, of less than 24 metres in length, and less than 80 Gross Tons operating in Irish Waters.
Such craft are engaged in Sail Training operations.

1.4 Full compliance with the Equivalency Rules contained in these rules, is deemed to satisfy Regulation 1B of S.I. No. 273 of 2002, as amended, and will result in the vessel being granted a P6 Commercial Sailboat passenger boat licence in accordance with the terms of S.I. No. 273 of 2002, as amended.

1.5 Any sailing boat, while holding a passenger boat licence, shall not be used for any other activity or purpose, which could affect or alter the conditions under which the licence was granted, during the period of validity of the licence.

2.0 Definitions

"approved" means approved by the Minister or by a body or organisation recognised by the Minister for such purpose and which is identified in a Marine Notice.

"*authorised person*" means a surveyor or a person authorised in writing by the Minister to carry out inspections of vessels for the purposes of Part III of the Merchant Shipping Act, 1992 (No. 2 of 1992).

"collision regulations" means the Collision Regulations (Ships and Water Craft on the Water) Order 1984 (S.I. No. 29 of 1984) as amended.

"crew" means any person other than a passenger, or person on board in the role of trainee.

"domestic voyage" means a voyage from a place in the State to the same or another place in the State.

"digital select calling" and "DSC" means a technique using digital codes which enables a radio station to establish contact with, and transfer information to, another station or group of stations, and complying with the relevant recommendations of the International Radio Consultative Committee (CCIR).

"*efficient"* in relation to a fitting, piece of equipment or material means that all reasonable and practicable measures have been taken to ensure that it is suitable for the purpose for which it is intended to be used.

"favourable weather" means weather when the visibility is good and when the combined effects of wind, sea and swell on the passenger boat are never greater than those which would cause moderate rolling or pitching or result in the shipping of green seas on the weather deck or, in the case of an open boat, over the gunwale.

"freeboard" means the distance measured vertically downwards from the lowest point of the upper edge of the weather deck of a fully decked vessel.

"fully decked vessel" means a vessel having a weathertight deck extending for the entire length of the vessel and which is situated wholly above the waterline in the fully loaded condition.

"fully loaded condition" means loaded with fuel, stores and weights representing the total number of passengers and crew to be carried, based on 75 kg per person and on compliance with the maximum vessel loading assigned under the Recreational Craft Directive (RCD).

"GMDSS" means the Global Maritime Distress and Safety System.

"intoxicant" includes alcohol or drugs or any combination of drugs or drugs and alcohol.

"Irish Load Line Assigning Authority" means the Minister or any person or organisation authorised by the Minister for the purposes of the Merchant Shipping (Load Line) Rules, 2001, as amended, currently listed as:

- The Marine Survey Office (MSO),
- Lloyds Register (LR),
- Bureau Veritas (BV),

- American Bureau of Shipping (ABS),
- Det Norske Veritas (DNV),
- Germanischer Lloyd (GL),
- Nippon Kaiji Kyokai (NK),
- Registro Italiano Navale (RINA S.p.A.),
- Russian Maritime Registrar of Shipping (RMRS).

"land" means the mainland of the state or any island which is normally inhabited and which has piers or berthing facilities which are in regular use.

"length" means the overall length measured from the foreside of the foremost fixed permanent structure to the aftside of the aftermost fixed permanent structure of the passenger boat.

"licence" means a passenger boat licence granted under section 15 of the Merchant Shipping Act, 1992, as amended, and in force and cognate words shall be construed accordingly.

"machinery enclosure" means a compartment consisting of removable sides and top containing propulsion machinery, boilers, oil fuel units, steam and internal combustion engines, generators, major electrical machinery and similar items of machinery.

"machinery space" means any enclosed space that is not a machinery enclosure and that contains propulsion machinery, boilers, oil fuel units, steam and internal combustion engines, generators, major electrical machinery and spaces containing similar machinery.

"Marine Notice" means a Notice described as such and issued by the Department of Transport and which may be amended or replaced from time to time.

"Maritime Safety Directorate" means the division within the Department of Transport responsible for Maritime Safety.

"Marine Survey Office (MSO)" means the division within the Department of Transport responsible for undertaking vessel construction, safety, manning, and operational surveys.

"mechanical means of propulsion" means a means of propulsion fitted to the passenger boat utilising power from either marine inboard or outboard engines.

"Minister" means the Minister of Transport.

"National Authority" means a National Governing Body for sport as recognised by the Irish Sports Council and approved by the Minister;

"new passenger boat" means a passenger boat which is not an existing passenger boat.

"owner", in relation to a vessel, means the person registered under the Mercantile Marine Act 1955 as the owner of the vessel or, if no person is so registered, the person who owns the vessel, and includes any part owner, charterer, manager or operator of the vessel.

"partially smooth waters" means the areas of water specified in a Marine Notice within period or periods, if any, specified therein.

"Passenger boat" is defined in the Merchant Shipping Act 1992 as:

(*a*) a vessel carrying not more than 12 passengers for reward or having on board for the purposes of carriage for reward not more than 12 passengers, or

(*b*) a vessel that is carrying not more than 12 passengers, or has on board for the purposes of carriage not more than 12 passengers, and is on hire pursuant to a contract or other arrangement under which a crew or part of a crew is provided for the vessel by its owner,

and includes a vessel carrying not more than 12 persons to or from their place of work, or having on board not more than 12 persons for the purposes of such carriage, and owned by or on hire to their employer and a vessel registered outside the State and carrying not more than 12 passengers between places in the State, or having on board not more than 12 passengers for the purposes of such carriage, but does not include such a vessel carrying passengers to or from the State or having on board passengers for the purposes of such carriage.

"Passenger Boat Licence" means a passenger boat licence granted under section 15 of the 1992 Merchant Shipping Act.

"Principal Act" means the Merchant Shipping Act, 1894 (Session 57 & 58 Vict., chapter 60).

"Safety Operational Plan (S.O.P)" means a vessel specific plan covering the operation of the craft, training and maintenance.

"Sailing Vessel" means a craft using sails as its primary means of propulsion.

"sea" means any areas of water not being smooth or partially smooth waters.

"smooth waters" means any areas of water not being to sea or partially smooth waters and in particular, the areas of water specified in a Marine Notice.

"surveyor" means a person appointed under section 724 of the Principal Act to be a surveyor of ships for the purposes of that Act.

"vessel" includes any ship or boat and any other vessel used in navigation.

"VHF" means the frequency spectrum between 30 Mhz and 300 Mhz.

"watertight" means capable of preventing the passage of water in any direction.

"weather deck*"* means the weathertight deck which is exposed to the elements.

"weathertight" means capable of preventing the admission of a significant quantity of water into the vessel when subject to a hose test.

3.0 Application, Areas of Operation, ComSail Classes, and Interpretation

3.1 Application

These Equivalency Rules apply to commercial sailing craft, monohull, used in sail training, the purpose of which is to provide instruction in seamanship and navigation that are:

- Up to 24 m and less than 80 GT;
- Not carrying cargo;
- Carrying no more than 12 passengers- for sail training;
- Proceeding to sea (as defined by relevant Marine Notice).

3.2 Classes of Commercial Sail Boat / Areas of Operation

3.2.1 P6 ComSail Inshore

Commercial sailing vessels of a minimum length of 7m, proceeding to sea a maximum distance of three miles, operating from nominated points of departure.

3.2.2 P6 ComSail Coastal

Commercial sailing vessels of a minimum length of 9.5m proceeding to sea to a maximum distance of 30 miles from the coast, during which time they are no more than 6 hours transit from a designated safe haven, identified in their approved Safety Operational Plan.

3.2.3 P6 ComSail Offshore

Commercial Sailing vessels of minimum length 11m, proceeding to sea beyond 30 miles from the coast.
Such craft must be constructed and equipped to an enhanced standard, to enable them survive extended operation in heavy weather.

3.3 Interpretation of Rules

In cases where a question of interpretation, relating to any section of these rules of equivalency arises, a final decision may be obtained on written application to the Chief Surveyor of the Marine Survey Office.

3.4 Equivalent Arrangements

Where these rules specify a craft complies with a particular requirement in terms of Hull / Machinery Construction, Equipment carried, or Operating / Manning conditions, the Minister may approve an alternative arrangement provided he is satisfied such measures are at least as effective as those required by these rules.

4.0 Structural Design and Construction

4.1 General

All vessels must be fitted with a watertight weather deck, and be constructed to withstand sea and weather conditions likely to be encountered in the vessels intended area of operation.

4.2 Materials of Construction

Craft may be constructed of Steel, Aluminium, Glass Reinforced Plastic (GRP), Wood, Composites, or equivalent materials, subject to the approval of the MSO.

4.3 Structural Strength and Design

4.3.1 Evidence of satisfactory Hull design, Scantlings, quality of materials, and workmanship must be provided.

The following is acceptable for new licence applications:

4.3.2 **P6 ComSail inshore:** - evidence of Boats designed and constructed to a set of approved Classification Society Rules,

Or

to relevant ISO standards utilised in EU 94/64 Recreational Craft Directive, as amended, and subject to inspection of the builders Technical Construction File, by the MSO.

4.3.3 **P6 ComSail Coastal**

Evidence of a vessel constructed under the relevant rules of an Irish Load Line Issuing Authority / Classification Society as offered by one of the following methods:

(i) Survey under construction by an MSO Surveyor.
This applies only to new hulls where plans are submitted to the MSO prior to construction, reviewed and approved, and that the standard of construction is acceptable to the MSO.

(ii) A Construction Certificate issued by another Administration.
This Certificate to indicate the scantlings and quality of materials are in accordance with the requirements of a Recognised Organisation, and that the standard of construction is acceptable to the MSO.

(iii) Construction Certificate issued by a Recognised Organisation.
This Certificate to indicate the scantlings and quality of materials are in accordance with the requirements of a Recognised Organisation, and that the standard of construction is acceptable to the MSO.

4.3.4 **P6 ComSail Offshore**

Evidence of a vessel constructed under the relevant rules of an Irish Load Line Issuing Authority / Classification Society as offered by one of the following methods:

(i) Survey under construction by an MSO Surveyor.
This applies only to new hulls where plans are submitted to the MSO prior to construction, reviewed and approved, and the vessel constructed under survey by an MSO Surveyor.

(ii) A Construction Certificate issued by another Administration.
This Certificate to indicate the scantlings and quality of materials are in accordance with the requirements of a Recognised Organisation, and that the vessel was constructed under satisfactory survey.

(iii) Construction Certificate issued by a Recognised Organisation.
This Certificate to indicate the scantlings and quality of materials are in accordance with the requirements of a Recognised Organisation, and that the vessel was constructed under satisfactory survey.

4.4 Hull Strength and Design - Equivalency approval Method - Applicable to GRP to P6 Inshore and Coastal only

4.4.1 Where it is not possible to establish if a production yacht has been built using the above methods, owners have the option of engaging a Naval Architect/consultant to conduct a detailed survey and produce a report establishing if the hull would meet requirements set down in a suitable set of Class Society Rules, e.g. Lloyds Special Service Craft Rules, ABS Rules For offshore racing yachts, etc.

4.4.2 Such a report must be reviewed and approved by the MSO.

4.4.3 To establish the quality of build, and quality of materials the hull will be subject to an enhanced survey by the MSO, and may be subject to operational restrictions based on the conditions found.

4.4.4 All Internal areas will require to be fully opened for inspection.
Owners may be required to have the hull subject to relevant destructive or non-destructive testing, such as taking core samples, and laminate burn tests for GRP boats, or ultra sonic testing for steel hulls.

5.0 Stability

5.1 General

5.1.1 Requirements for Stability Standards are defined by a vessel's area of operation.

5.1.2 Vessels operating Offshore must be provided with a Stability Information Booklet, which is approved by the MSO.

5.1.3 Owners should appoint a competent person, satisfactory to the MSO, to prepare a Stability Booklet, including undertaking any inclining tests, recording of readings, stability calculations etc.

5.1.4 Vessels operating in Inshore and Coastal areas do not require a Stability booklet, but must be assessed for stability by either an Inclining test or subject to a simplified stability assessment.

5.1.5 All vessels must be capable of clearing water from the main deck or cockpit recesses, by means of suitable freeing ports and scuppers.

5.2 Stability for P6 ComSail Offshore

5.2.1 The intact Stability requirements of **P6 ComSail Offshore** boats must comply with the requirements of Section 11.8 – Sailing Monohull Vessels, of the UK Small Commercial Vessel code (SVC) for sailing vessels up to 24 metres load line length, in commercial use, carrying no cargo and not more than 12 passengers.

Or

5.2.2 A standard proposed by the owner and considered equivalent by the Marine Survey Office.

5.2.3 On vessels carrying more than 16 persons, damage stability in accordance with section 11.2 of the above code must be supplied, or an alternative approved by the MSO.

5.2.4 The owner must submit to the MSO, sufficiently detailed information to allow the stability be assessed in accordance with the above code.

5.2.5 Any inclining tests must be witnessed by a Surveyor from the Marine survey Office.

5.3 Stability for P6 ComSail Inshore and P6 Coastal operation

5.3.1 The stability assessment of craft operating in the above areas may be undertaken using any of the following methods:

(i) As described in 5.2.1;
(ii) By the application in full of, ISO 12217 Part 2 – Small Craft – Stability and Buoyancy Assessment and Categorisation – Sailing Boats of hull length greater than or equal to 6m.

The application of the above standard must be satisfactorily verified by a qualified Naval Architect, or by a current EU Notified Body appointed under the terms of the RCD, and their findings approved by the MSO.

6.0 Watertight Integrity

6.1 General

6.1.1 A vessel must be designed and constructed in a manner which will prevent the ingress of water.

6.1.2 The vessel should have a watertight deck extending over its entire length from stem to stern.

6.1.3 A watertight deck may be stepped, recessed, or have raised sections, however any such sections must be themselves of a watertight construction.

6.2 Watertight Bulkheads

Every P6 ComSail Craft must have either:

6.2.1 A transverse watertight bulkhead located between 25% and 35% of the length of the vessel from forward.

Or

6.2.2 A transverse watertight collision bulkhead, positioned not more than 5% of the vessels length measured from forward, **and** a second after transverse bulkhead located not greater than 45% of the vessels length from forward.

6.2.3 All pipe and service penetrations through this bulkhead must be sealed and the bulkhead fully glassed in position on the hull to provide a watertight status.

6.2.4 Access through the Bulkhead is permitted provided a forward opening door is installed.
The door must be of equivalent strength and construction as the adjacent bulkhead, be mounted with substantial multipoint hinges, and be provided with a three point means of locking capable of being operated from both sides (top, centre, and lower locking handles). Where this bulkhead provides access to an accommodation area, consideration should be given to providing suitable ventilation within the accommodation area when the door is closed.

6.3 Hatches and Accesses

Hatchway openings to internal spaces below the weather deck should:

6.3.1 Be of an effective construction and provided with a weathertight means of closure.

6.3.2 Any hatchway cover must be permanently mounted, provided with positive locking means, and either of sliding hinged, or equivalent construction.

Where hatchways are used as emergency exits they must be capable of being operated from both sides.

6.3.3 Hatches should be kept closed at sea, where this is not practical, hatch openings should be:

(i) as small as possible;
(ii) located as close to the centre line of the vessel as possible;
(iii) installation should provide at least 300mm from the bottom of the hatch above the weather deck.

6.3.4 Where wash boards are fitted, they must be provided with a positive means of securing in place, to avoid the possibility of being dislodged in heavy weather.

6.4 Sky Lights / Flush Deck Hatches

6.4.1 Skylights should be located ideally on the centre line of the vessel.

6.4.2 Skylights / Deck hatches must have an efficient means of securing in the closed position.

6.4.3 Where such a hatch is used as an emergency means of evacuation from an internal space, it must be possible to open it from internally and externally.

6.4.4 Deck hatches should where practical, be hinged on their forward edge.

6.5 Port Lights / Side Windows

6.5.1 Port light / Windows fitted to a vessel's hull, must be of watertight construction, and of adequate strength for the vessels area of operation.

6.5.2 Mounting frames, glazing material, and method of frame installation must provide at least equivalent strength as the hull structure they are fitted to.

6.6 Storm Boards – Emergency Window Blanks

6.6.1 Every vessel operating beyond a three mile limit must carry emergency storm boards, to be fitted in the event of glazing failure of any deck hatch, port light, or side window fitted.

6.6.2 Emergency storm board must be capable of rapid deployment and installation, and securing.

6.6.3 The ratio of storm board required is 50% for each size of opening on board.

6.7 Ventilators and Exhausts

6.7.1 Ventilators should be of efficient construction, and positioned as far inboard as possible and as high as possible and be of a design to prevent ingress of water, particularly when the vessel is heeled.

6.8 Hull below Waterline Openings

6.8.1 Every engine exhaust system, which exits below the waterline, or the heeled waterline, must be fitted with suitable means to prevent back flooding into the hull via the exhaust system.

6.8.2 Any opening below the weather deck must be provided with an efficient means of closure.

6.8.3 All hull openings below the waterline, including those below the heeled waterline, must be fitted with a suitable seacock, or sea valve. Where access to operate such valves is restrictive, remote means of closing must be provided.

6.8.4 Openings for speed logs must be fitted with effective means of closure once the log is withdrawn inboard.

6.8.5 Inlets and discharges pipe work for WCs must be fitted with suitable and effective anti-siphon devices.

6.8.6 Materials used for valves below the waterline should be of steel, bronze, copper, or equivalent composite material. Pipe work used should be of a suitable marine grade material.

6.8.7 All hose connections to hull fittings must be double clipped with stainless steel jubilee clips.

6.8.8 All Hull openings below the waterline must be provided with a suitable tapered soft wooden plug located adjacent, for use in the event of a hull fitting shearing off.

7.0 Safety Operational Plan (S.O.P)

7.1 General

7.1.1 The owner / operator of every P6 ComSail Coastal and Offshore commercial sailing vessel must prepare and maintain a Safety Operational Plan, specific to the vessel's operation and equipment.

7.1.2 The S.O.P must be approved as part of the initial license survey, and revalidated at subsequent renewal surveys.

7.1.3 The S.O.P must be reviewed by the operator:

(i) At a minimum period every two years,

(ii) In the event of the vessel becoming involved in a reportable incident.

7.1.4 Any changes to the Plan based on a review must be recorded, and detail conclusions made and actions taken.

7.1.5 The S.O.P must be available on board the vessel at all times, and be available to MSO surveyors for inspection if requested.

7.2 Safety Operational Plan

The S.O.P consists of two parts:

- Operational Plan;
- Training / Instruction manual.

7.2.1 **Operational Plan**

The Operational Plan must contain as a minimum:

(i) Details of the vessels area of operation and climatic conditions that may limit its operation;

(ii) Defining where relevant, the maximum weather conditions the vessel will continue to operate in (Inshore and Coastal);

(iii) List of safe havens available to the vessel within its area of operation;

(iv) Define Company policy on the wearing and use of lifejackets and safety harnesses on board;

(v) Arrival pilotage plan / notes for safe entry to such ports / Anchorages, including approaches after dark where relevant;

(vi) Full list of 'as fitted' Safety Equipment on board the vessel incorporating a safety plan showing its location (to be mounted in a prominent location);

(vii) Pre-departure checklist of vessel and its safety equipment;

(viii) Skippers pre departure safety briefing to newly joined Crew / Trainees, including emergency procedures and safety equipment awareness;

(ix) Contacts for Emergency Services within the area of operation;

(x) Contacts for company shore management;

(xi) Operational procedures to contact shore based rescue authorities, and Company's shore base, in the event of an emergency;

(xii) Procedures for undertaking emergency training drills on board and recording of such drills;

(xiii) Details of Minimum Manning numbers for the vessel, and crew qualifications and training required;

(xiv) Relevant documentation relating to the operation of the vessel including copies of current Passenger Boat Licence, any correspondence from the MSO in relation to the vessel, copies of

safety equipment service records – Liferafts, Inflatable Lifejackets, Fire Extinguishers etc.

7.3 Training, Instruction, Maintenance Manual

7.3.1 This section should include details of, and instructions for use, including maintenance, of the boats Lifesaving and Fire Fighting equipment.

7.3.2 The above document forms part of the Safety Operational Plan, and must be approved by the MSO.

7.3.3 All elements may be contained within the one document, or produced separately.

7.3.4 The manual must be available on board for use by crew and trainees.

7.3.5 It may comprise a combination of Manufacturers Instruction and Data Sheets, and vessel specific procedures compiled by the owner.

7.3.6 As a minimum it should provide details of:

(i) Plan of Vessel showing layout and location of all safety equipment;
(ii) Launching, Boarding, and clearing of liferafts from a vessel;
(iii) Correct Donning of Lifejackets;
(iv) Use of Flares;
(v) Use of VHF Radios – including DSC functions;
(vi) Operation of EPIRB / SART;
(vii) Medical Kit;
(viii) Aids to vessels navigation – GPS / Radar / Navtex etc.;
(ix) Firefighting appliances – FirePumps/CO2 Flooding/Extinguishers;
(x) Bilge systems and flooding controls.

It should also contain procedures for:

(xi) Helicopter Operations;
(xii) Man Overboard Recovery;
(xiii) Use of Sea Anchors;
(xiv) Hazards of exposure and Hypothermia;
(xv) Personal Survival at Sea;
(xvi) Damage survival (Flooding & Grounding);
(xvii) Fire on Board;
(xviii) Crew muster list stating responsibilities of individual crew during an emergency – Fire, Flooding, Grounding, Abandoning Ship;
(xix) Procedures to deal with capsize or full knockdown.

7.4 On Board maintenance

This section of the manual should contain instructions for the maintenance of essential Safety and Fire Equipment, in addition to records of inspection of such equipment by the operator. As a minimum, it should contain the following:

(i) Maintenance and Repair instructions;
(ii) Check List for use when carrying out required inspections;
(iii) Schedule of periodic maintenance;
(iv) List of spare parts carried on board and their storage location;
(v) List of Part suppliers;
(vi) Log of records of Inspections.

8.0 Bilge Pumping Arrangements

8.1 General

8.1.1 Every P6 ComSail Vessel must be provided with a suitable bilge pumping arrangement to allow pumping of water from any enclosed compartment below the weather deck.

8.1.2 The arrangements must be installed, to prevent back flooding through the system from the sea, or between internal compartments of the vessel.

8.2 System Capacities – Vessels over 12m in length

8.2.1 Vessels of 12 metres and over must have an effective bilge pumping system, with suction pipe work arranged, so that any internal compartment can be pumped when the vessel is heeled to an angle of 15 degrees, and consisting of:

(i) A minimum of two bilge pumps, one to be hand operated, the other pump either engine driven or electrically powered;

(ii) A valve suction manifold, and associated bilge suction lines to each internal space under the weather deck;

(iii) Where appropriate, bilge strum boxes should be provided in the event of risk of obstructing bilge suctions;

(iv) Non-return valves to prevent the risk of back flooding.

8.2.2 The system should be capable of operation from the cockpit, with all hatches, companionways, and watertight doors closed.

8.2.3 Where multiple battery powered pumps are provided, power supply shall not be provided by the same battery, but distributed across alternate power sources.

8.2.4 The total pumping capacity should exceed 275 litres per minute, with the power driven pump having a minimum capacity of 140 litres per minute.

8.3 System Capacities – Vessels under 12m in length

8.3.1 Vessels of less than 12m in length must be fitted with at least two bilge pumps, one of which may be power driven.

8.3.2 One pump should be located in the main Cockpit, and one pump in the accommodation, operation of each should be possible with the hatches closed.

8.3.3 Unless a central bilge manifold system is fitted as in 8.2.1(ii), any pump suction may only connect to a total of two internal spaces, using a suitable ” **Y”** valve suction connection.

8.3.4 Vessels of less than 12 metres must have a total pumping capacity of more than 90 litres per minute.

8.4 Machinery Space Bilges

The bilge area within enclosed machinery spaces must be constructed in a manner to contain any leaks within its boundary, and prevent the movement of any oil / fuel contaminated water to other bilge areas within the vessel.

8.5 Machinery Space Bilge Alarms

A high level bilge alarm must be fitted to the Machinery space bilges, providing an audible warning at the vessels control position.

9.0 Machinery

9.1 General

9.1.1 Each vessel must be fitted with an efficient means of mechanical propulsion, capable of manoeuvring the vessel safely in the fully loaded condition, ahead and astern.

9.1.2 Engines must be maintained according to Manufacturers instructions and schedules.

9.1.3 Operators must be capable of producing evidence of regular engine maintenance.

9.1.4 Propulsion engines must be fitted with suitable instrumentation, to indicate the status of essential operating conditions of the unit, instrumentation must be available adjacent to the helms position.

9.1.5 Main propulsion machinery and any auxiliary machinery, essential for the propulsion and safety of the vessel must be designed to function when the craft is heeled to an angle of 15 degrees either way under static conditions, and 22.5 degrees whilst under way under dynamic conditions, and simultaneously inclined 7.5 degrees by the bow or stern under dynamic pitching conditions.

9.2 Propulsion Engines

9.2.1 Petrol Inboard Engines are **not** permitted. Only Diesel Engines may be used as inboard engines.

9.2.2 Petrol Outboard propulsion engines (for tenders) are permitted, subject to an approved petrol tank, supply hose, and connections being provided, the tank and its contents must be capable of being rapidly jettisoned overboard.

9.2.3 Petrol may not be stowed below the weather deck.

9.2.4 Any spillage of petrol associated with fuel handling must be arranged to drain directly overboard.

9.3 Generators

9.3.1 Diesel GenSets may be positioned within the machinery spaces provided they comply with the requirements relating to Fuel Isolation, remote shutdown, Structural Fire Protection, and Fixed fire fighting facilities.

9.3.2 Petrol Gensets may only be positioned above the weather deck.
If housed in a deck locker, this space must be suitably ventilated.
The GenSet must be fitted with a suitable remote means of stopping it.
Such lockers must have approved structural fire protection fitted, and be capable of flooding with CO2, from outside.

9.3.3 There should be no openings from such a locker, to the enclosed spaces within the hull.

9.3.4 Petrol for GenSets must be stowed in portable containers subject to the conditions of paragraph 9.4.11.

9.4 Fuel Installations and Stowage

9.4.1 Fuel Supply systems for propulsion engines must be fitted with suitable filtration and water separation devices.

9.4.2 Means must be provided in the machinery spaces, to ensure that any spillages of oils, including fuel, lubricating, or hydraulic oil, can be contained and readily removed without contamination of the vessel's bilge system.

9.4.3 Fuel tanks, associated piping, fittings, and systems should be designed, constructed and installed, to be adequate for the purpose they are intended and should as a minimum conform to ISO 21487.

9.4.4 Each fuel tank must have an external means of filling from the weather deck, and a suitable means of venting to atmosphere, while avoiding the possibility of moisture entering the tank.

9.4.5 Fuel tanks must be external to the machinery space.

9.4.6 A reliable means must be provided to indicate the tanks contents. It is desirable that fuel tanks have a means of dipping the contents manually.

9.4.7 An emergency shut off valve must be supplied on the fuel tank, or on the fuel line as close to the tank as practically possible (but external to the engine spaces) to isolate any source of fuel that may feed an engine space fire, e.g. Propulsion Engine, GenSet, or Space Heater diesel supply lines.

9.4.8 Where such a fuel shut off valve is inaccessible, it must be fitted with means of remote operation, and designed to prevent the risk of inadvertent operation.

9.4.9 Short runs of fuel supply piping between the Fuel tank and engine (max 1.0m) may be of a flexible type, connections must be of a screw type or other approved type.

9.4.10 Flexible pipe must be fire resistant / metal reinforced, or other wise protected from fire. Material used must conform to suitable international or national standards.

9.4.11 It is desirable that petrol should not be carried on board commercial sail craft. However where its carriage is unavoidable, e.g. Tender Outboards, the following applies:

(i) Petrol can only be stowed outside on the weather deck in approved portable containers;
(ii) Such containers must be clearly marked, and should be kept to a minimum;
(iii) They must be positioned to allow the rapid jettisoning overboard;
(iv) Any leakage or spillage must flow directly overboard, and not into the vessels internal bilges.

9.5 Engine Starting

9.5.1 Engines used for propulsion should ideally be provided with at least two means of starting, either by hand, mechanical, or electrical start.

9.5.2 Where the sole means of starting is electrical, a secondary battery supply is required. This should be connected to the starting circuit via a suitable change over switch arrangement, such that the system can provide at least six consecutive starts without having to resorting to recharging.

9.5.3 A charging system for both sets of batteries must be provided.

9.6 Emergency Engine Stops

Inboard engines must be fitted with a manual emergency means (or equivalent) of stopping the engine, located and operated from outside the machinery area.

10.0 Electrical System

10.1 All electrical installations, including fittings, materials, connections and devices, must comply with an approved standard, e.g. Classification Society Rules, ISO, IEC.

10.2 Electrical installations and associated equipment must be installed in a manner as to minimise the risk of electric shock to occupants, and fire on board.

10.3 Suitable provision must be made for overload and short circuit protection of all circuits, except engine starting circuits supplied directly from starting batteries.

10.4 Accumulator Batteries must be stowed in a secure manner, in an adequately ventilated container, so as to protect the battery from mechanical damage, flooding, and shorting of the terminals. At least one terminal protective cover should be fitted to each battery.

10.5 Where lighting and essential services are provided by dedicated Domestic Batteries, means must be provided for alternative supply.

10.6 Ventilation of the battery container should lead to open atmosphere, to avoid the accumulation of gas emitted from batteries within the vessel.

10.7 Dedicated batteries powering Radio and essential communications equipment should be positioned as high as possible above the water line, to ensure their continued operation in a vessel flooding situation.

11.0 Steering Arrangements

11.1 Means of Effective Steering

Every vessel must be equipped with a reliable and efficient means of steering, both ahead and astern, over a range of speeds, and in the fully loaded condition.

11.2 Emergency Steering

Every vessel fitted with a remote means of steering must be equipped with an effective emergency means of steering that can be rapidly deployed in the event of failure of the remote system.

11.3 Helm Position – means of Clear Vision

The helm position on vessels must be located to provide the individual helming the vessel a clear view for the purpose of safe navigation of the vessel.

12.0 Fire Fighting Equipment and Appliances

12.1 Fire Pumps

12.1.1 Every P6 ComSail vessel must be provided with a dedicated fire pump, suitable hose and adjustable nozzle.
Fire Pumps must be located external to the machinery spaces.

12.1.2 This pump may be hand operated, or power operated, and be capable of producing a jet of water to reach any part of the boat.

12.1.3 Where power operated, the vessel must demonstrate the pump is self priming, and has sufficient power reserves to allow continuous operation for a period of 45 minutes.

12.1.4 Every fire pump must have a dedicated sea suction and hull isolation valve, located external to any machinery space.
Where fire pump isolation valves are inaccessible, they must be fitted with a remote means of operation from above the deck.

12.1.5 Fire pump pipework located between the hull and the pump must be of steel or equivalent.

12.2 Fire Extinguishers

12.2.1 Every P6 ComSail boat must be provided with at least:

12.2.2 One approved portable extinguisher located in each accommodation space accessible to passengers.

12.2.3 In addition to 12.2.2, a further portable extinguisher suitable for use on oil fires, specifically for use in machinery spaces.

12.2.4 Fire Extinguishers must be inspected annually by suitably qualified companies.

12.2.5 All ComSail vessels must be supplied with a suitable fire bucket and lanyard.

12.3 Machinery Space CO2 Flooding

12.3.1 Machinery enclosures less than 4.5m³ gross volume must have the facility to discharge an approved carbon dioxide extinguisher through a readily accessible opening in the enclosure boundary.
Such an opening must be as small as practical, and the necessary extinguisher located adjacent to the machinery space.

12.3.2 Machinery spaces of greater than 4.5m³ must be fitted with a fixed flooding system, directly connected to CO2 bottle(s) located and operated from outside the space.

12.3.3 The quantity of CO2 required must be sufficient to occupy 60% of the enclosure volume, based on 0.56 cubic metres of free gas per kg of liquid CO2.

12.3.4 Fixed pipe work system, must consist of suitable materials, be adequately supported, and installed so as to prevent the accumulation of moisture within piping.

12.3.5 Every machinery space CO2 flooding arrangement, must have a set of operating instructions posted adjacent to the operating point.

12.3.6 Every Machinery enclosure must be lined and made gas tight with a suitable fire resistant material, as far is reasonable and practical.

12.3.7 Means must be provided to ensure any ventilation openings can be closed in a quick and efficient manner.

12.4 Fire Blankets

A suitable fire blanket must be located adjacent to any galley or cooking area.

12.5 Smoke alarms

12.5.1 Machinery space enclosures containing either propulsion engines or Gensets must be fitted with a suitable smoke detector.

12.5.2 On vessels engaged on overnight or extended voyages, every accommodation space below deck including sleeping areas must be fitted with a suitable smoke alarm which will sound an audible alarm in that space.

12.5.3 On vessels larger than 13.7m, all fire alarms should be audible at the helm position.

13.0 Lifesaving Appliances and Equipment

13.1 Liferafts – General

13.1.1 Life rafts must be serviced at a manufacturer's approved service station on an annual basis.

13.1.2 Rafts must be stowed in FRP containers, and clearly identified to show the raft type and pack carried.

13.1.3 Storage and location points on board for life rafts should be decided on only after consideration of the following, suitable boarding area for crew, access and ease of launching by crew, protection from heavy weather, risk of fouling rigging in the event of a float free operation, stability & trim of vessel.

13.1.4 Hydrostatic Release Units which are not time dated, must be serviced by an approved Manufacturers and MSO Service station. Units which are time dated must be changed prior to their expiry date.

13.1.5 Where use is made of Grab Bags these must be kept fully stocked and stowed in a readily accessible and identified position adjacent to, or on the weather deck, to facilitate the rapid evacuation of the vessel in an emergency.

13.1.6 The contents and location of a Grab Bag must be included in the approved Safety Operations Plan for the vessel.

13.2 Operational Area – P6 ComSail Offshore

13.2.1 Vessels operating offshore must provide liferafts of sufficient capacity to accommodate at least the total number of persons on board.

13.2.2 Liferafts provided must be constructed to either SOLAS, or MED Wheelmark standards, and have a canopy and insulated floor.

13.2.3 Such Rafts must be equipped with a SOLAS "A" Pack.

13.2.4 Rafts must be stowed outside on the weather deck, or suitable open area.

13.2.5 All rafts must be mounted on a suitable cradle, and fitted with a float free arrangement incorporating a Hydrostatic Release Unit (HRU), allowing it to float free and inflate automatically in the event of the vessel sinking.

13.3 Operational Area – P6 ComSail Inshore and P6 ComSail Coastal

13.3.1 Vessels operating in designated Inshore and Coastal areas must provide liferafts of sufficient capacity to accommodate at least the total number of persons on board, and have a canopy and insulated floor.

13.3.2 Liferafts provided must be either:

(i) Constructed to either SOLAS or MED Wheelmark standards, as for Offshore, but fitted with a SOLAS "B" Pack, or

(ii) Constructed to the International Sailing Federation (ISAF) Offshore Special Regulations (OSR) liferaft requirements as detailed in Appendix A Part 2, incorporating the ISO 9650 liferaft standards.

Such liferafts must be equipped to a SOLAS B standard, and may require a 'Grab Bag' to supplement the original equipment integral to this type of raft.

13.3.3 Rafts must be stowed outside on the weather deck, or suitable open area.

13.3.4 All rafts must be mounted on a suitable cradle, and fitted with a float free arrangement incorporating a Hydrostatic Release Unit (HRU), allowing it to float free and inflate automatically in the event of the vessel sinking.

13.4 Lifebuoys

13.4.1 All craft must carry at least two lifebuoys, these must be stowed in a float free manner on the weather deck readily accessible for rapid deployment by crew (additional units may be provided if the owner wishes).

13.4.2 Each lifebuoy must carry the vessels name and Port of Registry / Home Port permanently marked on it.
Lifebuoys must be fitted with Retro Reflective strips.

13.4.3 At least one lifebuoy (but not more than 50% of the total number carried) must be fitted with a suitable buoyant line of at least 15m in length.

13.4.4 At least one lifebuoy must be fitted with a Dan Buoy and Light. Lifebuoys fitted with lights must not have buoyant lines attached.

13.4.5 Where horse shoe type lifebuoys are used, to avoid their being blow across the sea's surface at speed, it is required either of the following be fitted as appropriate to its function:
(i) a buoyant line to be attached, or
(ii) A drogue be fitted.

13.5 Flares

13.5.1 All pyrotechnics carried must be to SOLAS or MED (Wheelmarked) approved standards.

13.5.2 All Flares must be stored in a suitable and readily accessible watertight container.

13.5.3 Vessels operating in the Offshore category must supply:
- 6 Red Parachute flares,
- 6 Red Hand-held flares,
- 2 Buoyant orange smoke signals,
- 4 White flares.

13.5.4 Vessels operating within both designated Inshore and Coastal categories must carry:
- 4 Red Parachute Flares,
- 4 Red Hand-held Flares,
- 2 Buoyant Orange smoke signals,
- 2 White Flares.

13.6 EPIRB

13.6.1 Vessels operating in P6 ComSail Offshore and ComSail Coastal categories must carry a COSPAS-SARAT satellite EPIRB.

13.6.2 Such EPIRB's must be stowed above the weather deck, allowing it to either be:

(i) Manually released;

(ii) Removed and placed into a life raft;

(iii) Float Free with automatic activation (incorporating a suitable protective housing and HRU) in the event the vessel sinks.

13.6.3 Such units should be sited on board after considering the units possible exposure to heavy seas, crew accessibility to it, and the risk of fouling on sails / rigging if deploying in float free mode from a sinking craft.

13.6.4 P6 ComSail inshore Category boats do not require an EPIRB.

13.7 SART

13.7.1 Vessels operating offshore must also be provided with an approved SART (Search and Rescue Radar Transponder).

13.7.2 This must be stowed in a readily accessible location, available for rapid transfer into any survival craft.

13.8 Lifejackets / Inflatable lifejackets

13.8.1 Every vessel must provide an approved Lifejacket for every person carried on board.

13.8.2 Lifejackets must comply to SOLAS or MED approved Wheelmark standards.

13.8.3 Donning instructions should be posted on board, and instructions on donning and use of Lifejackets must be included in the vessels Safety Operational Plan, and contained in the safety pre briefing issued by the Master to new passengers and crew, prior to departure.

13.8.4 Lifejackets must be stowed in a suitable, dry, and readily accessible location, which does not present a risk to crew, and always be available for use in an emergency.

13.8.5 It is recommended that all lifejackets carried are of the same type/ manufacture, to limit confusion in use.

13.8.6 All Lifejackets must be fitted with a whistle and Retro Reflective Tape.

13.8.7 Lifejackets on vessels operating in Coastal and Offshore areas must be fitted with a light.

13.8.8 Where children are carried, they must be issued with a suitable lifejacket, appropriate to their size and weight.

13.8.9 Children's Lifejackets must be stowed separate from Adults' Lifejackets on board, and the location clearly identified as containing only children's jackets.

Inflatable Lifejackets

13.8.10 Inflatable Lifejackets, consisting of Compressed Gas Inflation fitted with oral top up valves, may be used provided they comply with the above standards. Such an inflatable lifejacket must have an integral Safety Harness incorporated.

13.8.11 Inflation may be either Automatic or Manual activation.

13.8.12 Special consideration must be given to the storage of Automatic inflation units.

13.8.13 Where Inflatable Lifejackets are used, they must be subject to an annual inspection, and servicing to the Manufacturers recommendations, at an approved service station.
Inspections must occur prior to the vessel's Passenger Boat License renewal survey.

13.8.14 Where Inflatable Lifejackets are provided, an additional 10% must be supplied, to cover the possibility of malfunctioning units during an evacuation.

13.9 Man overboard – Means of recovery

All craft must have a proven means of recovering a crew member from the water. Methods may include, boarding ladders, slings, use of spars and running rigging.

13.10 Bulwarks and Guard Rails

13.10.1 Bulwarks, or a suitable combination of stanchion and safety wires, must extend around the entire perimeter of any exposed deck.

13.10.2 Bulwarks or safety rails should extend a minimum of 1000mm above the deck.

13.10.3 A suitable means of rapidly removing a section of safety wire must be provided, to facilitate the recovery of a Man Overboard.

13.10.4 Where for operational reasons, the above impedes the efficient operation of the craft, safety rail heights may be reduced to a minimum of 500mm **provided** all persons on deck are wearing a suitable PFD and are clipped to the craft's Safety Jack Line:

- as stated in the vessel's Safety Plan,
- during the Hours of Darkness,
- in the event of the vessel having to reef sail as a result of weather conditions.

13.11 Protective Clothing for all persons on board

Suitable protective clothing from the elements, must be available for all persons on board and appropriate to the vessel's areas of operation.

14.0 Navigation Equipment

14.1 General

14.1.1 **P6 ComSail Inshore** must be provided with the following:

(i) Suitable Magnetic Compass, correctly adjusted and located at the helm position,
(ii) Means of taking bearings over an arc of the horizon of 360 degrees, e.g. hand bearing compass,
(iii) Suitable Echo Sounder,
(iv) Waterproof torch capable of signaling,
(v) FM/AM Radio Receiver, capable of receiving local weather reports,
(vi) Suitable means of making sound signals.

14.1.2 In addition to the above, **P6 ComSail Coastal and Offshore** must also be provided with:

(i) Navtex Weather / Navigation data Receiver,
(ii) Speed / Distance measuring log,
(iii) Aneometer, providing a continuous indication of relative windspeed adjacent to the helm,
(iv) Inclinomer,
(v) Barometer,
(vi) Portable search light, for use in Man Overboard recovery operations.

14.2 Nautical Publications

14.2.1 **P6 ComSail Inshore** must carry:

(i) Set of current navigation Charts, corrected for all areas of operation.

The following Nautical Publications:

(ii) Copy of the International Code of Signals,
(iii) Tide Tables for areas of operations,
(iv) Tidal Stream Data for area of operation,
(v) List of Radio Signals for area of operation,
(vi) List of Lights for area of operations,
(vii) The above may be contained in a suitable Nautical Almanac.

14.2.2 **P6 ComSail Offshore and Coastal** craft must:

(i) Carry a set of current navigation Charts, corrected for all areas of operation.
(ii) Comply with S.I. No. 282 of 1985, Merchant Shipping (Carriage of Nautical Publications) Regulations, 1985 namely:

- International Code of Signals,
- Illustrated table of Life Saving Signals,
- Marine Notices relevant to the vessel's safety and operation,
- Mariners Handbook,
- Notices to Mariners for relevant areas of operation,
- Nautical Almanac,
- Navigational Tables,
- Lists of Radio Signals,
- Lists of Lights,
- Sailing Directions,
- Tide Tables,
- Tidal Stream Atlases,
- Operating and Maintenance instructions for navigational aids carried by the ship.

15.0 Radio Equipment

P6 ComSail Inshore must:

15.1 Carry a VHF transmitter with DSC, and receiver capable of operating on VHF channel16.

P6 ComSail Coastal and Offshore must be equipped with:

15.2 Approved radio equipment complying with GMDSS requirements appropriate to its area of operation.

15.3 Carry an approved handheld VHF complying with GMDSS requirements.

15.4 **All P6 ComSail** vessels must provide a dedicated battery supply, powering Radio and essential communications equipment, which must be positioned as high as possible above the water line, to ensure their continued operation in a vessel flooding situation.

16.0 Crew Qualifications and Manning

16.1 All P6 vessel Skippers must hold an Irish Passenger Boat Command Endorsement, relevant to the command of sailing craft (refer to current applicable Marine Notice).

16.2 Masters of **P6 ComSail** vessels must hold approved radio certification appropriate to the radio equipment that is required to be carried.

16.3 Masters of **P6 ComSail (Coastal & Offshore)** vessels must have undertaken Fire Fighting Courses to STCW standards.

16.4 **P6 ComSail Offshore** and **ComSail Coastal** craft engaged in extended voyages must be manned with sufficient crew, to ensure a person qualified under 16.1 is available on each watch, reflecting the size of the vessel and experience of trainees.

16.5 The skipper must hold appropriate training certification from an authority acceptable to the MSO.

17.0 Masts, Rigging, and Storm Sails

17.1 The condition of spars and rigging of existing vessels must be subject to periodical survey by a competent person experienced in marine rigging, and a report presented to the MSO.

17.2 Such a report is also required for a new vessels initial survey following application for a license.

17.3 The frequency of such an inspection for existing vessels, is every four years (two survey cycles), or as required by the MSO.

17.4 Such a report as a minimum, should be based on a detailed visual inspection of all the vessel's spars, standing rigging, running rigging, chain plates, back stay adjustors, and mast step arrangements.

17.5 In addition, Vessel Operators should undertake an annual visual inspection of all spars, sails and rigging.

17.6 Every vessel must have the facility to travel to windward in heavy weather conditions, either by means of dedicated storm sails, or by means of effective deep reefing of existing sails.

17.7 All P6 ComSail vessels must carry wire cutters or an equivalent for use in the event of dismasting.

18.0 Accommodation

Hand and Grab Rails

18.1 There must be sufficient hand and grab rails distributed throughout the accommodation, to allow the safe and speedy movement of occupants when the vessel is underway. Particular attention should be paid to location of hand / grab rails in areas such as access hatches, galleys, toilet, and ladders or steps.

Access / Emergency Escapes

18.2 There must be at least two means of evacuating each accommodation area, where skylights are used as a means of escape, they must be capable of being opened from both sides.

Seating

18.3 Sufficient seating below decks, as appropriate, must be provided to accommodate all persons on board.

Lighting

18.4 All accommodation spaces must be provided with effective means of lighting.

Toilet facilities / Water Services

18.5 On craft operating on Coastal and Offshore areas, adequate Toilet facilities must be provided on board. These facilities must be separate from the other living areas.

18.6 An adequate supply of potable fresh water must be carried on board, and piped to suitable locations within the accommodation areas, including the W.C.

18.7 As a minimum a supply of cold water should be available at all sinks on board. Where hot pumped water systems are fitted, they should be designed installed and maintained for their operational pressures and temperature.

Wet Locker space

18.8 A suitable storage area on board must be provided for the storage and drying of foul weather gear.

Ventilation

18.9 All internal accommodation spaces must be provided with suitable means of changing air supply.

Galley facilities

18.10 Craft operating in Coastal and Offshore area must have adequate galley facilities including means of cooking, secure food storage lockers, preparation areas, and a sink.

18.11 Gas Cookers must be installed as per Marine Notice No.1 of 2001.

18.12 Cookers must be gimballed, and supplied with a suitable crash bar. Provision must be made to secure the cook in position during heavy weather allowing him to work with both hands free.
A means of locking the gimball mechanism must be provided.

Accommodation / Berths

18.13 Craft operating in Coastal and Offshore areas and any craft engaged in overnight or extended transits must provide adequate sleeping accommodation on board.
Lee boards or cloths should be fitted where appropriate.

18.14 Reasonable storage space must be provided for personal effects for each person carried.

19.0 Miscellaneous Equipment

19.1 All P6 ComSail Craft must be provided with:

(i) A suitable boat hook,

(ii) Radar Reflector,

(iii) Sufficient number of Safety Harnesses and harness lines for number of persons on board,

(iv) Suitable Safety Harness Anchor points in Cockpit Area for entire watch,

(v) Suitable Jack Lines extending over entire working deck – Port and Starboard – for crew working on deck,

(vi) Sea Anchor.

20.0 Medical Equipment

20.1 All commercially operated Sailing craft must be provided with a suitable First Aid kit, as required by Council Directive 92/29/EEC concerning the minimum health and safety requirements for improved medical treatment on board vessels.

S.I. No. 506 of 1997 – European Communities (Minimum Safety And Health Requirements For Improved Medical Treatment On Board Vessels) Regulations, 1997 – transposes the Directive into National Legislation, which requires the following Categories of First Aid kit to be carried:

Medical Pack:	**Vessel Type:**
Cat. A	Seagoing Craft, with **no limitation** on length of trips.
Cat. B	Seagoing vessels making trips of: (*a*) less than 150 nautical miles from the nearest port with adequate medical equipment, and (*b*) less than 175 nautical miles from the nearest port with adequate medical equipment and which remain continuously within range of the helicopter rescue services.
Cat. C	(*a*) Craft staying within 30 nautical miles of the shore with no cabin accommodation other than a wheelhouse, and (*b*) lifeboats and life-rafts.

Medicines carried on board must be maintained within their expiry dates.

21.0 Clean Seas – Pollution Prevention

21.1 Vessels operating under these rules of equivalency, must comply with those International, National, and Local requirements for the prevention of marine pollution, applicable in the vessels area of operation.

21.2 For vessels operating in Irish waters, the following legislation applies:

- Sea Pollution Act, 1991, as amended;
- S.I. No. 44 of 1994 – Sea Pollution (Prevention of Oil Pollution) Regulations, 1994, as amended;
- S.I. No. 45 of 1994 – Sea Pollution (Prevention of Pollution by Garbage from Ships) Regulations, 1994, as amended.

21.3 The owner of a vessel shall ensure that it is equipped as far as practicable and reasonable with installations to ensure the retention of oil or oily bilge mixtures on board, and their discharge to reception facilities ashore. Such measures may include the use of Engine Drip trays, segregation or separation of engine room bilges spaces from other bilges.

21.4 Where the direct overboard discharge of sewage is prohibited by authorities, within a vessels area of operation, it must be equipped with holding tanks of sufficient capacity to store waste for discharge to shore facilities.

21.5 The disposal into the sea of **ANY** plastics, including but not limited to synthetic ropes, synthetic fishing nets and plastic garbage bags, is **prohibited.**

21.6 The disposal into the sea of the following garbage shall be made as far as practicable from the nearest land but is in any case prohibited if the distance from the nearest land is less than:

(i) **25 nautical miles** for dunnage, lining and packing materials which will float;

(ii) **12 nautical miles** for food wastes and all other garbage including paper products, rags, glass, metal, bottles, crockery and similar refuse.

Disposal into the sea of garbage specified in (ii) may be permitted when it has passed through a comminuter or grinder and made as far as practicable from the nearest land but in any case is prohibited if the distance from the nearest land is less than 3 nautical miles.
Such comminuted or ground garbage shall be capable of passing through a screen with openings no greater than 25 millimetres.

21.7 On Craft exceeding 12m in length, advisory placards are required to be posted to inform Crew and Passengers of the conditions specified in paragraph 21.6.

22.0 Survey Requirements

22.1 A Passenger Boat Licence may be issued to a vessel, for a maximum period of two years, following its satisfactory inspection, and approval of its SOP, by a surveyor from the Marine Survey Office.
Licences may however be issued for periods of less than two years at the attending surveyors discretion.

22.2 The validity of a Passenger Boat Licence is dependant on the craft being manned, operated, equipped, and maintained in accordance with the terms of issue of its licence, including compliance with these rules.

22.3 When a vessel is found to have breached the terms of issue of a Passenger Boat Licence, the Administration may cancel its Certificate.

22.4 When a vessel is sold, the Passenger Boat Licence is cancelled, the owner / Operator should advise the MSO of the change of circumstances and return its licence for formal cancellation and records.
A new application may be made by the subsequent owner to have the boat re-surveyed.

22.5 Owners / Operators wishing to renew a Passenger Boat Licence, are required to make an application for survey to the MSO, in advance of the vessels current licence expiry date.

22.6 All craft are required to undergo an out of water hull inspection for initial and renewal surveys.
For the out of water hull survey, the time, location, and means of support must be discussed and agreed in advance with the attending Surveyor.
Craft are to be presented in a safe and secure manner, allowing full access to all areas of the underwater hull profile.
Hulls, internal spaces, Engine spaces, and fittings must be reasonably clean.
All internal spaces must be opened in advance of the survey.
Any equipment required, must be present at the time of survey.

22.7 The following associated documentation must be available:

(i) A complete copy of the vessels Safety Operational Plan (SOP),
(ii) Copy of Passenger Boat Licence application,
(iii) Copy of Liferaft Annual Servicing for previous two years,
(iv) Copy of Fire extinguishing Servicing records for previous two years,
(v) Copies of Crew Qualifications, including any required Commercial Endorsements.

22.8 Applications for surveys should be addressed to:

Superintendent, Mercantile Marine Office,
Department of Transport, Leeson Lane, Dublin 2,
Or
Superintendent, Mercantile Marine Office,
Centre Park House, Centre Park, Cork.

23.0 Anchors and Cables

23.1 P6 ComSail Offshore and ComSail Coastal craft should be provided with at least two Anchors and associated cable based on table below. In choosing anchor sizes, Operators should take into consideration excessive windage factors caused by high freeboard, large superstructures, etc., and may require to increase anchor dimensions to account for such design factors.

Anchors and Cables – Table referred to in paragraph 23.1

	Anchor Mass		Anchor Cable Diameter			
Mean Length (See note 4)	Main	Kedge	Main Chain Rope	Kedge Chain	Rope	
(metres)	(kg)	(kg)	(mm)	(mm)	(mm)	(mm)
6	8	4	6	12	6	10
7	9	4	8	12	6	10
8	10	5	8	12	6	10
9	11	5	8	12	6	10
10	13	6	8	12	6	10
11	15	7	8	12	6	10
12	18	9	8	14	8	12
13	21	10	10	14	8	12
14	24	12	10	14	8	12
15	27	13	10	14	8	12
16	30	15	10	14	8	12
17	34	17	10	14	8	14
18	38	19	10	16	8	14
19	42	21	12	16	10	14
20	47	23	12	16	10	14
21	52	26	12	16	10	14
22	57	28	12	19	10	16
23	62	31	12	19	10	16
24	68	34	12	19	10	16

Notes:-

1. Chain cable diameter given is for short link chain. Chain cable should be sized in accordance with EN 24 565:1989 (covering ISO 4565: 1986 and covered by BS 7160:1990 – Anchor chains for small craft), or equivalent.
2. The rope diameter given is for nylon construction. When rope of another construction is proposed, the breaking load should be not less than that of the nylon rope specified in the table.
3. When anchors and cables are manufactured to imperial sizes, the metric equivalent of the anchor mass and the cable diameter should not be less than the table value.
4. For the purpose of this section, mean length is defined as:-

$$\frac{\textit{Length + Length on waterline}}{2}$$

23.2 P6 ComSail inshore must carry a minimum of one Anchor and associated cable.

23.3 Main anchors must be capable of rapid deployment, the vessel must have an adequate securing point, on the foredeck (Cleat or Samson Post) and be provided with a suitable fairlead or Roller on the stemhead.

23.4 A suitable means of securing Anchors in place must be provided.

23.5 Anchor cable may be either chain or rope, if using rope, a minimum of 10 meters chain must be provided as a tail to the anchor.

23.6 Cable length carried should reflect the boat's areas of operation, as a minimum not less than 30m should be carried.

23.7 Where the vessels main anchor exceeds 35kg, a suitable windlass, (mechanical or electrical) must be provided.

Annex 1

ComSail Vessels - list of relevant legislation

Primary Legislation:

Merchant Shipping Act, 1894

Mercantile Marine Act, 1955

Merchant Shipping (Load Lines) Act, 1968

Sea Pollution Act, 1991 (as amended)

Merchant Shipping Act, 1992 (as amended)

Merchant Shipping (Investigation of Marine Casualties) Act, 2000

Safety, Health and Welfare at Work Act, 2005

Maritime Safety Act, 2005

Statutory Instruments:

CARRIAGE OF NAUTICAL PUBLICATIONS	
Merchant Shipping (Carriage of Nautical Publications) Regulations, 1985	282 of 1985
CERTIFICATION OF MASTERS – Passenger Boat	
Merchant Shipping (Passenger Boat Manning) Regulations 2005	649 of 2005
CODE OF SAFE WORKING PRACTICES	
Merchant Shipping (Code of Safe Working Practices) Regulations, 1988	107 of 1988
COLLISION REGULATIONS	
CR (Ships and Water Craft on the Water) Order, 1984	29 of 1984
CR (Ships and Water Craft on the Water) (Amendment) Order, 1990	36 of 1990
CR (Ships and Water Craft on the Water) (Amendment) Order, 1993	287 of 1993
CR (Ships and Water Craft on the Water) (Amendment) Order 2005	47 of 2005
EUROPEAN COMMUNITIES REGULATIONS	
EC (Minimum Safety & Health Requirements for Improved Medical Treatment on Board Vessels) Regulations, 1997	506 of 1997
EC (Port Reception Facilities for Ship-Generated Waste and Cargo Residues) Regulations 2003	117 of 2003
LOAD LINE	
MS (Load Lines) Rules, 2001	424 of 2001
MS (Load Lines)(Exemption) Order, 2002	416 of 2002
MS (Load Lines)(Exemption) (Amendment) Order 2003	190 of 2003

MERCHANT SHIPPING ACT, 1992, as amended	
MSA, 1992 (Commencement) Order, 1992	205 of 1992
MSA, 1992 (Part II) (Commencement) Order, 1998	547 of 1998
MS (Miscellaneous Provisions) Act, 1998 – Section 4	20 of 1998
MS (Investigation of Marine Casualties) Act, 2000 – Section 44	14 of 2000
MS (Investigation of Marine Casualties) Act, 2000 (Prescribed Classes of Vessels) Regulations, 2001 – sections 35(1) & 36(1) of MSA 1992.	285 of 2001
Maritime Safety Act 2005 – Section 50	11 of 2005

MERCHANT SHIPPING (INVESTIGATION OF MARINE CASUALTIES) ACT, 2000	
MS (Investigation of Marine Casualties) Act, 2000 (Sections 44, 45 and 46) (Commencement) Order, 2000	252 of 2000
MS (Investigation of Marine Casualties) Act, 2000 (Prescribed Classes of Vessels) Regulations, 2001	285 of 2001
MS (Investigation of Marine Casualties) Act, 2000 (Remaining Provisions) (Commencement) Order, 2002	289 of 2002
Marine Casualty Investigation Board (Establishment Day) Order, 2002	290 of 2002
MS (Investigation of Marine Casualties) Act 2000 (Remaining Provisions) (Commencement) Order, 2003	124 of 2003
Marine Casualty Investigation Board (Establishment Day) Order, 2003	125 of 2003
Maritime Safety Act 2005 – Section 51	11 of 2005

PASSENGER BOATS	
MS (Passenger Boat) Regulations, 2002	273 of 2002
Licensing of Passenger Boats (Exemption) Regulations, 2002	274 of 2002
MS (Passenger Boat) (Amendment) Regulations, 2002	555 of 2002
Licensing of Passenger Boats (Exemption) (Amendment) Regulations, 2002	556 of 2002
MS (Passenger Boat) (Amendment) Regulations 2003	648 of 2003
Merchant Shipping (Passenger Boat Manning) Regulations 2005	649 of 2005

SEA POLLUTION - Annex I MARPOL - PREVENTION OF POLLUTION BY OIL	
SP (Prevention of Oil Pollution) Regulations, 1994	44 of 1994
SP (Prevention of Oil Pollution) (Amendment) Regulations, 1997	514 of 1997
SP (Prevention of Oil Pollution) (Amendment) Regulations 2002	642 of 2002
SP (Prevention of Oil Pollution) (Amendment) Regulations 2003	191 of 2003

SEA POLLUTION - Annex IV MARPOL - PREVENTION OF POLLUTION BY SEWAGE FROM SHIPS	
SP (Prevention of Pollution by Sewage from Ships) Regulations 2006	269 of 2006

SEA POLLUTION - Annex V MARPOL – PREVENTION OF POLLUTION BY GARBAGE FROM SHIPS	
SP (Prevention of Pollution by Garbage from Ships) Regulations, 1994	45 of 1994
SP (Prevention of Pollution by Garbage from Ships) (Amendment) Regulations, 1997	516 of 1997
SP (Prevention of Pollution by Garbage from Ships) (Amendment) Regulations 2006	239 of 2006

SIGNALS OF DISTRESS	
Signals of Distress (Ships and Water craft on the Water) Rules, 1977	234 of 1977

Annex 2

ComSail Vessels - list of relevant Marine Notices

Marine Notice No. 1 of 2002 - Use of liquefied petroleum gas (LPG) installations and systems on merchant vessels, fishing vessels, pleasure craft and other marine craft.

Marine Notice No. 24 of 2004 - Port and Sea Areas.

Marine Notice No. 27 of 2005 – (1) Merchant Shipping (Passenger Boat Manning) Regulations 2005. (2) Nomination of Irish Sailing Association as appointed body under regulations.

Marine Notice No. 4 of 2006 – Nomination of Bord Iascaigh Mhara (BIM) as an appointed body for the purposes of the Merchant Shipping (Passenger Boat Manning) Regulations 2005.