1.1 FOREWORD

1.1.1 The aim of this Code of Practice is to improve safety in the less than 15 metres Length Overall (LOA) sector of the fishing industry and to raise the safety awareness of all those involved with the construction, operation and maintenance of such vessels.

1.1.2 The content of the Code has been the subject of extensive discussion with the Fishing Industry Safety Group to oversee the Code's development. If the Code needs to be up-dated at any time to take account of new statutory requirements that apply to vessels operating under the Code, the organisations involved in the development of the Code will be consulted.

1.2 APPLICATION

1.2.1 This Code applies to all fishing vessels, registered in the UK, of less than 15 metres Length Overall (LOA) in accordance with the Fishing Vessels (Codes of Practice) Regulations 2017 No. 943 and the Merchant Shipping (Work in Fishing Convention) Regulations 2018 No.1106.

1.2.2 For vessels built **on or after 23 October 2017,** references to Registered Length mean the Registered Length as defined in The Statutory Instrument 1998 No. 1916 The Merchant Shipping (Tonnage) (Fishing Vessels) (Amendment) Regulations 1998.

1.2.3 For vessels built before this date, the Registered Length means the registered length shown on the vessel's certificate of registry.

1.2.4 Although this Code applies to all vessels of less than 15m LOA, any wording in italics only applies to New Vessels (2020) built on or after the date of entry into force of this Code or existing vessels which make significant modifications to the vessel and which would, if undertaken on a New Vessel (2020), require compliance with a recognised Construction and Outfit Standard for Fishing Vessels.

1.2.5 The following sections of the Code apply to New Vessels (2020) from the date of entry into force of this Code:

- Chapter 1
- Chapter 2
- Chapter 3 Sections 3.1 to 3.10 and 3.12
- Chapter 4
- Chapter 5
- Chapter 6
- Chapter 7
- Chapter 8
- Chapter 9
- Chapter 10
- Chapter 11

[Option A Phase in Period

1.2.6 The following sections of the Code apply:

- Chapter 1 Sections 1.1 to 1.6 and 1.8
- Chapter 2 Sections 2.1.2 to 2.1.4, 2.2.3 to 2.3.2, 2.4 to 2.19
- Chapter 3 Sections 3.1, 3.11 and 3.12
- Chapter 4 Sections 4.1.2 to 4.7.1, 4.7.3 to 4.13
- Chapter 5 Sections 5.1.2 to 5.12
- Chapter 6 Sections 6.1 to 6.7 and 6.9 to 6.10

- Chapter 7
- Chapter 8
- Chapter 9
- Chapter 10
- Chapter 11

apply to existing vessels:

- of 12m RL to less than 15m LOA from 2 years after the entry into force of this Code;
- of 10m RL to less than 12m RL from 3 years after the entry into force of this Code;
- of 7m RL to less than 10m RL from 4 years after the entry into force of this Code; and
- of less than 7m from 5 years after the date of entry into force of this Code:]

Option B

[1.2.6 The following section of the Code

- Chapter 1 Sections 1.1 to 1.6 and 1.8
- Chapter 2 Sections 2.1.2 to 2.1.4, 2.2.3 to 2.3.2, 2.4 to 2.19
- Chapter 3 Sections 3.1, 3.11 and 3.12
- Chapter 4 Sections 4.1.2 to 4.7.1, 4.7.3 to 4.13
- Chapter 5 Sections 5.1.2 to 5.12
- Chapter 6 Sections 6.1 to 6.7 and 6.9 to 6.10
- Chapter 7
- Chapter 8
- Chapter 9
- Chapter 10
  Chapter 11

apply to existing vessels:

- To which Category A Stability methods apply from 24 months after the entry into force of this Code;
- To which Category B Stability methods apply from 42 months after the entry into force of this Code; and
- To which Category C Stability Methods apply from 60 Months after the entry into force of this Code]

1.2.7 From the date of entry into force of this Code vessels will be inspected against all the requirements although until the phase in period applicable to the vessel has expired, they will not be expected to comply. Where the vessel would not be required to comply with the Code at the time of inspection, the vessel owner will be expected to provide proof by the end of the phase in period of the Code that the vessel now complies.

1.3 DEFINITIONS

1.3.1 In the Code, except where the context otherwise indicates:

.1 “Accommodation spaces” means corridors and lobbies, stairways, lavatories, cabins, offices, crew spaces, pantries not containing cooking appliances and spaces similar to any of the foregoing and trunks to such spaces;

.2 “Amidships” is the mid-length of “Length” as defined in Statutory Instrument 1998 No. 1916 The Merchant Shipping (Tonnage) (Fishing Vessels) (Amendment) Regulations 1998;

.3 **“**Breadth (B)” is the maximum breadth of the vessel, measured amidships to the moulded line of the frame in a vessel with a metal shell and to the outer surface of the hull in a vessel with a shell constructed of any other material;

.4 “Certifying Authority” means the MCA or a person or organisation authorized by MCA to:

.1 appoint persons for the purpose of examining vessels and issuing and signing Declarations of Survey; and

.2 issue Certificates of Construction and Outfit;

.5 “Code” means this Code, unless another Code is specified;

.6 “Collision bulkhead” is a watertight bulkhead up to the working deck in the forepart of the vessel.

.7 “Crew” means any person, including the skipper, employed or engaged, or working in any capacity related to the operation of the vessek but excluding shore personnel carrying out work on board a vessel at the quayside and port pilots;

.8“ Crew space” means crew accommodation within the meaning of section 43(7) of the Merchant Shipping Act 1995;

.9 “Decked vessel” means a vessel with a continuous watertight freeboard deck that extends from stem to stern and has positive freeboard throughout, in any condition of loading of the vessel;

.10 “Deckhouse” see “Superstructure” as defined in section 1.3.51;

.11 “Depth” means the moulded depth amidships;

.12 “Draught” means the vertical distance from the moulded base line amid-ships to the operating water line of a vessel;

.13 “Equivalent material” used in the expression “steel or other equivalent material” means any non-combustible material which, by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of the applicable exposure to the standard fire test (e.g. aluminium alloy with appropriate insulation);

.14 “Existing vessel” means a fishing vessel which is not a New Vessel (2020);

.15 “Fire Test Procedures Code” means the IMO Code for Application of Fire Test Procedures;

.16 “Fishing vessel” means a vessel for the time being used (or, in the context of an application for registration, intended to be used) for, or in connection with fishing sea fish other than a vessel used (or intended to be used) for fishing otherwise than for profit; and for the purpose of this definition “sea fish” includes shellfish, salmon and migratory trout (as defined by section 44 of The Fisheries Act 1981);

.17 “Float-free” in relation to life saving appliances means that method whereby the appliance is automatically released from a sinking vessel and is ready for use;

.18 “Freeboard” means the distance measured vertically downwards from the upper edge of the freeboard deck to the waterline;

.19 “Freeboard deck” means the lowest complete deck above the deepest operating waterline from which fishing is undertaken. In vessels fitted with two or more complete decks, a Certifying Authority may accept a lower deck as the freeboard deck provided that the deck is situated above the deepest operating waterline;

.20 An “Inclining Test” should be conducted in accordance with MSIS 9 Approval of Stability Information;

.21 “Independent” in relation to a pump, means a pump operated autonomously through a different power source or switch board other than from the vessel’s main;

.22 “Length overall (LOA)” means the distance between the foreside of the foremost fixed permanent structure and the afterside of the aftermost fixed permanent structure; and "fixed permanent structure" includes any portion of the hull which is capable of being detached, but which is fixed in place during the normal operation of the vessel. It does not include functional arrangements such as safety rails, bowsprits, pulpits, stemhead fittings, rudders, steering gear, outdrives, outboard motors, propulsion machinery, diving platforms, boarding platforms, rubbing strips and fenders, other than where such functional arrangements are designed to replace any part of the hull that has been removed;

.23 “Length (L)” in relation to a vessel, means “Length between perpendiculars” (LBP);

.24 “Length between perpendiculars” (LBP) is the ITC ’69 definition which means 96% of the total length on a waterline of a vessel at 85% of the least moulded depth measured from the top of the keel, or the length from the fore-side of the stem to the axis of the rudder stock on that waterline, if that be greater. In vessels designed with a rake of keel the waterline on which this is measured shall be parallel to the designed waterline. The forward perpendicular and the after perpendicular are positioned at the forward and after ends of LBP respectively;

.25 “Registered length” has the same meaning as length in the Tonnage Regulations {SI 1997 No. 1510 - The Merchant Shipping (Tonnage) Regulations} which has the meaning as “Length between perpendiculars” (LBP);

.26 “Lifejacket” means a lifejacket complying with the requirements of the LSA Code as amended or as approved by MCA;

.27 “Lightship”, is a ship complete in all respects, but without all portable fishing gear, consumables, stores, cargo, and crew and effects, and without any liquids on board except for machinery and piping fluids, such as lubricants and hydraulics, which are at operating levels;

.28 “Lightship check” is a procedure to establish the weight and centres of gravity of the vessel without portable fishing gear consumables, stores, cargo, crew and effects and without any liquids on board except that machinery and piping fluids are at operating levels;

.29 “LSA Code” means the International Life-Saving Appliance (LSA) Code adopted by the Maritime Safety Committee of the Organisation by resolution MSC.48(66), as amended;

.30 “Machinery space” means the main engine room;

.31 "Main switchboard" is a switchboard directly supplied by the main source of electrical power and intended to distribute electrical energy;

.32 “MCA” means The Maritime and Coastguard Agency, an executive agency of the Department for Transport or their successors;

.33 “Merchant Shipping Act 1995” references to the Merchant Shipping Act 1995 or to rules or regulations which are made or have effect as if made under that Act, are to that act or to those rules or regulations respectively as amended at the date of this Code coming into force;

.34 “Marine Guidance Note” (MGN), “Merchant Shipping Notice” (MSN) and “Marine Information Note” (MIN) means a Note or Notice described as such and issued by MCA;

.35 “Midship section" is that section of the hull defined by the intersection of the moulded surface of the hull with a vertical plane perpendicular to the waterline and centreline planes passing through amidships;

.36 “Moulded depth” means:

i) the vertical distance measured from the top of the keel to the underside of the upper deck at side. In wood and composite ships the distance is to be measured from the lower edge of the keel rabbet. Where the form at the lower part of the midship section is of a hollow character, or where thick garboards are fitted, the distance is to be measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel;

ii) in ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwales were of angular design;

iii) where the upper deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, the moulded depth shall be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part;

and for the purposes of this definition,

(a) "upper deck" means the uppermost complete deck exposed to weather and sea, which has permanent means of weather tight closing of all openings in the weather part thereof and below which all openings in the sides of the ship are fitted with permanent means of watertight closing. In a ship having a stepped upper deck, the lowest line of the exposed deck and the continuation of that line parallel to the upper part of the deck is taken as the upper deck; and

(b) "weather tight" means that in any sea conditions water will not penetrate into the ship.

.37 <u>New Vessels (2018)</u> – See Chapter 10

(i) The building or major conversion contract has been placed on or after 31 December 2018; or

(ii) the building or major conversion contract has been placed before 31 December 2018 and which is delivered <u>three years</u> or more after that date; or

(iii) in the absence of a building contract, on or after 31 December 2018:

a. the keel is laid, or

b. construction identifiable with a specific vessel begins, or

c. assembly has commenced comprising at least 1 per cent of the estimated mass of all structural material;

.38 New Vessels (2020)

(i) The building or major conversion contract has been placed on or after [Date of Entry into force of Code]; or

(ii) the building or major conversion contract has been placed before [Date of entry into force of Code] and which is delivered three years or more after that date; or

(iii) in the absence of a building contract, on or after [Date of Entry into Force of Code]:

a. the keel is laid, or

b. construction identifiable with a specific vessel begins, or

c. assembly has commenced comprising at least 1 per cent of the estimated mass of all structural material, whichever is less;

(iv) joined the Register as a fishing vessel under the requirements set out in section 1.7 of this Code.

.39 "Non-combustible material" means material that neither burns nor gives off flammable vapours in sufficient quantity for self-ignition when heated to a temperature of 750°C, this being determined in accordance with the IMO Fire Test Procedures Code. Any other material is a combustible material;

.40 "Open Decks"; anywhere on a vessel that is exposed and not within a weather tight or watertight area or within the shelter deck area of a vessel;

.41 "Owner" means the registered owner of a vessel, unless that vessel has been chartered by demise or is managed, either wholly or in part, by a natural or legal person other than the registered owner under the terms of a management agreement; in that case, the owner shall be construed as the demise charterer or natural or legal person managing the vessel as appropriate;

.42 "Perpendiculars"

.1 The aft perpendicular shall be taken at the after end of length between perpendiculars (LBP). This shall be the measured on the waterline at 85% of the moulded depth and shall be either the aft side of the stern or the axis of the ruder stock, whichever is the longer;

.2 Amidships is the perpendicular to the waterline at a distance 0.5L aft of the forward perpendicular;

.3 Forward perpendicular, means the perpendicular at the forward end of the ship's length between perpendiculars coinciding with the foreside of the stem on the waterline at 85% of the moulded depth on which such length is measured;

.43 "Personal Floatation Device" means a lifejacket or a buoyancy aid of at least 150N or a wearable buoyancy device of at least 50N that provides buoyancy in the water. The intended use of a PFD is to be constantly worn in the case of falling overboard, rather than for intentionally entering the water or survival craft during an abandon ship scenario

.44 “Ramp door, hatch or lid” is a power operated deck level hatch used to empty the catch from the codends into the fish holding ramp;

.45 "Retro-reflective material" is a material which reflects in the opposite direction a beam of light directed on it;

.46 “Sea” in the context of ‘at sea’ means all waters outside a safe haven and “safe haven” means a harbour or shelter of any kind which affords entry, subject to prudence in the weather conditions prevailing, and protection from the forces of weather. Details of categorised waters can be found in MSN 1837 or any superseding MSN;

.47 “Skipper” means the certified officer/crew member who commands, or has responsibility of the vessel holding the relevant certificates;

.48 “SOLAS 1974 as amended” means the International Convention for the Safety of Life at Sea, 1974;

.49 “Standard fire test” is a test in which a specimen of the relevant bulkhead or deck is exposed in a test furnace to temperatures corresponding approximately to a standard time – temperature curve in accordance with the IMO Fire Test Procedures Code;

.50 “Standards” such as BS (British Standard), EN (European Standard accepted by the European Committee for Standardisation, CEN), IEC (International Electrotechnical Commission) and ISO (International Organisation for Standardisation) and MED (Marine Equipment Directive) identified in the Code for reference purposes, shall include any standards that amend or replace them;

.51 "Steel or other equivalent material" means steel or any material which, by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of the applicable fire exposure to the standard fire test (e.g. aluminium alloy with appropriate insulation);

.52 "Superstructure" is the decked structure on the working deck extending from side to side of the vessel or with the side plating not being inboard of the shell plating more than 0.04B;

.53 “Survey” means the survey for the issue of a Construction and Outfit Certificate or for the issue of a Registration Survey Comparison Report prior to Registration as a Fishing Vessel

.54 “UK fishing vessel” means a fishing vessel which meets the criteria set out in section 85(2)(a) of the Merchant Shipping Act 1995;

.55 “Small Fishing Vessel Certificate” means a certificate issued in respect of a fishing vessel under this Code, and takes the format set out in Annex 2;

.56 “Vessel” means a New Vessel (2020), a New Vessel (2018) or existing fishing vessel;

.57 “Watertight” in relation to a structure means capable of preventing the passage of water through the structure in any direction under a head of water for which the surrounding structure is designed;

.58 “Weather deck” means the main deck that is exposed to the elements;

.59 “Weathertight” means that in any sea conditions water will not penetrate into the vessel.

1.4 CODE REQUIREMENTS

1.4.1 Compliance with Code Requirements

1.4.1.1 To comply with the Code the vessel owner is responsible for ensuring that the vessel:

(i) is built, equipped, surveyed, certified, maintained and operated in accordance with the relevant provisions of the Code;

(ii) is subjected to annual self-certification inspections in accordance with section 1.5;

(iii) continues to comply with the requirements of the Code in service;

(iv) is operated by appropriately qualified and certificated crew who have completed mandatory training courses; and

(v) is not operated as a fishing vessel without a valid UK fishing vessel certificate being in force.

1.4.2 Inspection and Certification of fishing vessels

1.4.2.1 Applications for survey or inspection shall be made by or on behalf of the owner of the vessel to MCA giving reasonable notice, for the survey or inspection to be carried out, at the port agreed with the MCA.

1.4.1.2 The vessel owner shall present the vessel for inspection on first registration, at change of ownership and at intervals not exceeding five years from the date of last inspection for a Certificate Renewal Inspection. If owners wish to present their vessels as a group to be inspected on the same day, the Marine Office should be contacted to make the necessary arrangements.

1.4.1.3 The owner should arrange for a renewal examination to be carried out by the MCA prior to the expiry of the existing certificate. The vessel shall be inspected both in and out of the water. The out of water inspection may take place at any time in the 6 months prior to the expiry of the current Small Fishing Vessel Certificate. Out of Water inspections are not required, but are recommended, prior to the end of the Phase in period set out in Section 1.2.6 above. After that date, they must be conducted at the next 5 year renewal inspection. Upon satisfactory completion and verification that the vessel complies with the Code of Practice, the Small Fishing Vessel Certificate may be issued. Where a renewal examination is completed beyond the expiry of the existing certificate, the new Certificate should be valid for not more than five years from the expiry of the existing certificate, unless it has been agreed in advance with the Certifying Authority that the new Certificate may be dated from the date of completion of the renewal examination.

1.4.1.4 On satisfactory completion of the inspection, a Small Fishing Vessel Certificate will be issued. The Small Fishing Vessel Certificate may remain in force for 5 years from the date of its issue or such shorter periods as may be specified by the Maritime and Coastguard Agency (MCA). Small Fishing Vessel Certificates issued at change of ownership will only be issued upto the date of expiry of the previous Certificate unless the vessel is seen within 6 months of the expiry of the Certificate and Out of Water and In Water Inspections are undertaken.

1.4.1.5 A vessel may be inspected by the MCA at any time to check compliance with Code requirements.

1.4.1.6 The MCA may cancel a Small Fishing Vessel Certificate if satisfied:

- that the certificate has been issued based upon false or erroneous information;

- that since the issue of the certificate, the hull, equipment or machinery have sustained any damage or are otherwise inadequate for their intended service;

- that the vessel has been significantly modified or altered or changed its mode of fishing without due authorisation by the MCA;

- that another Fishing Vessel Certificate has been issued in respect of the vessel; or

- that the vessel has ceased to be registered as a fishing vessel in the United Kingdom.

1.5 **Annual self-certification**

1.5.1 The vessel owner shall ensure that every year, within 1 month of the anniversary of the vessel's registration they (or other competent person(s) employed by them) inspects the vessel to confirm that the:

.1 safety equipment carried on board the vessel has been suitably maintained and serviced in accordance with the manufacturer's instructions; and

.2 safety and other specified equipment continues to comply with the checklist appropriate to the length and construction of the vessel: and

.3 a health and safety risk assessment has been completed and given or explained to the crew.

1.5.2 On completion of these annual checks, the owner must sign a self-certification declaration as contained in the Specimen Certificate at Annex 3 confirming that the vessel complies with the Code and retain a copy of the declaration on board for inspection purposes.

1.6 **Vessel Modifications and Change of Mode of Fishing**

1.6.1 The owner of a United Kingdom fishing vessel must notify the MCA at the earliest opportunity of the details of any proposal to alter or modify the structure of that vessel, remove or reposition engines or machinery or change the mode of fishing and/or its gear.The MCA will consider whether these modifications and alterations shall be investigated, prior to making any changes, to ensure that the vessel will continue to comply with the required stability criteria. In addition, modifications or alterations to any vessel shall only be carried out after consultation and with the approval of the MCA.

1.6.2 The Heel Test and Roll Test as set out in MGN 503 should be carried out both pre and post modification. These tests can indicate whether stability has been significantly changed as a result of modifications made to the vessel, its gear or gear handling arrangement or other changes. The heel test can be repeated to assess modifications to the vessel or to assess the effects of cumulative weight gain over time. It is essential that the repeat test is conducted with the vessel arrangement and test weight being as close as possible to the previous test.

1.7 **Construction and Outfit Standards for Vessels joining the Register for the first time or have previously Registered as a Fishing Vessel on the UK Flag but have been unregistered for a period of 6 months or more.**

1.7.1 In addition to the requirements contained in sections 1.4 and 1.5, vessels less than 7m Registered Length wishing to join the UK Register as a fishing vessel for the first time have to demonstrate that their vessel's construction is of a suitable standard and in the case of vessels 7m and over registered length, their construction and outfit, is of a suitable standard.

1.7.2 For vessels built on or after 16 July 2007, and registering as a fishing vessel for the first time, the construction and outfit must conform to the recognised standard of a Certifying Authority for small Fishing Vessels or an equivalent standard recognised by the MCA as suitable for Fishing Vessels, such as those of a Recognised Organisation. Failure to do so will result in the vessel not being registered. On first registration of a vessel, the owner shall supply the required hull construction and outfit certificates to the Registry of Shipping and Seamen (RSS), together with the Small Fishing Vessel Certificate in order that the vessel can be registered. A Certifying Authority means the MCA, or a person authorised by the MCA for the purpose of examining vessels and issuing and signing Certificates of Construction and Outfit for vessels built on or after 16 July 2007 or Survey Reports for vessels built prior to that date.

1.7.3 For vessels built prior to 16 July 2007, owners will be required to prove that the condition of the vessel is satisfactory. This is carried out through a Certifying Authority who will complete a registration survey. This survey will examine the vessel's structure and, in the case of vessels of 7m and over, their outfit, against the Fishing Vessels Construction and Outfit Standards of a Certifying Authority or an equivalent recognised by the MCA as suitable for Fishing Vessels, such as those of a Recognised Organisation. The MCA will then examine the Certifying Authority's Survey Report, and either allow registration or require the owner to address areas of concern. Registration will not be allowed to proceed until areas of concern have been addressed to the satisfaction of the MCA and the Certifying Authority. When registering the vessel, the owner shall supply the Survey Report from the Certifying Authority and the Small Fishing Vessel Certificate to RSS in order that the vessel may be registered. Alternatively, the vessel should comply with an equivalent standard recognised by the MCA as suitable for fishing vessels.

1.7.4 Vessels that have previously been on the UK Register, but that are currently off the Register for any reason and apply to re-register after a period of 6 months or more have elapsed since they left the Register will be treated in accordance 1.7.3 above, regardless of vessel's age.

1.7.5 For all vessels a MCA safety inspection must follow the Certifying Authority's registration survey or the issue of a Certification of Construction and Outfit, as applicable. The MCA inspection will cover the requirements of this Code, the crew qualifications, and any other mandatory requirements.

1.7.6 To register a Fishing Vessel built on or after 16 July 2007 the following is required:

Vessel Length	Hull Construction Certificate issued by a Certifying Authority	Outfit Compliance Certificate issued by a Certifying Authority
Less than 7 metres (L)	Yes	Recommended
7 metres (L) to less than 12 metres (L)	Yes	Yes
12 metres (L) to less than15 metres (LOA)	Yes	Yes

1.7.7 To register a fishing vessel built before 16 July 2007, the following is required;

Vessel Length	Registration Survey by a Certifying Authority
Less than 7 metres (L)	Yes
7 Metres (L) to less than 12 metres (L)	Yes

12 metres (L) to less than 15 metres (LOA)	Yes

1.7.8 Before purchasing an existing vessel or commissioning a new build vessel you are advised to seek professional advice on:

- the suitability of the vessel for its intended mode of fishing; and
- the suitability of the vessel to be registered as a fishing vessel.

1.8 APPEAL PROCEDURES

1.8.1 If an owner is dissatisfied with an inspection, then this should in the first instance be discussed with the person who carried out the inspection.

1.8.2 If agreement cannot be reached with the person who carried out the inspection the owner may refer the matter to the Consultant Surveyor (Fishing Vessels) in the Region where the vessel was inspected.

1.8.3 Should the above procedure fail to resolve the dispute, the owner may refer the matter to the Director of Maritime Safety and Standards at MCA Headquarters, and, if necessary, to the MCA Chief Executive.

1.8.4 If an owner is still not content with the way in which the complaint has been handled, the owner may serve notice, within twenty-one days, of the completion of the procedure given in sections 1.8.1 to 1.8.3 above, on the MCA that their dispute be referred to a single arbitrator appointed by agreement between the MCA and the owner.

1.8.5 A person should not be qualified for appointment as an arbitrator unless that person is:

(i) a person holding a certificate of competency as a deck officer, marine engineer officer or equivalent;

(ii) a naval architect;

(iii) a person with special experience of the fishing industry;

(iv) a member of the Chartered Institute of Arbitrators; or

(v) a person holding a Certificate of Competency (Fishing Vessels) Class 1.

1.8.6 The final allocation of costs will depend on the arbitrator's decision. If the decision is in the favour of the owner, the arbitrator may award the owner such compensation as the arbitrator thinks fit in addition to allocating costs.

1.8.7 The Ombudsman (also called the Parliamentary Commissioner for Administration) plays an important role as the final step on the complaints ladder and provides a fully independent channel for reviewing complaints. If an owner wishes to complain to the Ombudsman, they should write to their MP, and ask him or her to refer it to the Ombudsman.

1.8.8 Usually, before an owner can complain to the Ombudsman's Office, they will expect the owner to have put their complaint to the Agency first, using the MCA's internal complaints procedure.

Chapter 2 - Construction, Weathertight and Watertight Integrity

2.1 General

2.1.1 *New Vessels (2020) must be built and maintained to the standards contained in a recognised Construction and Outfit Standard for Fishing Vessels, and with the requirements stated in this chapter*. *Hull construction and arrangement drawings shall be reviewed and approved by a Certifying Authority. The hull shall be surveyed during construction by a Certifying Authority to verify compliance with the approved drawings. An appropriate certificate of construction shall be issued on completion of build.* *N*

2.1.2 For vessels already in the Register, the existing arrangements will be accepted, subject to the requirements stated in this chapter as applying to all vessels.

2.1.3 The structural strength and construction of every fishing vessel and the disposition of bulkheads shall be adequate for all foreseeable operating conditions in service. The scantlings, arrangements and construction for the hull, bulkheads, superstructures, deckhouses, machinery casings, companionways and other structures shall be sufficient to withstand all operational loads arising during the vessel's service. Particular attention should be paid to the intended fishing methods.

2.1.4 The vessel should be *designed, constructed* and maintained in such a manner as to be watertight and in accordance with the Construction Standard applicable at the time of construction.. The number of openings in the weathertight structure of the vessel must be as few as practicable and be provided with the closing and securing arrangements described below.

2.2 Construction Materials

2.2.1 *Vessels should be constructed of the following materials or a suitable combination:*

i) *Wood;*

ii) *Fibre/Glass reinforced plastic (F.R.P.) (G.R.P.);*

iii) *Steel;*

iv) *Aluminium Alloy.* *N*

2.2.2 Vessels of construction and materials differing from those in 2.2.1 will be specially considered, taking into account the nature of the material and soundness of construction.
N

2.2.3 When modifications or repairs are carried out to all vessels, these must be in accordance with a recognised Construction Standard for Fishing Vessels and the additional or replacement construction materials must be of a similar nature and standard as the original material. Alternative materials must also be compatible with the original hull material.

2.3 Decks

2.3.1 Full length and partial weather decks, including shelter decks, must be of sound and watertight construction, and be of sufficient strength to withstand the sea and weather conditions likely to be encountered.

2.3.2 Recesses in weather decks must be fitted with drainage arrangements so that the deck drains under all normal conditions of trim, and it is recommended that they operate efficiently at a heel of 10°.

2.3.3 *Minimum requirements for freeboard are given in section 3.10.* *N*

2.4 Bulkheads

2.4.1 Bulkheads, if fitted, are required to be watertight and not breached. Where the vessel was constructed to Standards which did not require watertight construction, or not standards did not exist, the existing arrangement may be maintained at the discretion of the MCA.

2.4.2 The requirements of a recognised Construction Standard for Fishing Vessels should be incorporated when the vessel undergoes major structural work or alterations and in the case of machinery space bulkheads, when the vessel is re-engined.

2.5 Access through Bulkheads

2.5.1 Accesses through watertight bulkheads, if fitted, shall be of watertight construction, have equivalent structural strength as the adjacent bulkhead and be kept closed at sea.

2.6 Doorways above Weather Deck

2.6.1 Doorways giving access to space below the deck should be fitted with a permanent coaming of 300 mm minimum height above the deck. Alternatively, a portable coaming may be provided, fixed in guide channels to give a minimum coaming height of 300 mm.

2.6.2 Doors must be of sound construction and be weathertight.

2.7 Hatches and Coamings

2.7.1 Where access or loading/unloading hatchways are fitted in the weather deck raised coamings, of substantial construction and with a minimum height of 300 mm, should be provided. If this is not practicable, owing to the operation of fishing gear or working space obstructions, the coaming may be omitted, provided that the hatch can be secured weathertight. Hatches must only be kept open when necessary for fishing operations and otherwise be kept closed at sea to prevent the risk of downflooding and capsize and signage provided stating “To be Kept Closed at Sea”. Hatchway covers fitted in the weather deck must be provided with efficient means of securing weathertight closure Flush deck hatches are not recommended unless necessary and any hatches that are required to be open at sea must have coamings.

2.7.2 Hatchways should be as small as possible subject to the requirements of Access and Escape Arrangements.

2.8 Flush Hatches and Scuttles

2.8.1 Ice scuttles, where fitted, must be of metal construction, with screw or bayonet type clamp fastening and with the loose cover permanently attached to the structure with hinges, wire or chain and be capable of being closed watertight. Scuttles and hatches must be kept closed at sea to prevent the risk of downflooding and capsize.

2.9 Skylights

2.9.1 Skylights must be of efficient construction and be capable of being closed watertight from both sides. Skylights used as emergency escapes shall be kept clear of obstructions. Where the glazing material and its method of fixing is not equivalent in strength to the surrounding structure, portable blanking pieces or plates that can be secured over the glazing must be provided. Portable blanking pieces or plates must be stored in a readily accessible position.

2.10 Side Scuttles and Portlights

2.10.1 Side Scuttles and Portlights *shall not be fitted below the weather deck.* Side scuttles or portlights fitted below the weathertight deck and not fitted with an attached deadlight must be provided with a

portable blanking plate, which can be efficiently secured, if the glazing breaks. Portable blanking plates must be stored in a readily accessible position. *N*+E

2.10.2 Glazing material in existing sidelights must be sound and efficiently secured. When the glazing material is damaged it must be blanked off. Replacement material must meet the requirements of a recognised Construction and Outfit Standard for Fishing Vessels.

2.11 Windows

2.11.1 *Windows shall not be fitted below the weather deck.* Windows fitted to spaces above the weather deck, such as a deckhouse or superstructure protecting an opening leading to below the weather deck, must be weathertight. N+*E*

2.11.2 Glazing material in existing windows must be sound and efficiently secured, and glass should be toughened or laminated. When the glazing material is damaged it must be blanked off. Replacement material must meet the requirements of a recognised Construction and Outfit Standard for fishing vessels.

2.12 Ventilators

2.12.1 An effective means of ventilation is to be provided to all enclosed accommodation spaces, and service spaces which under normal operating conditions may be entered by persons on board.

2.12.2 There shall be sufficient fresh air in enclosed workplaces, having regard to the work methods used and the physical demands that are placed on the crew.

2.12.3 If a mechanical ventilation system is used, it shall be maintained in good condition

2.12.4 Ventilators serving spaces below the weathertight deck must be provided with an effective means of weathertight closure.

2.13 Exhaust Systems

2.13.1 Engine exhaust systems of the dry or water-injected type, which discharge through the hull below the weathertight deck at the side or stern, should be provided with permanently attached means of preventing back flooding into the hull or engine through the exhaust system. This may be by system design or valve or non-return device.

2.13.2 Exhaust systems which go up by the funnel hall be insulated to prevent the risk fire and ventilated away from crew.

2.14 Air Pipes

2.14.1 Air pipe arrangements must be of sound construction, operate efficiently and be provided with an efficient means of watertight closure, with provision made to prevent overpressure or vacuum occurring when tanks are filled or emptied.

2.14.2 Exposed air pipes, in excess of 25 mm diameter, serving fuel oil, hydraulic oil, and lubricating oil tanks must be fitted with anti-flash gauze diaphragms. Where the pipe in 25mm or less in diameter alternative arrangements may be considered.

2.15 Sea Inlets and Discharges

2.15.1 Sea inlets and discharges should be fitted with an efficient means of closure. Inlets should be marked with open/closed and the system they serve.

2.15.2 Use of flexible hoses must be minimised and consideration given to installing permanent piping wherever possible. Where sea inlet piping systems comprise flexible hose, the connection of the hose to the sea inlet must be of sound and efficient construction and purpose designed clips used where possible. Where this is not possible, double clipping may be accepted.

2.15.3 Inlet or discharge openings should be fitted with a valve or seacock at the hull connection, which is readily accessible for operation in an emergency. If such valves are inaccessible in an emergency, they should be fitted with a remote means of operation, i.e. by extended spindle or wire pull device operable above floor plate level

2.15.4 Openings serving as discharges from engine cooling water, bilge and general service pumps, galley and toilet drains, etc., should be also fitted with an automatic non-return valve adjacent to the closing valve. Alternatively, a screw down non-return type valve may be fitted.

2.16 Materials for Valves and Associated Piping - Sea Water Systems

2.16.1 Valves, pipes and fittings serving as sea inlets and discharges attached directly to the hull of the vessel below the load waterline should be of steel, bronze, or other equivalent and compatible material.

2.16.2 Where the sea inlet valve or fitting is connected to the hull by means of a tube or distance piece, the tube or distance piece should be of a material that is compatible with the hull and valve.

2.16.3 Valves, piping and flexible hoses must be of sound and efficient construction and installation. All piping systems must be well supported with pipe clips or mounts and protected against vibration and chafing.

2.17 Water freeing arrangements - Open Vessels

2.17.1 Open type vessels are to be fitted with bilge pumps as required by section 4.9 of this Code

2.17.2 In open vessels where water coming on board normally drains to the bilge, the following provisions should apply:-

1. The height of any door sill above the fixed sole level in open type vessels should be as high as practical, but in New Vessels (2020) no less than 200mm. If hinged, the door should open outwards. Doors should be operable from both sides.

2. Air pipes and ventilators leading from below the level of the sole should have the open end as high as practical and be protected against mechanical damage.

2.17.3 Sole drainage on open vessels is to be given careful consideration. The level of the floor should not be positioned at such a height that it would have an adverse effect on the stability of the vessel, the following guidance is given:-

1. There should be effective drain openings fitted on each side of the sole to enable any water to drain directly to the bottom of the vessel. In the case of a vessel with a sealed sole, an aft sump is to be fitted, extending from the keel to deck.
2. It is recommended that the drainage area be at least 2% of the total bulwark area above the sole.
3. Open vessels are not to be fitted with freeing ports.
4. Any barrier or coaming which may be fitted to the sole to prevent the entry of rain water to the bottom of the vessel should not be at a height any greater than 25mm above the level of the sole.

5. The bilge pumping intake should be at a readily accessible position.

6. Sole support structures that form buoyancy spaces are to sealed and surfaces that may come into contact with water are to be sealed with gel coat or similar.

2.17.4 Open boats with a sole and which are fitted with a small limber hole shall have the limber hole replaced with a proprietary drain fitting with a screw in plug which is permanently attached. The drain shall be plugged in operation but may be opened when out of service to protect the vessel. The hole should be 25mm diameter at the most

2.17.5 These vessels shall carry suitable manual bilge pumping to remove significant quantities of water off the deck. In any situation the capacity of the bilge pump will exceed the potential rate of flooding by several orders of magnitude.

2.18 Water freeing Arrangements – Decked Vessels

2.18.1 On decked vessels, where the fixed bulwarks, ends or sides of superstructures etc., form enclosed wells, means to clear entrapped water are to be provided and may comprise any, or any combination, of the following:-

(i) Freeing ports with an attached means of closing (provided that the freeing port is closed only during fishing operations and that the closing device is easily operable and accessible, subject to the approval of the Surveyor).

(ii) Permanent openings in the bulwarks such as slots.

(iii) Apertures in and under bulwark or stern ramp doors.

(iv) Deck scuppers where the discharge is above the load waterline.

2.18.2 The minimum area for freeing ports on each side of the well or deck is to be not less than 3% of the total bulwark area each side.

2.18.3 Openings in the vessel to the height of the rail or used for the purposes of deploying gear are not to be used in the calculation of freeing port area.

2.18.4 Lift-up closing appliances should not be fitted to freeing ports, or locking devices fitted to freeing port flaps, if they reduce the total freeing port area along either side of the vessel below the freeing port requirement. They will only be considered acceptable where the remaining open freeing port area meets the requirement when the appliances are closed

2.18.5 Freeing ports are to be arranged throughout the length of the bulwark or well to provide maximum drainage under all normal conditions. At the discretion of the attending surveyor, up to one third of the freeing port area required at each side may be located in the transom bulwark, with the vessel centreline dividing the port and starboard side allocation. Where the freeing port area in the transom bulwark is greater than the maximum one third allowance per side, the excess area shall not be included in the total freeing port area provided.

2.18.6 Where deck erections within a well limit the volume of water that may be retained onboard, then the freeing port area may be reduced proportionally provided that such erections do not in themselves contribute to water retention.

2.18.7 The means of clearing water must not provide easy access for water to enter the enclosed deck space.

2.18.8 Any freeing port or slot in the bulwark is to have the bottom edge as close to the deck as possible. Freeing ports greater than 230mm in depth and wider than 350mm are to be fitted with bars.

2.18.9 Where freeing ports are fitted with hinged flaps or shutters, sufficient clearance to prevent jamming is to be provided and hinges are to be fitted with pins of non-corrodible material. Greasing points or nipples are to be provided where practicable.

2.18.10 Care is to be taken that deck pounds, machinery and net or gear stowage will not impede the free flow of trapped water to the freeing ports or slots.

2.18.11 Lift-up closing appliances fitted to freeing ports are to be so arranged that they are secure in the open position. Lift-up closing appliances should be fitted to no more than 50% of ports.

2.18.12 Where vessels are fitted with full or partial shelters which are left open at the stern, and where the passage of water forward is not restricted by watertight bulkheads, the freeing port area is to be increased by 1% over the requirement stated in section

2.18.13. Freeing Ports must not be kept closed, water retained on board the vessel will reduce stability and increase the risk of capsize.

Chapter 3 – Stability and Freeboard

3.1 All vessels

3.1.1 The carriage of unnecessary spare gear, stores and parts, the accumulation of debris and the cumulative effects of minor modifications over time can adversely affect the vessel's stability. Attention shall be made to limiting these effects.

3.1.2 All vessels are required to maintain a record of stability tests. Where a stability information book is NOT currently required, a record book shall be maintained which contains:

- results of heeling or roll tests conducted, as per MGN503 as a minimum at the time of Certificate renewal (to facilitate detection of changes in stability);
- Wolfson Stability Guidance Notice and the associated freeboard (to provide direct guidance on safe loading & lifting. The fitting of the Freeboard Mark is recommended).

3.1.3 Additional Guidance on Stability is contained in the MCA publication "FISHING VESSEL STABILITY GUIDANCE" available from ecgroupinfo@ecgroup.co.uk by quoting MCA/263 or can be downloaded from https://www.gov.uk/government/publications/fishing-vessel-stability-guidance.

3.1.4 Stability Notices can be produced through the following link https://www.safetyfolder.co.uk/

STABILITY OF ALL FISHING VESSELS OF 12 METRES (L) TO LESS THAN 15 METRES (LOA) BUILT, OR JOINING THE REGISTER AFTER 23 OCTOBER 2017

3.2 General Requirements

3.2.1 All fishing vessels of 12 metres (L) to less than 15 metres (LOA) built or joining the Register after 23 October 2017 shall be provided with approved stability information to the satisfaction of the MCA, in accordance with MGN 281(F), for the vessels' intended operation.

3.2.2 Placement of the draught marks shall be witnessed by the MCA. Vessels of 12 metres (L) to less than 15 metres (LOA) built before the entry into force of this Code and already Registered as Fishing Vessels are recommended to comply with these requirements.

3.2.3 The approved stability information shall contain the information and particulars that are detailed in Annex 4.

3.2.4 All vessels shall be sufficiently stable when intact in the conditions of service for which they are intended.

3.2.5 The skipper shall take the precautionary measures necessary to maintain adequate stability of the vessel.

3.2.6 Information on the vessel's stability shall be available on board and accessible to those on watch.

3.2.7 Instructions supplied concerning the vessel's stability shall be strictly observed by those on watch.

3.2.8 Stability information shall be checked and the continuing validity confirmed at certificate renewal by verifying the vessel's lightship details held by the MCA. When changing, repositioning or adding

equipment that adds or removes significant weight or places the weight at a different height, either higher or lower, e.g. fishing gear, winches, or shelters, advice shall be sought from MCA on the effect this could have on the stability of the vessel before the changes are made.

3.2.9 Owners must apply the Wolfson Method as set out in Annex 8 and display the Wolfson Stability Notice in a prominent position on the vessel. The fitting of the Wolfson Mark is recommended. The owner must produce a new Notice if the vessels dimensions are altered.

3.3 Intact Stability Criteria for Vessels Requiring a Stability Information Booklet

3.3.1 Vessels shall, for the operating conditions and circumstances set out in Annex 4 including icing allowances when applicable, and in all foreseeable operating conditions, satisfy the following stability criteria after due correction for the free surface effects of liquids in tanks:

.1 The area under the curve of righting levers (GZ curve) should not be less than:

a) 0.055 metre-radians up to an angle of 30°;

b) 0.090 metre-radians up to an angle of 40° or such lesser angle of heel at which the lower edges of any openings in the hull, superstructures, deckhouses or companionways, being openings that cannot be closed weathertight, are immersed;

c) 0.030 metre-radians between the angles of heel of 30° and 40° or such lesser angle as defined in (b);

.2 the righting lever (GZ) should be at least 200 millimetres at an angle of heel equal to or greater than 30°;

.3 the maximum righting lever (GZ) should occur at an angle of heel not less than 25°;

.4 in the upright position the transverse metacentric height (GM) should not be less than 350 millimetres.

3.3.2 If a vessel with beam to depth ratio greater than 2.5, such as a catamaran or multihull type does not meet the stability criteria given in section 3.3.1, the vessel should meet the following criteria:

i) the area under the righting lever curve (GZ Curve) should not be less than 0.085 metre radians up to θ_{GZmax} when $\theta_{GZmax} = 15^o$ and 0.055 metre-radians up to θ_{GZmax} when $\theta_{GZmax} = 30^o$.

When the maximum righting lever, GZmax, occurs between $\theta = 15^o$ and $\theta = 30^o$ the required area under the GZ Curve up to θ_{GZmax} should not be less than:

$A = 0.055 + 0.002(30^o - \theta_{GZmax})$ metre-radians

where: θ_{GZmax} is the angle of heel in degrees at which the righting lever curve reaches its maximum.

ii) the area under the righting lever curve between $\theta = 30^o$ and $\theta = 40^o$ or between $\theta = 30^o$ and the angle of downflooding θf, if this angle is less than 40^o, should not be less than 0.03 metre-radians;

iii) the righting lever GZ should not be less than 0.2 metre at an angle of heel of 30 degrees;

iv) the maximum righting lever should occur at an a angle not less than 15 degrees; and

v) the initial metacentric height GM_o should not be less than 0.35 metre.

3.3.3 For vessels engaged on single or twin boom fishing the values of dynamic stability, righting lever and metacentric height given in sections 3.3.1 i), ii), iv) and 3.3.2 i), ii), iii), v) respectively shall be increased by 20%.

3.4 Damage Stability requirements for multihull vessels

3.4.1 In addition to complying with the intact stability criteria in sections 3.3.1 to 3.3.3 multihull vessels should comply with the requirements of Annex 5 below.

3.5 Lightship Particulars

3.5.1 The lightship weight, vertical centre of gravity (VCG) and longitudinal centre of gravity (LCG) should be determined from the results of an inclining experiment. Guidelines for the procedure on carrying out of an inclining experiment can be found in the Instructions for the Guidance of Surveyors on Stability Approval (MSIS 9), Chapter 1, Annex 3[1].

3.5.2 An inclining experiment may not produce satisfactory results for vessels such as multihulls where the VCG is less than one third of the GM over the range of standard operating conditions. In such cases the LCG should be obtained by lightweight survey (MSIS 9, Chapter 1, Annex 1) or by weighing with two gauges (e.g. one fore and one aft). The lightship VCG may be obtained by an accurate weight estimate calculation with a suitable margin added, in no case should the lightship VCG be taken below main deck level. Details of the estimated lightship weight, LCG and VCG should be submitted to the MCA at an early stage for verification.

3.5.3 The lightship weight may include a margin for growth, up to 5% of the lightship weight at the discretion of the MCA, positioned at the LCG and vertical centre of the weather deck amidships or the lightship VCG, whichever is higher. (The lightweight margin should not be used in practice to increase maximum cargo-deadweight).

3.5.4 For any newly built ship with known differences from a sister ship, a detailed weights and centres calculation to adjust the lead ship's lightship properties should be carried out.

i) The lightship properties for the new ship may be assessed by carrying out a lightweight survey. The deviation in lightship displacement should not exceed 2% of the lightship displacement of the sister ship. In addition, the deviation in lightship LCG should not exceed 1% of the LBP of the sister ship LCG. Where the deviation is within these limits the actual lightship weight and LCG derived from the lightship check should be used in conjunction with the higher of either the lead ship's VCG or the calculated value.

ii) Subject to the agreement of the MCA, the requirement for an inclining test may be dispensed with in cases where the margins on intact and damage stability are sufficient to permit minor changes in VCG, e.g. a minimum of 10% margin on intact and damage stability criteria requirements, and the weight difference can be accurately assessed to the satisfaction of the MCA. In addition, the vessel must be similar in all respects and the MCA must be satisfied with the procedure and accuracy of the original inclining. Small modifications, for which an accurate assessment by calculation may be taken into account, are acceptable. Where lightship particulars of a vessel are based on a lightship survey the inclining report for the 'lead' sister vessel should be included in the stability information of the subsequent sister/s.

[1] http://www.dft.gov.uk/mca/mcga07-home/shipsandcargoes/mcgashipsregsandguidance/mcga-dqs-ss_guidance_to_surveyors.htm

iii) Where the deviation exceeds either of these limits, an inclining test should be carried out.

iv) A sister ship is defined as a ship built under the survey of a Certifying Authority, by the same yard from the same plans and within five years of the new ship.

3.6 NEW VESSELS (2020) OF LESS THAN 12M (L) OR VESSELS WISHING TO JOIN THE REGISTER ON OR AFTER THE DATE OF ENTRY INTO FORCE OF THIS CODE

3.6.1 For fishing vessels of less than 12m, wishing to join the register on or after the date of entry into force of this Code, the requirements for stability are based on the fishing method.

3.6.2 The following types of fishing method shall be deemed Category A and are addressed in Section 3.7

- Beam Trawling;
- Chain Matt;
- Open Gear;
- Simple Rigs
- Mussel and Scallop Dredges
- Stern Trawling

3.6.3 The following types of fishing method shall be deemed Category B and are addressed in Section 3.8:

- Scotch Poles;
- Bulk Fishing;
- Potting;
- Pair Trawling;
- Seine Net.
- Vessels with Vivier Tanks

3.6.4 The following types of fishing method shall be deemed Category C and are addressed in Section 3.9:

- Gill and Trammel netting;
- Rod fishing;
- Line fishing.

3.6.5 Other types of fishing not specified shall be deemed Category A and meet the requirements set out in Section 3.7 although MCA may consider, on a case by case basis, other methods of fishing and may assign either Category B or Category C as appropriate.

3.6.6 If a New Vessel (2020) changes it's fishing method to one in a different category, it must comply with one of the Stability requirements for the proposed new Category. Before changing fishing method, owners must seek approval from MCA.

3.7 Stability of Category A New Vessels (2020) of less than 12m (L) or vessels wishing to join the Register on or after the entry into force of this Code

3.7.1 Category A vessels categorised of less than 12m (L) that are built or join the register for the first time on or after the date of entry into force of this Code must comply with the same requirements as vessels of 12 metres (L) to less than 15 metres (LOA) built, or joining the Register after 23 October 2017, as set out above in Sections 3.1 to 3.5

3.7.2 Owners must apply the Wolfson Method as set out in Annex 8 and display the Wolfson Stability Notice in a prominent position on the vessel. The fitting of the Wolfson Mark is recommended. The owner must produce a new Notice if the vessels dimensions are altered.

3.7.3 A Lightship check in accordance with s section 3.5 shall be applied and repeated at certificate renewal.

3.8 Stability of Category B New Vessels (2020) of less than 12m (L) or wishing to join the Register on or after the date of entry into force of this Code.

3.8.1 Vessels to which this section applies have two options for demonstrating suitable stability.

.1 Compliance with the requirements for vessels of 12m (L) to less than 15m (LOA) built or joining the Register on or after 23 October 2017: or

.2 Off set load Test at Annex 6;

3.8.2 For vessels complying with the requirements of .1, the requirements of sections 3.1 to 3.5 apply.

3.8.3 Owners must apply the Wolfson Method as set out in Annex 8 and display the Wolfson Stability Notice in a prominent position on the vessel. It is not necessary for the mark to be placed on the vessel. The owner must produce a new Notice if the vessels dimensions are altered.

3.8.4 If the vessel complies with 3.8.1.1, then a Lightship check shall be undertaken and repeated at Certificate renewal. If the vessel complies with 3.8.1.2, then the off set load test shall be conducted at Certificate renewal.

3.9 Stability of Category C New Vessels (2020) of less than 12m (L) or wishing to join the Register on or after the date of entry into force of this Code.

3.9.1 The options applicable to vessels to which this section applies are.

.1 Compliance with the requirements for vessels of 12m (L) to less than 15m (LOA) built or joining the Register on or after 23 October 2017: or

.2 An Offset load Test at Annex 6; or

.3 if less than 6m, be constructed in compliance with ISO 12217-3; or

.4 If 6m to less than 12m, be constructed in accordance with ISO 12217-1.

3.9.2 Owners must apply the Wolfson Method as set out in Annex 8 and display the Wolfson Stability Notice in a prominent position on the vessel. It is not necessary for the mark to be placed on the vessel. The owner must produce a new Notice if the vessels dimensions are altered.

3.9.3 For vessels complying with the requirements of .1, the requirements of sections 3.1 to 3.5 apply. For vessels complying with .2 above, the requirements of 3.1 and 3.8.1.

3.9.4 For vessels complying with ISO 12217-1 or ISO12217-3, vessels must be CE marked demonstrating compliance with that ISO Standard and no modifications to the vessel must have taken place that will invalidate the certification.

3.9.5 If the vessel complies with 3.9.1.1, then a Lightship check shall be undertaken and repeated at Certificate renewal. If the vessel complies with 3.9.1.2, then the off set load test shall be conducted at Certificate renewal.

3.9.6 To ensure these vessels complying with 3.9.1.3 or 4 maintain adequate stability, at the initial inspection the vessel must either conduct a Roll or Heel Test as set out in MGN 503 or any superseding document. Example forms for recording the results of Roll or Heel Tests are contained at Annexes 13 and 14 respectively. Multi-hulled vessels must apply the Heel test. The results must be recorded. At each subsequent renewal inspection and when any vessel modifications take place, or the vessel changes fishing method, the exact same test must be repeated under the same vessel conditions.

3.10 Freeboard for New Vessels (2020) or vessels wishing to join the Register after [Date of Entry into force of the Code]. See also Annex 7.

3.10.1 Open vessels are to have a minimum freeboard, or "Positive Clear Height at Side" measured down from the lowest point of gunwale top to the design waterline. Freeboard measurements are to be not less than 400mm for a vessel of 7m LOA or less and 700mm for a vessel of 15m LOA. For a vessel of intermediate length the clear height should be determined by linear interpolation.

3.10.2 Open vessels are to be limited in their area of operation to 20 miles from a safe haven and in favourable weather conditions.

3.10.3 Decked vessels with a continuous watertight weatherdeck are to have a minimum freeboard from the design waterline of not less than 300mm. Freeboard is to be measured from the waterline to the lowest point of the deck at side.

3.10.4 Decked vessels with freeboard less than 300mm are to be limited in their area of operation to 20 miles from a safe haven and in favourable weather conditions

3.10.5 All vessels shall have a notice visible at the helm position stating the limited area of operation, alongside the Wolfson Stability Notice.

3.11 Existing Vessels of less than 15m LOA. See also Annex 7.

3.11.1 Vessels to which this section applies must have been Registered before [Date of entry into force of Code]. Any vessels that were Registered before [date of entry into force of Code] but have subsequently been Deregistered and off the Register for more than 6 months must comply with either the requirements for vessels of 12m (L) to less than 15M (LOA) joining the Register after [date of entry into force of Code] or vessels of less than 12m (L) joining the Register after the date of entry into force of this Code.

3.11.2 Owners of Existing vessels of all sizes and fishing methods must apply the Wolfson Method as set out in Annex 8 and display the Wolfson Stability Notice in a prominent position on the vessel. It is recommended that the Freeboard Mark is displayed. The owner must produce a new Notice if the vessels dimensions are altered.

3.11.3 Existing vessels must also conduct a Roll or Heel Test as set out in MGN 503 or any superseding document. Example forms for recording the results of Roll or Heel Tests are contained at Annexes 13 and 14 respectively. Multi-hulled vessels must apply the Heel Test. The results must be recorded. At each subsequent renewal inspection and when any vessel modifications take place, or the vessel changes fishing method, the exact same test must be repeated under the exact same condition.

3.11.4 Open vessels are to be limited in their area of operation to 20 miles from a safe haven and in favourable weather conditions.

3.11.5 Decked vessels with freeboard less than 300mm are to be limited in their area of operation to 20 miles from a safe haven and in favourable weather conditions. Decked and Open vessels must not reduce their freeboard below the levels recorded at the time of their first inspection to this Code of Practice. Existing Decked and Open vessels that comply with the requirements of 3.10 above must continue to do so.

3.11.6 Existing vessels that carry out modifications must inform MCA and, if so required by MCA, comply with the relevant stability requirements applicable to New Vessels (2020) employing the proposed Category of Fishing.

3.11.7 If an existing vessel changes it's fishing method to one in a different category, it must comply with one of the Stability requirements applicable to New Vessels (2020) for the proposed new Category. Before changing fishing method, owners must seek approval from MCA.

3.12 Stability Conditions on Small Fishing Vessel Certificates

3.12.1 The fishing method of the vessel shall be recorded on the Small Fishing Vessel Certificate. If the vessel changes its method of fishing without informing the MCA and the stability requirements appropriate to the proposed method being applied, the Certificate is no longer valid.

3.12.2 Vessels that operate more than one type of fishing method may have these methods marked on the Certificate.

3.12.3 The Certificate shall also indicate any limitations placed on the vessels area of operation.

4.1.1 General

4.1.1 New Vessels (2020) must be built and maintained to the standards contained in a recognised Construction and Outfit Standard for Fishing Vessels, and with the requirements stated in this chapter. *N*

4.1.2 For vessels already in the Register, the existing arrangements will be accepted, subject to the requirements stated in this chapter as applying to all vessels.

4.1.3 All vessels which fit a new engine of over 130kW must obtain a EIAPP Certificate.

4.1.4 Where vessels are being modified, then the modifications must be in accordance with a recognised Construction and Outfit Standard for Fishing Vessels. Other installations proposed may be specially considered, provided that full information is presented to and approved by a Certifying Authority. Attention is drawn to Chapter 11, Clean Seas, regarding prevention of pollution.

4.1.5 Machinery and pressure vessels shall be of a design and construction adequate for the service for which they are intended (fit for purpose) and be efficiently installed (taking into account the manufacturer's guidance) and protected, including the use of effective guards protecting moving parts so as to minimise any danger to persons on board. Access for persons must be arranged having due regard shall be given to moving parts, hot surfaces and other hazards. Hot surfaces must be sufficiently insulated. Pressure vessels shall be fitted with safety valves.

4.1.6 Ancillary equipment and piping must be in accordance with the appropriate part of the Code. In particular, care should be exercised when accessing the bilge area when shafts are rotating.

4.1.7 Layout and installation of machinery spaces and propulsion machinery should be designed for safe and efficient operation.

4.1.8 Lighting should be designed to facilitate easy inspection.

4.1.9 Ventilation should be provided either by mechanical fans or natural vents to meet the air requirements of the propulsion machinery and to prevent build-up of fumes or excessive heat.

4.1.10 Access ladders should be of metal such as steel where practicable and securely fixed to the vessel's permanent structure.

4.1.11 Floor plates, where fitted, should be non-slip and securely fastened with accessible fasteners.

4.2 Propulsion Machinery and Stern Gear

4.2.1 Propulsion engines and associated stern gear must be of a design, type and rating to suit the design and size of the vessel taking account of the vessels history, operating conditions and area of operation. Inboard-mounted engines should be diesel powered for use with fuel oil having a flash point greater than 60ºC.

4.2.2 *Flexibly mounted engines should be fitted with short flexible connections of an appropriate type, fitted to associated piping and exhaust systems.* Flexible sections of piping must be fitted when the engine or systems are repaired or replaced, provided that the existing installation is sound and efficient and is safe in use. Flexible shaft couplings must be in a sound condition and suitable for the power being transmitted. *N&E*

4.2.3 A vessel fitted with an inboard engine must have adequate means and power for going astern in order to maintain control of the vessel in all foreseeable circumstances.

4.2.4 The propeller shaft and any intermediate shaft, together with the stern tube, bearings and bushes, must be in a sound condition and operate efficiently. Shaft materials and diameter should be suitable for the power being transmitted. Inboard-mounted stern glands must be accessible for adjustment.

4.3 Engine Starting

4.3.1 All propulsion engines shall be provided with a secondary means of starting, where practicable.

4.4 Controls and Instruments

4.4.1 The controls and instrumentation systems as fitted will generally be accepted, provided that the systems are in a good state of repair and operate satisfactorily.

4.4.2 Propulsion engines fitted below deck in a machinery space and arranged for remote operation from the wheelhouse or helm position must be provided, on or adjacent to the engine, with arrangements or mechanism for stopping the engine.

4.4.3 High water temperature and low lubricating oil pressure alarms shall be fitted, where practicable and when a new engine is fitted. Alarms on New Vessels (2020) and new engines shall be audible and visual at the control station.

4.5 Steering System

4..5.1 The steering system must operate efficiently and be well maintained. The steering gear, including bearings and rudder stock, must be of sound and efficient construction, and suitable for the size and power of the vessel. (see also 4.7.1.7)

4.5.2 Vessels fitted with motorised or hand hydraulic, chain, cable, or mechanical steering must be provided with an alternative means of steering which will operate if the main system fails.

4.5.3 The main control or helm position must be located such that the person operating the steering gear has a clear view for the safe navigation of the vessel. (See MGN 313)

4.5.4 All parts of mechanical linkages of rod and chain should be accessible with adequate lubrication arrangements provided.

4.6. Refrigerating Plant

4.6.1 Refrigerating plants 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 on board. Refrigerant detection sensors, compatible with the refrigerant being used, are recommended to be fitted (where practicable).

4.6.2 Ammonia, methyl chloride or chlorofluorocarbons (CFCs, with ozone depleting potential higher than 5% of CFC-11) shall not be used as refrigerants.

4.6.3 Where refrigerating plants are installed they shall be maintained in an efficient working condition and examined at regular intervals.

4.7 Electrical Installations

4.7.1 General

4.7.1.1 The electrical arrangements shall be such as to minimise the risk of fire and electric shock. The installation shall also be designed and constructed so as to ensure the proper functioning of all equipment necessary to maintain the vessel in normal operational and living conditions without recourse to an emergency power supply.

4.7.1.2 *Detailed guidance on the design and installation of electrical equipment is given in the following documents.* Where practicable, these regulations should be followed when rewiring or fitting additional circuits and equipment:

(i) The Institution of Electrical Engineers Regulations for the Electrical and Electronic Equipment of Ships with Recommended Practice for their Implementation, (latest edition)

(ii) BS 6883 (1999), Specification for elastomer insulated cables for fixed wiring in vessels. (Suitable for lighting, power, control, instrumentation and propulsion circuits).

(iii) IEC 600 92-350, Low voltage shipboard power cables. (General construction and test requirements for shipboard cables with copper conductors intended for low voltage power systems at voltages up to and including 0.6/1kV).

(iv) ISO 10133, Small Craft – Electrical systems – Extra low voltage DC installations.

(v) ISO 13297, Small Craft – Electrical systems – Alternating current installations.

(vi) BS EN 28846, Small Craft – Electrical devices – Protection against ignition of surrounding flammable gases.

4.7.1.3 Particular attention must be given to protection against water ingress and the effects of vibration.

4.7.1.4 Main and emergency switchboards shall be suitably guarded and arranged to provide easy access without danger to any person. Adequate non-conducting mats or gratings shall be provided. Exposed parts that may have a voltage between conductors or to earth exceeding 55 volts shall not be installed on the face of any switchboard or control panel.

4.7.1.5 Tanks, machinery or other metallic objects that can provide an electric shock exceeding 55 volts shall have special earthing arrangements,

4.7.1.6 Switchboards shall be clearly marked; fuse boxes and fuse holders shall be checked at regular intervals to ensure that the correct rating of fuse is being used. Differing voltages should not be included in any one distribution board.

4.7.1.7 All circuits except the main supply from the battery to the starter motor and electrically driven steering motors, shall be provided with electrical protection against overload and short circuit, (i.e. circuit breakers shall be installed). Short circuit protection shall be for not less than twice the total rated current load in the circuit protected.

4.7.1.8 Steering motors should have an overload alarm in lieu of overload protection. Short circuit protection should before not less than twice the total rated current of the steering motors in the circuit protected.

4.7.1.9 Cables which are not provided with electrical protection should be kept as short as possible and be “short circuit proofed”, e.g. single core with an additional insulating sleeve over the insulation of each core. Normal marine cable (e.g. in compliance with BS 6883) which is single core will meet this recommendation without an additional sleeve, since it has both conductor insulation and a sheath.

4.7.1.10 In the event of failure of engine and charging systems, the battery capacity must be able to supply the emergency lights for at least one hour.

4.7.1.11 The electrical generating system must have sufficient capacity in normal running conditions to ensure the correct operation of all safety and navigation equipment including navigation and fishing lights.

4.7.1.12 With regard to existing cable installations and to any additional cables fitted:

i) Cables should not be run below floor plate level except where this is necessary for connections to underwater equipment, etc., in which case the cable should be run in conduit.

ii) Cables running through machinery spaces should not be secured with plastic clips.

iii) Cables running through fish holds should be fitted in conduit and cables should not be secured directly to fuel or oil storage tanks.

iv) Cables should be of the correct current carrying capacity for their application.

v) When selecting cables, particular attention should be given to environmental factors such as temperature and contact with substances, e.g. polystyrene, which degrades P.V.C. insulation.

4.7.1.13 Vessels should be fitted with an adequate cathodic protection system. Anodes should be efficiently connected to the system and the hull, and not painted over.

4.7.2 Insulation resistance

4.7.2.1 Before a new installation, or any alteration or addition to an existing installation, is put into service the insulation resistance is to be measured of all circuits and electrical equipment, using a direct current insulation tester. *N*

4.7.2.2 The test shall use an applied voltage of 500 V.d.c for all circuits up to 500V.d.c or V.a.c. (r.m.s.). For vessels with systems of 50 volts or less, the insulation resistance shall be at least 0.3 megohm. For vessels with systems greater than 50 volts, the insulation resistance shall be at least 1.0 megohm. *N*

4.7.2.3 A low voltage instrument operating at twice the minimum voltage may be used for testing to avoid the possibility of damage. In this case the insulation resistance shall be at least 1.0 megohm. *N*

4.7.2.4 Electrical systems insulation testing shall be conducted on a routine basis at renewal surveys. The condition of the electrical cables and the insulation material shall also be visually checked. *N*

4.7.2.5 *Insulated neutral distribution systems shall be continuously monitored by suitable means.* *N*

4.7.3 D.C. Systems Up To 24 volts

4.7.3.1 Systems should be two wire.

4.7.3.2 Existing earthing systems, where these are required, will be accepted provided that the system is sound and efficient and that no danger to the system or vessel may occur. Hull earth plates, if fitted, must be efficiently connected and not painted over.

4.7.3.3 Batteries should be in good condition, secured, protected from short circuiting and overloading, and should be sited clear of heat sources *and the battery installation and ventilation should be in accordance with IEE Regulations.* *N&E*

4.7.3.4 A battery cut-off switch double pole type should be fitted at each battery or bank. Systems such as automatic bilge pumps or alarms for when the vessel is unattended should be connected before the cut-off switch.

4.7.4 A.C. Systems

4.7.4.1 Cables for A.C. systems must be kept separate from D.C.

4.7.4.2 Switchgear for A.C. systems must be fitted in switchboards and panels which are separate from those containing D.C. systems. Systems and equipment must be clearly marked.

4.7.4.3 Switchgear and sockets must be so arranged as to prevent the fitting of low voltage equipment and lamps into high voltage systems.

4.8 Pumping and Piping Systems

4.8.1 Fuel Oil Installations

4.8.1.1 Tanks will generally be accepted provided that they are of sound and efficient construction and safe in operation. Sight glasses, contents gauges or sounding pipe arrangements are to be fitted to all fuel tanks. Sight glasses are to be adequately guarded and fitted with spring loaded isolating valves or other approved positive shutoff device, so that in the event of a breakage, only the contents of the glass can spill.

4.8.1.2 Piping systems should be of sound construction, in a good state of repair and suitable for the service intended. Flexible connections should be of an appropriate armoured fire-resistant metallic hose with screwed fittings and kept as short as practicable.

4.8.3 Cooling Water Systems

4.8.3.1 Provided that the piping and fittings are of sound construction and efficient in operation, the cooling water system fitted will be accepted until such time as the system is renewed or the vessel is re-engined, when the requirements of a recognised Construction and Outfit Standard for Fishing Vessels must be applied.

4.9 Bilge Pumping Systems

4.9.1 All decked vessels must have an efficient bilge pumping arrangement. Open vessels where the bilge is not visible must also have an efficient bilge pumping arrangement fitted.

4.9.2 Regular cleaning of bilges is required.

4.10 Bilge Alarms

4.10.1 In all vessels to which h4.9.1 above aplies, a bilge alarm system is to be fitted with audible and visible indication at helm/control position. Bilge level sensors are to be fitted in the machinery space and fish room/hold. Sensors shall also be fitted in any compartment which has a bilge suction if the level of bilge water cannot be readily checked visually without entering the compartment.

4.11 Anchors and Cables

4.11.1 For *vessels built since 1 April 2001 these shall be in accordance with the requirements of a recognised Construction and Outfit Standard for Fishing Vessels in force at the time.* Vessels built before 1 April 2001 shall carry a suitable means of anchoring and chain cable or warp of a length suitable for the intended area of operation, attached and ready for use. *N&E*

4.12 Towline

4.12.1 All vessels must be provided with a means of being towed.

4.13 Hard Points/Towing Points

4.13.1 Operations such as towing impose great loads on ropes, warps, gear and equipment. MGN 308 – Mooring, Towing or Hauling Equipment on All Vessels – Safe Installation and Safe Operation provides updated advice on the safe installation, maintenance and use of mooring, towing and hauling equipment.

CHAPTER 5 - FIRE PROTECTION, DETECTION AND EXTINCTION.

5.1 General

5.1.1 *New Vessels (2020) must be built and maintained to a recognised Construction and Outfit Standards for Fishing Vessels for Fire Protection and LPG Installations and with the requirements stated in this chapter.* *N*

5.1.2 For vessels already in the Register, the existing arrangements will be accepted, subject to the requirements stated in this chapter as applying to all vessels.

5.1.3 Where vessels are being modified, then the modifications must be in accordance with a recognised Construction and Outfit Standard for Fishing Vessels

5.2 Fire Prevention

5.2.1 Glass portlight and deadlight arrangements, if fitted in the boundaries of machinery spaces, will be accepted if they are in a sound condition, but if damaged they must be blanked off.

5.2.2 Cylinders containing flammable, toxic or other dangerous gases, and expended cylinders shall be clearly marked as to their contents and properly stowed and secured on open decks. All valves, pressure regulators and pipes leading from such cylinders shall be protected against damage. Such cylinders may be stowed in compartments that meet the requirements set out in section 5.2.3.

5.2.3 Cylinders and bottles containing flammable, toxic liquids, toxic gases and liquefied gases, other than liquefied petroleum gas shall be stored in compartments having direct access from open decks but must not be stowed in machinery spaces. Such compartments shall have boundary bulkheads constructed from non-combustible materials. Pressure adjusting devices and relief valves, if any, shall exhaust within the compartment. Where boundary bulkheads of such compartments adjoin other enclosed spaces they shall be gas-tight and be provided with ventilation arrangements that are separate from other ventilation systems. Ventilation shall be arranged at high and low levels and the inlets and outlets of ventilators shall be positioned in safe areas and fitted with spark arresters.

5.2.4 The guidance on storage of flammable liquids, dusts, gases and solids can be found at http://www.hse.gov.uk/fireandexplosion/index.htm

5.2.5 Exhaust pipes and ducts must be adequately insulated to avoid igniting combustible materials and must be protected from damage.

5.3 Cleanliness of machinery spaces

5.3.1 Machinery spaces shall be kept clean, free of rubbish and combustible waste. Bilge levels shall be checked regularly and oily waste and sludge shall be collected and properly disposed of ashore (see also Chapter 11, section 11.1).

5.3.2 Any oil leakage from machinery, fuel or lubricating oil systems shall be promptly identified and rectified.

5.4 Cooking and Heating Appliances

5.4.1 Appliances that are purchased shall meet the latest standards and be suitable for use on boats and be installed and serviced regularly (at least annually) by qualified persons. Repairs shall only be undertaken using proprietary components. Vents and flues shall be checked for damage and blockages.

5.4.2 Appliances must not be positioned close to engines and fuel tanks.

5.4.3 All types of stoves and heating appliances must be strongly secured to the surrounding structure.

5.4.4 Curtains or any other suspended textile materials must not be fitted within 600 mm of any heating or other appliance.

5.4.5 Materials that are in the vicinity of any cooking appliance shall be non-combustible, except that combustible materials may be employed when these are faced with stainless steel or a similar non-combustible material.

5.4.6 Wherever possible, electrically powered cooking equipment shall be provided in preference to open flame types.

5.4.7 Curtains, towel rails, hooks and similar arrangements shall be kept well clear of the cooking area.

5.4.8 Electric stoves and other cooking appliances shall be fitted with an isolation switch outside the galley space.

5.5 Required equipment

5.5.1 Vessels are required to carry the following equipment:

5.5.1.1 Open Vessels less than 7m

- 1 Fire Bucket and lanyard
- 1 Fire Blanket (light duty) in galley or cooking area (if applicable*)*
- 1 Multi-purpose Fire Extinguisher (fire rating 5A/34B) – if vessel has in-board engine or auxiliary engine (extinguisher should be capable of dealing with all fire types, including hydrocarbons)
- 1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)

5.5.1.2 Open Vessels 7m to less than 10m

- 1 Fire Blanket (light duty) in galley or cooking area (if applicable*)*
- 1 Fire Pump and hose or 1 Fire Bucket and lanyard
- 1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)
- 1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)

5.5.1.3 Open Vessels 12m to less than 15m

- 1 Fire Blanket (light duty) in galley or cooking area (if applicable*)*
- 1 Fire Pump and hose or 1 Fire Bucket and lanyard
- 1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)
- 1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)

5.5.1.4 Decked vessels less than 10m

- 1 Fire Blanket (light duty) in galley or cooking area (if applicable*)*
- Fire Detectors
- 1 Fire Pump and hose or 1 Fire Bucket and lanyard
- 1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)
- 1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)

5.5.1.5 Decked Vessels 10m to less than 15m

- 1 Fire Blanket (light duty) in galley or cooking area (if applicable*)*
- Fire Detectors
- 1 Fire Pump and hose or 1 Fire Bucket and lanyard
- 1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)
- 1 fixed Fire Extinguishing system for machinery spaces
- 1 Multi-purpose Fire Extinguisher for oil fires (13A/113B)
- 1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)

5.6 Fire Detectors on Decked vessels

5.6.1 Battery powered fire detectors and alarms may be suitable under certain circumstances for accommodation where they may be easily audible from the wheelhouse and/or deck and would be assessed on a case by case basis by the Surveyor to check their suitability for purpose.

5.6.2 For engine spaces an alarm which is audible and also visual shall be provided in the wheelhouse. A selection of detector models is available which can be connected to each other such that an alarm in the engine space also triggers an alarm in the wheelhouse. Advice on these types is available from the MCA.

5.6.3 In essence a fire detector for engine spaces shall be fit for purpose and may be a combination of smoke and/or optical detectors which can be connected by wire or wirelessly to a similar alarm in the wheelhouse. The Wifi connection should be tested

5.7 Fire Extinguishers (Portable)

5.7.1 Fire on board a vessel can, if it is not controlled, lead to the loss of the vessel and/or serious injuries. The checklists in this Code of Practice give a minimum requirement for the extinguishers to be carried on Fishing Vessels. When extinguishers are replaced, new extinguishers shall comply with BS EN 3, or the Marine Equipment Directive (96/98/EC as amended by 2002/75/EC).

5.7.2 There are two sizes quoted in the section 5.5 above:

Designation	**Equivalent Dry Powder**	**Equivalent Foam**
5A/34B	1 Kg ABC Dry powder	1.75 Litre. AFFF
13A/113B	4 Kg ABC Dry powder	2 Gallon or 6 Litres. AFFF

5.7.3 The designation gives a measure of the ability of the extinguisher. ‘A’ indicates a wood-based fire; the number indicates fire size which has been used to test the extinguisher. ‘B’ indicates a liquid-based fire; the number indicates the size of fire, which has been used to test the extinguisher.

5.7.4 Where it is not practicable to carry or store a large fire extinguisher, an alternative is to carry a combination of others to make up the required capacity. Add the numbers before the ‘A’ and the ‘B’ together, and if these exceed the total required the extinguishers will provide an equivalent capacity, e.g. two 8A/70B extinguishers would give a capacity of 16A/140B, which is greater than the required 13A/113B.

5.7.5 In any case the minimum acceptable size of extinguisher acceptable would be 5A/34B. A fire may require more than one smaller extinguisher to put it out.

5.7.6 Fire extinguishers shall be serviced and maintained at the manufacturer’s recommended service intervals by a formal service station approved by the manufacturer. In the case of sealed units, these shall be replaced when they reach their expiry date.

5.7.7 Halon, in any form, is not authorised for use.

5.8 Fire extinguishers (Fixed)

5.8.1 For existing vessels with fixed systems in machinery spaces where the space is never occupied an automatic discharge system may remain acceptable if it is already installed, subject to the agreement of an MCA surveyor, providing that an indication of discharge is given. Vessels built after 23 October 2017 are not permitted to have this arrangement and existing vessels are not permitted to install such arrangements.

5.8.2 Automatic Insert gas aerosol systems are not acceptable when fitted without the ability to make the compartment gastight prior to the release of the agent. AFFF or dry powder systems may be accepted at the discretion of the MCA.

5.8.3 For machinery spaces that can be occupied, the system shall be designed and installed in accordance with its manufacturers' instructions. These spaces shall incorporate an advance warning alarm system, within the space, (audible and visual). The space shall be able to be made gastight to contain the extinguishing agent, and to starve the oxygen supply. Systems fitted shall be based on the class of fire risk.

5.9 Fire buckets

5.9.1 Fire buckets shall be heavy duty with a Lanyard long enough to reach water. Buckets need not be made of steel

5.10 Fire blankets

5.10.1 For the galley or cooking appliance, fire blankets shall be of light duty to BS EN 7944 (this standard has superseded 6575) or a recognised equivalent BS EN 1869.

5.12 Fire pumps

5.12.1 Fire pumps can be a hand pump or any other pump that supplies water from the sea onto the deck with a hose suitable for fire-fighting purposes. Engine driven pumps are acceptable but are liable to failure in the event of an engine compartment fire. The pumps must be capable of supplying a hose or hoses such that a jet of water can reach any part of the vessel accessible to the crew.

CHAPTER 6 - PROTECTION OF THE CREW

6.1 General

6.1.1 This Chapter applies to all vessels.

6.1.2 Owners have a duty of care to ensure that their vessels are operated without endangering the safety and health of the crew and any other persons on board the vessel.

6.1.3 The crew shall be given training and instructions on health and safety matters on board fishing vessels, and in particular, on accident prevention.

6.1.4 In accordance with the guidance in MGN 588 (F) or any superseding document, unless measures are in place which eliminate the risk of fishermen falling overboard, all fishermen must be provided with and must wear, PFDs or safety harnesses fitted and tethered in such a way as to prevent going overboard. The measures eliminating the risk of Man Overboard must be documented in a written risk assessment. MGN 571 contains guidance on preventing Man Overboard.. The following is provided as guidance on Personal Flotation Devices and statutory lifejackets:

(i) A vessel is required to carry life-saving appliances (LSA) including lifejackets for all persons on-board through regulation forming part of the “Statutory LSA”. These Statutory Lifejackets are of a type designed tested and maintained to a standard appropriate to the vessel type and area of operation. These lifejackets are to provide persons buoyancy in an abandon ship scenario.

(ii) A PFD can be lifejacket or a buoyancy aid of at least 150N or a wearable buoyancy device of at least 50N that provides buoyancy in the water. The intended use of a PFD is to be constantly worn in the case of falling overboard, rather than for intentionally entering the water or survival craft during an abandon ship scenario.

(iii) A statutory lifejacket can be very bulky in nature and cumbersome when worn on deck, however once in the water, they provide a high level of buoyancy for the wearer awaiting rescue after abandoning ship.

(iv) A PFD can be much smaller and more streamlined such as a waistcoat styled buoyancy aid enabling the user to continue to perform tasks whilst wearing it on deck, with the added level of safety that should they fall overboard, the PFD will offer them added buoyancy and increase the chances of survival until recovered.

(v) In the event of an abandon ship scenario, individuals should, if time permits, remove their PFDs and don the statutory lifejacket provided on the vessel, which will offer them a higher level of buoyancy than their PFD and a greater chance of survival.

(vi) A lifeline and harness attaching the person to the vessel may be worn, instead of or in addition to the PFD.

6.2 Risk Assessment

6.2.1 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 require employers to make a suitable and sufficient assessment of the risks to the health and safety of fishermen, whether employed, engaged or working in any capacity (except persons solely engaged as pilots) arising in the normal course of their activities or duties. Guidance on these regulations and on the principals of risk assessment is contained in a Marine Guidance Note (currently MGN 587 (M&F)), or any superseding document.

6.2.2 A risk assessment is intended to be a careful examination of the vessel's procedures or operations which could cause harm, so that decisions can be made as to whether adequate control measures are in place to reduce those risks to an acceptable level or whether more shall be done.

6.2.3 The assessment shall first identify the hazards that are present and then establish whether a hazard is significant and whether it is already covered by satisfactory precautions to control the risk, including consideration of the likelihood of the failure of those precautions that are already in place.

6.2.4 The health and safety risk assessment must also be reviewed regularly, (at least annually) to ensure that it remains appropriate to the vessel's fishing method and operation. If there has been a change of fishing method or of operational practice, the assessment must also be reviewed accordingly.

6.2.5 Risk assessments of the vessel are particular to each employer. When a vessel is sold, the new owner must complete, or arrange the completion of, a new risk assessment and self-certification.

6.2.6 All members of the crew shall be informed of all measures to be taken regarding health and safety on board the vessel. Such information must be easily understood and promulgated for all to see by the persons concerned. All members of the crew must sign the aforementioned Risk Assessment to agree it has been understood.

6.2.7 Where risks to the health and safety of the crew cannot be prevented or sufficiently controlled by collective or technical means of protection, they must be provided with personal protective equipment.

6.2.8 Personal protective equipment in the form of clothing or over clothing shall be in bright colours, contrasting with the marine environment and clearly visible. Reference must be made to The Merchant Shipping and Fishing Vessels (Personal Protective Equipment) Regulations 1999, No 2205, MSN 1870, MGN 331 or any superseding documents.

6.3 Voluntary Safety Management

6.3.1 MGN596 (F) Marine Guidance Note provides guidance on the contents of a voluntary Fishing Safety Management Code (FSM) and how to ensure it remains relevant to your vessel or company as things change over time.

6.3.2 The FSM itself will help you keep on top of the documentation required and to ensure that when you need to take action to check equipment, service it or carry out maintenance, the system can remind you of what is needed. Owners and skippers will find that if they implement such a system it will greatly assist in complying with their statutory safety obligations

6.3.3 The FSM can also help you to ensure that everyone on your vessel carries out their work safely.

6.3.4 It is recognised that there are a wide variety of fishing vessels, undertaking a wide variety of fishing with different methods of operation. The purpose therefore, of developing the FSM, is to establish a common structure which everyone can use.

6.3.5 The FSM requires a vessel specific safety management system.

6.3.6 A documented Safety Management System can help demonstrate that vessels comply with their statutory requirements at all times.

6.3.7 You may already be familiar with some of the documents below which help to maintain an effective safety management system. The new documents assist in complying with the Work in Fishing Convention.

6.3.8 Documentation that should be developed and records maintained include:

- The Safety Management Manual;
- Company Safety and Environment Policies;
- All crew certification and training records;
- Planned maintenance system;
- Vessel Operation (operating procedures and the risk assessment);
- Testing/Certification relating to the lifesaving appliances and fire-fighting equipment;
- Accident and incident reports and any remedial actions taken thereof;
- Evidence of reviews of your safety management system, self-audit Reports and close outs thereof;
- Environmental management and pollution prevention;
- Records of drills and safety training

6.4 Gas Detection on Decked Vessels

6.4.1 Suitable means for detecting the leakage of gas (i.e. Liquefied Petroleum Gas, Butane, Propane or other flammable gases) shall be provided in any compartment containing a gas-consuming appliance or in any adjoining space or compartment into which the gas, of greater density than air, may seep.

6.4.2 Gas detector's heads shall be securely fixed in the lower part of the compartment in the vicinity of the gas-consuming appliance and other space(s) into which gas may seep. In areas where the detector head is susceptible to damage in the lowest part of the compartment (e.g. engine space bilge) the detector head shall at least be fitted below the lowest point of ignition.

6.4.3 The detection system shall incorporate a visible and audible alarm, which can be heard in the space concerned and the control position with the vessel in operation.

6.4.4 The detection system shall be capable of being tested and be tested on a regular basis whilst the vessel is in service and shall include a test of the detector head operation as well as the alarm circuit, in accordance with the manufacturer's instructions.

6.4.5 The detection equipment shall be maintained in accordance with the manufacturer's requirements and checked that it is operational as part of the vessel's regular maintenance regime.

6.4.6 A suitable notice, detailing the action to be taken when an alarm is given by the gas detection system, shall be displayed prominently in the vessel.

6.5 Carbon Monoxide Alarms

6.5.1 In all vessels, Carbon Monoxide (CO) Alarms shall be installed in every space on all vessels that have enclosed spaces that contain fired cooking or heating appliances and where an engine exhaust penetrates through the wheelhouse or crew space. Fired appliances apply to, but may not be limited to, appliances fired by LPG, diesel or paraffin. CO Alarms are not required when heating or cooking is undertaken using electrical cookers or heaters.

6.5.2 CO Alarms shall be of the Lithium Battery type and installed, regularly tested, maintained and replaced in accordance with the manufacturer's guidance.

6.5.3 Signs of CO include:

- staining, sooty smears or discolouration of surfaces around an appliance or its flue;
- appliances that are difficult to light, keep lit or burn weakly;

- burners with yellow or orange or “floppy” flames that threaten to go out;
- an unfamiliar or burning smell when an LPG or oil appliance is on;
- smelling engine exhaust fumes regularly inside the space.[2]

6.5.4 CO Alarms are a useful back-up precaution but must NOT be regarded as a substitute for proper installation and maintenance of gas equipment by a Gas Safe registered engineer. When you buy a carbon monoxide alarm, ensure it meets current safety standards (BS EN 50291-2) and carries the Kitemark. Vessels which carry CO Alarms meeting BS EN 50291-1 should replace the alarm with an alarm meeting BS EN50291-2 when the Alarm requires replacement.

6.6 Handrails, hand holds and grab rails

6.6.1 *New Vessels (2020) must comply with a recognised Construction and Outfit Standards for fishing vessels.* Existing vessels being modified must also comply with a recognised Construction and Outfit Standards for Fishing Vessels

6.6.2 On existing vessels

- The perimeter of an exposed deck should be fitted with bulwarks, guard rails or guard wires of sufficient strength and height for the safety of persons on deck; the height of tubular railings and guard wires being not less than 1000 mm above the deck (9l5 mm where already fitted), the lower course of rails or wires having a clearance of not more than 230 mm and the remaining courses being evenly spaced. Where there would be unreasonable interference with the efficient operation of the vessel the height may be reduced.

- Sections of rails or wires may be portable where necessary for the vessel"s fishing operations.

- Access stairways, ladder ways and passageways must be provided with handrails and grab rails for the safety of the crew.

6.7 Surface of Working Decks

6.7.1 Decks to which the crew are expected to have access must be provided with an adequate non-slip surface or efficient non-slip covering.

6.7.2 Particular attention must be paid to the provision of a non-slip surface to any hatch cover fitted on a working deck.

6.7.3 The exposed bottom boards of open boats must have a non-slip surface.

6.8 Winches, tackles and hoisting gear This section is mandatory for vessels joining the Register after [date of entry into force of Code]2020 and strongly recommended for existing vessels

6.8.1 Every vessel that is provided with winches, tackles and hoisting gear shall have such gear properly installed having regard to the intended service of the vessel.

6.8.2 All hoisting gear, hauling gear and related equipment shall satisfy the requirements of The Merchant Shipping and Fishing Vessels (Provisions and Use of Work Equipment) Regulations 2006 No. 2183 and the Merchant Shipping and Fishing Vessels (Lifting Operations and Lifting Equipment) Regulations 2006 No. 2184 as applicable.

[2] Source: Boat Safety Scheme and CoGDEM

6.8.3 All equipment used in hoisting/hauling should be used only by a competent person and must be inspected and examined at regular intervals and a written record shall be made of all such tests and examinations.

6.8.4 All parts of hauling gear, hoisting gear and related equipment must be maintained in good repair and working order.

6.8.5 The controls for the hauling and hoisting gear shall be installed in an area sufficiently large enough to enable operators to work unhindered.

6.8.6 The hauling and hoisting gear shall also have appropriate safety devices for emergencies, including emergency stop facilities.within reach of the equipment operator A duplicate set of emergency stop facilities is to be provided in the wheelhouse.

6.8.7 The gear operator must have a clear view of the gear and any crew member working near it.

6.8.8 If hauling gear is controlled from the wheelhouse, the operator must also have a clear view of the crew working near the gear, either directly or via any other suitable medium. All operators, in the wheelhouse or on deck shall give exclusive attention to that task and must not carry out other tasks while operating the equipment.

6.8.9 A reliable communications system must be used between the wheelhouse and the working deck and the crew shall be trained in the use of hand signals.

6.8.10 A sharp look out must always be maintained and the crew warned of the imminent danger of heavy oncoming seas during fishing operations or when other work is being undertaken on deck.

6.8.11 Contact with bare ropes and warps and with moving parts of the equipment shall be minimized by installing protective devices.

6.8.12 The following control measures shall be installed for restricting moving masses (on vessels with trawl doors or codends):

(i) devices to immobilise the trawl doors;

(ii) devices to control the swinging motion of the codend.

6.8.13 The crew must be trained in the use of fishing gear and hauling and hoisting equipment.

6.9 Securing of heavy equipment

6.9.1 Heavy items of equipment such as spare fishing gear, batteries, cooking appliances etc., shall be securely fastened in place to prevent movement due to severe motions of the vessel.

6.9.2 Stowage lockers containing heavy items shall have lids or doors with secure fastening.

6.10 Medical Kit

6.10.1 All vessels must carry a first aid kit which shall be of Category ‘C’ standard for vessels staying up to 60 nautical miles from shore and Category ‘B’ for vessels operating between 60 and 175 Nautical miles from the nearest port. MSN 1768 (M+F) provides guidance on the contents which shall be included. Equipment listed in MSN1768 can be kept in sealed bags.

6.10.1 Any person responsible for medical stores should hold the relevant first aid training.

CHAPTER 7 - LIFE SAVING APPLIANCES

7.1 General

7.1.1 This Chapter applies to all vessels

7.1.2 Life saving appliances that are not required by this Chapter to be of approved type shall be to the satisfaction of MCA.

7.1.3 Adequate instructions for use shall be provided with each life saving appliance and also adjacent to its stowage position when appropriate.

7.1.4 Life saving appliances intended for use in the sea shall be fitted with retro reflective markings to the satisfaction of MCA.

7.2 Vessel Requirements

7.2.1 The following life saving appliances shall be provided:

Minimum Number required for each vessel size							
	Open Vessels			Decked Vessels			
	0-less than 7m	7 to less than 12m	12m to less than 15m	Less than 7m	7m to less than 10m	10m to less than 12m	12m to less than 15m
Liferaft(s) - sufficient capacity for all persons on board vessel and appropriate for area of operation (see 7.3.1 and 7.3.2)	Nil	1	1	Nil	1	1	1
Lifejackets	1 per person	1 per person	1 per person plus 2 spare	1 per person	1 per person	1 per person plus 2 spare	1 per person plus 2 spare
Personal Floatation Devices	1 per person	1 per person	1 per person	1 per person	1 per person	1 per person	1 per person
1 Lifebuoy (with 18 metre buoyant line attached	1	2 or 1 with 18 metre buoyant line attached) or 1 Lifebuoy (with 18 metre buoyant line) +1 Buoyant Rescue Quoit	2 or 1 with 18 metre buoyant line attached) or 1 Lifebuoy (with 18 metre buoyant line) +1 Buoyant Rescue Quoit	2 or 1 with 18 metre buoyant line attached) or 1 Lifebuoy (with 18 metre buoyant line) +1 Buoyant Rescue Quoit	2 or 1 with 18 metre buoyant line attached) or 1 Lifebuoy (with 18 metre buoyant line) +1 Buoyant Rescue Quoit	2 or 1 with 18 metre buoyant line attached) or 1 Lifebuoy (with 18 metre buoyant line) +1 Buoyant Rescue Quoit	2 or 1 with 18 metre buoyant line attached) or 1 Lifebuoy (with 18 metre buoyant line) +1 Buoyant Rescue Quoit
Parachute flare	2	3	3	3	3	3	3
Hand held Flare	2	2	2	2	2	2	2
Smoke signal	1	1	1	1	1	1	1
Waterproof torch	1	1	1	1	1	1	1
Satellite EPIRB	1 required but recommend if Personal Locator Beacons for all crew carried	1 required but recommend if Personal Locator Beacons for all crew carried	1 (If vessel operates single handed, either a PLB or EPIRB may be carried, but MCA	1 required but recommend if Personal Locator Beacons for all crew carried	1 required but recommend if Personal Locator Beacons for all crew carried	1 (If vessel operates single handed, either a PLB or EPIRB may be carried, but MCA	1 (If vessel operates single handed, either a PLB or EPIRB may be carried, but MCA

			recommends both a carried)			recommends both a carried)	recommends both a carried)
Personal Locator Beacons (see section x.xx for requirements)	1 for each member of the crew but recommend if Satellite EPIRB carried	1 for each member of the crew but recommend if Satellite EPIRB carried	Recommend for each member of the crew	1 for each member of the crew but recommend if Satellite EPIRB carried	1 for each member of the crew but recommend if Satellite EPIRB carried	Recommend for each member of the crew	Recommend for each member of the crew
Means of recovering a person from the Water and getting back on board (if single handed)	1	1	1	1	1	1	1

7.3 Liferafts

7.3.1 Any liferafts which can be demonstrated to have been purchased prior to 23 October 2017 and currently on fishing vessels of less than 15m may continue to be used until 23 October 2022, after which, all vessels required to carry liferafts shall comply with the requirements set out below, subject to the phase out requirements for Offshore Racing Council (ORC) Liferafts in MGN553.

.1 Vessels Operating 150 miles or more from a safe haven

,i shall be provided with liferafts of such number and capacity that, in the event of any one liferaft being lost or rendered unserviceable, there is sufficient capacity remaining for all on board; and

.ii The liferafts provided shall;

.a be constructed to SOLAS standard and to the Marine Equipment Directive Standards (MED), have insulated floor and insulated canopy and be equipped with a "SOLAS A PACK[3]"; and

.b be contained in fibre reinforced plastic (FRP) containers which may be a suitable container other than a SOLAS container) stowed on the weather deck or in an open space, accessible in all weather conditions and shall be fitted with float free arrangements (hydrostatic release units) so that the liferafts float free, inflate and break free automatically.

.2 Vessels Operating 60 miles to less than 150 miles from a safe haven.

.i The liferaft requirements apply as they do for vessels operating 150 miles or more from a safe haven except that, the liferaft need not have an insulated floor or insulated canopy where the vessel operates exclusively in waters having a temperature of 10 degrees centigrade or higher (see notes). The certification shall clearly show this limitation, or;

ii. Liferafts built to the ISO 9650 – Small Craft Inflatable Liferafts, Part 1, Type 1, Group A standard, provided the liferaft(s) are fitted with a boarding ramp; are equipped to the level of “SOLAS A PACK[4]”, which may, where necessary, include a “grab bag” to supplement the equipment integral to the liferaft; and are certificated as compliant with Part 1, Group A and Part 3 of ISO 9650 from March 2005 onwards, are acceptable.

[3] SOLAS “A” PACK requirements can be found in MSN 1676 (M+F), Schedule 4, Part 6.
[4] SOLAS “B” PACK requirements can be found in MSN 1676 (M+F), Schedule 4, Part 6.

Compliance certification issued by one of the EC notified bodies responsible for approval of life saving appliances, described in the Marine Equipment directive (www.MARED.org), will be recognised as full third-party verification of compliance.

.iii The liferaft capacity shall accommodate at least the total number of persons on board.

.iv Liferafts, shall be contained in FRP containers (which may be a suitable container other than a SOLAS container) stowed on the weather deck or in an open space, accessible in all weather conditions and shall be fitted with float free arrangements (hydrostatic release units) so that the liferafts float free, inflate and break free automatically.

.3 Vessels Operating less than 60 miles from a safe haven;

.i if operating outside Sea Area A1 (see guidance below on Radio), shall be provided with liferafts of such number and capacity that, in the event of any one liferaft being lost or rendered unserviceable, there is sufficient capacity remaining for all on board and if operating inside Sea Area A1 shall be provided with liferaft capacity to accommodate at least the total number of persons on board;

.ii the liferaft(s) provided shall be either;

.a be constructed to SOLAS standard and to the Marine Equipment Directive Standards (MED), have insulated floor and insulated canopy except that the liferaft(s) shall be equipped with “SOLAS B PACK”; or

.b built to the ISO 9650 – Small Craft Inflatable Liferafts, Part 1, Type 1, Group A standard, provided the liferaft(s) are fitted with a boarding ramp; are equipped to the level of “SOLAS B PACK”, which may, where necessary, include a “grab bag” to supplement the equipment integral to the liferaft, and are certificated as compliant with Part 1, Group A and Part 3 of ISO 9650 from March 2005 onwards.

.iii Liferafts carried in vessels which operate in up to 60 miles from a safe haven outside the UK Search and Rescue Region, where the sea temperature is less than 10 degrees centigrade, shall have an insulated floor and insulated canopy.

.iv Liferafts shall in approved FRP containers stowed on the weather deck or in an open space, accessible in all weather conditions and fitted in a float free arrangement so that the liferafts float free, inflate and break-free automatically.

.v Reference shall also be made to the following:

- MGN 267 - The Location and Stowage of Liferafts and Emergency Positioning Radio Beacons (EPIRBs) on UK Registered Fishing Vessels.

.vi Vessels operating less than 3 miles from shore may use open reversible liferafts constructed to SOLAS standard or MED approved. Liferaft(s) shall be equipped to a level equivalent to a “DfT E” pack[5]. This may, where necessary, include a “grab bag” to supplement the equipment integral to the liferaft.

[5] DfT E Pack requirements can be found in MSN 1676 (M&F), Schedule 4, Part 4

7.3.2 Liferafts shall be periodically serviced:

.a if SOLAS, in compliance with MGN 548 (M+F) "Life-Saving Appliances – Inflatable SOLAS Certificated Liferafts, Lifejackets, Marine Evacuation Systems, and repair of Inflatable Rescue Boats – Servicing Requirements and Approved Service Stations: or

.b if non-SOLAS, in accordance with MGN 553 (M+F) "Life-Saving Appliances – Inflatable Non-SOLAS Liferafts, Lifejackets, Marine Evacuation Systems, Danbuoys and Lifebuoys – Technical Standards and Servicing Requirements.

7.3.2.1 MGN 548 states that SOLAS certificated inflatable LSA including liferafts and lifejackets, systems shall be serviced every 12 months, and every effort shall be made to ensure that it is carried out on time. In exceptional cases, when it is clearly impracticable to comply with this annual servicing requirement, the MCA may consider whether the servicing could be deferred for a period not exceeding 5 months. In such cases, owners or skippers should apply to their local MCA Marine Office, explaining their reason in writing for seeking deferment, using the details at the end of MGN 548. MGN 548 shall be referred to for further information regarding servicing.

7.3.2.2 MGN 553 states that except where MCA requirements require more frequent servicing, non-SOLAS inflatable liferafts accepted on board UK commercial vessels are required to be serviced in accordance with the manufacturer's instructions by a Service Station authorised or approved by the manufacturer of the product. It is recommended that manufacturers and Service Stations follow the standard in Annex 1 of MGN 553 for conditions of Service Stations and conduct of servicing for non-SOLAS inflatable liferaft. The exception to this is where a vessel carries an ORC liferaft ahead of the formal phase out described in section 3.2 of MGN 553, the liferafts must be serviced annually.

7.3.2.3 Before submitting non-SOLAS inflatable liferafts to a Service Station, vessel owners and skippers, shall check that the station is capable of servicing the particular make and model of equipment by requesting sight of manufacturer accreditation/certification, if necessary to verify the capability of the station to service the raft.

7.3.2.4 It is recommended that owners or skippers of fishing vessels should check that the Service Station has been approved/accredited (as applicable) by the manufacturer. If in any doubt, owners or skippers should contact the manufacturer to be certain that the authorisation is in place.

7.3.2.5 During re-installation of liferafts after servicing, Service Stations and owners/skippers should be mindful of specially configured liferafts. Correct re-installation on the vessel is paramount for the safe operation in an emergency.

7.3.2.6 MGN 553 shall be referred to for further information.

7.3.2.7 Inflatable liferaft hydrostatic release units (other than the types which have a date limited life and are test fired prior to disposal) shall be serviced annually at a service station approved by the manufacturer.

7.3.2.8 The securing, stowage and launching of liferafts and the fitting of Hydrostatic Release Units shall be in accordance with MGN343 (M&F) Hydrostatic Release Units (HRUs) – Stowage ad Float Free Arrangements for Inflatable Liferafts, or any superceding document.

Notes: A safe haven means a harbour or shelter of any kind which affords safe entry and protection from the force of weather.

Sea temperature data may be found in sources such as the Admiralty Pilot for a given sea area and period.

To facilitate rapid abandonment in an emergency, where a liferaft 'grab bag' is provided, it shall be in an accessible position known to all on board.

Equipment carried in the 'grab bag' does not count towards the equipment the vessel itself must ordinarily carry.

7.4 Statutory Lifejackets

7.4.1 Lifejackets should be MCA (DfT) or SOLAS standard and MED approved ("Wheelmarked"); or should comply with BS EN 396 or BS EN ISO 12402, Part 3 or Part 6, for lifejackets of 150 Newtons; or BS EN 399 or BS EN ISO 12402, Part 2, for lifejackets of 275 Newtons or equivalent ISO/CEN standard.

7.4.2 All lifejackets should be fitted with a whistle, retro-reflective materials and a light.

7.4.3 If the lifejackets are the inflatable type, an additional 10% or 2 lifejackets, whichever is the greater, should be provided.

7.4.4 Inflatable lifejackets for New Vessels (2020) and new inflatable lifejackets for existing vessels are to be of the compressed gas inflation type, with either manual or automatic inflation, and fitted with oral top up valves. Lifejackets which are inflated orally only are not considered appropriate.

7.4.5 Compressed gas inflatable lifejackets should be serviced to manufacturers' recommendations within a maximum of one month either side of the Compliance, Renewal and Intermediate examination. In the intervening years they are to be examined annually to the manufacturer's recommendation. Certification or declaration of servicing must be available for inspection by the MCA. As far as is reasonable and practicable, visual examinations should be carried out weekly by the owner/managing agent to determine whether they are safe to use.

7.4.6 Where a lifejacket is serviced annually this is acceptable as an alternative to the servicing regime prescribed in 7.4.5

7.4.7 A suitable lifejacket should be provided for each person on board less than 32kg.

7.5 Personal Floatation Devices (PFD)

7.5.1 A PFD can be a buoyancy aid of at least 150N or a wearable buoyancy device of at least 50N that provides buoyancy in the water. Where applicable, they must comply with the requirements of 7.4 above.

7.6 Lifebuoys

7.6.1 Shall be marked with the vessel name and port of registry or fishing vessel number and fitted with reflective tape and may be circular or horseshoe or torpedo in shape.

7.6.2 At least one lifebuoy shall be so placed as to be readily accessible to the persons on board and shall always be capable of being rapidly cast loose and shall not be permanently secured in any way.

7.7 EPIRBs

7.7.1 Every EPIRB shall:

i) be fitted with a float free arrangement, whose operation will cause it to activate;

ii) be stowed in such a position that it is protected from possible damage and is easily removable from its mounting for placing in any survival craft (reference shall be made to MGN 267(F) - The Location and Stowage of Liferafts and Emergency Positioning Radio Beacons (EPIRBs) on UK Registered Fishing Vessels;

iii) have the float-free arrangement routinely replaced or serviced in accordance with the manufacturer's instructions;

iv) have the power source replaced whenever necessary and at least before its expiry date;

v) be registered, reference shall be made to The Merchant Shipping (EPIRB Registration) Regulations SI 2000, No. 1850 and Merchant Shipping Notice 1816 (M&F) – Mandatory Registration of Electronic Position indicating Radio Beacons (EPIRBs);

vi) on renewal, conform to IMO Resolution A.810 (19). The Radio and Telecommunication Terminal Directive Declaration of Conformity shall include reference to IEC 61097-2 or EN 300 066 or the Marine Equipment Directive Annex referenced by the Compliance Certificate shall be A.1/5.6; and

vii) transmit the position obtained from a built-in GPS receiver to satellite.

Reference shall also be made to MGN 267 - The Location and Stowage of Liferafts and Emergency Positioning Radio Beacons (EPIRBs) on UK Registered Fishing Vessels

7.7.2 All 406 MHz beacons (EPIRB or PLB) fitted to a United Kingdom vessel must be registered. Changes to registered beacons must also be notified. The effectiveness of a 406 MHz beacon as a Search and Rescue (SAR) aid depends upon correct registration details being available to the SAR services. If they are not, here is the potential to jeopardise SAR operations, including looking for the wrong vessel, or stopping a search because it might appear that the vessel with which the beacon is registered is not in distress.

7.7.3 The beacon manufacturers normally provide two or more identical registration cards on which vessel operators shall enter the required details, but these are also available from the Royal Yachting Association (Global Maritime Distress Safety System (GMDSS) Guidelines), Ofcom registration documentation and from the MCA via our website or the EPIRB Registry itself. One is to be returned to the manufacturer as a warranty, while another is sent to the competent authority. Any spare forms shall be retained by the beacon owner.

7.7.4 Beacons that operate within the 406 MHz band must be registered with the MCA. The completed form or any registration queries shall be sent to:

The UK Beacon Registry
The Maritime and Coastguard Agency
MRCC Falmouth
Castle Drive
Pendennis Point
Falmouth
Cornwall TR11 4WZ

Tel: 020 3817 2006
Fax: 01326 319264

Email: UKBeacons@mcga.gov.uk

Online registration: www.gov.uk/406beacon

Office hours: Mon – Thurs: 08:45 – 16:45 Fri: 08:45 – 16:15

Outside office hours or in the case of an alert:

Falmouth Coastguard Operations room: Tel: 01326 317575

The beacon supplier or the EPIRB Registry will help you complete the card correctly if you need assistance.

Further details on EPIRB and PLB Registration are contained in MSN 1816 (M&F) Mandatory Registration of Emergency Position Indicating Radio Beacons (EPIRBs), or any superseding document.

7.8 Flares and smoke signals

7.8.1 Flares and smoke signals shall be be stowed on or near the bridge in a dry and readily accessible location, clearly marked, of an Marine Equipment Directive approved type, within their expiry date. It should be noted that handheld signals burn for approximately 60 seconds, whilst buoyant signals burn for up to 3 minutes.

7.9 Personal Locator Beacons

7.9.1 If a 406 MHz EPIRB with GPS is carried, then Personal Locator Beacons (PLBs) can either be 406 MHz and comply with EN 302 152 or be AIS. If no EPIRB is carried, then PLBs must be 406MHz and comply with EN 302 152. This is because the EPIRB is considered to be the mandatory equipment and the PLB is a voluntary addition

7.9.2 On single handed vessels, skippers are strongly recommended, if they carry 406 MHz EPIRBs, to also carry and wear 406 MHz PLBs. Other PLB types may not notify the Coastguard of Man Overboard.

7.9.3 406 MHz PLBs, in addition to complying with EN 302 152, must be registered in accordance with The Merchant Shipping (EPIRB Registration) Regulations SI 2000, No. 1850 and Merchant Shipping Notice 1816 (M&F) – Mandatory Registration of Electronic Position indicating Radio Beacons (EPIRBs). AIS PLBs need not be registered.

7.9.4 Personal Locator Beacons should be worn whilst working on the open decks of fishing vessels at sea. When not being worn they should be stowed either in a deckhouse or other dry and readily accessible position. Personal Locator Beacons shall also be maintained in accordance with the manufacturer's instructions.

7.10 Means of Recovering a Helpless Person from the water

7.10.1 All Vessels must have an effective means of recovering a helpless/unconscious person from the water.

7.11 Means of getting back on board a vessel operated single handedly

7.11.1 Vessels operated single handed must have a means of enabling the skipper to get back on board the vessel. The means must be deployable by a person in the water.

CHAPTER 8 EMERGENCY PROCEDURES

8.1 General

8.1.1 This Chapter applies to all vessels

8.2 Inspections of life saving equipment and fire appliances

8.2.1 Inspections of the life-saving equipment and fire appliances shall be made at intervals of not more than one month.

8.3 Drills

8.3.1 The skipper and crew shall ensure that they are familiar in the use of all lifesaving and fire appliances and equipment with which the vessel is provided and shall ensure that all members of the crew know where the equipment is stowed. Related training shall be carried out in drills, including flooding drills, held in port or at sea, at intervals of not more than one month. Further information is contained in MGN 570 (F) Fishing Vessels: Emergency Drills or any superseding document. Information on how to prevent Man Overboard situations occurring is contained in MGN 571 (F) Fishing Vessels: Prevention of Man Overboard.

8.3.2 The drills referred to in paragraph 8.3.1 shall ensure that the crew thoroughly understand and are exercised in the duties which they have to perform with respect to the handling and operation of all life-saving, fire-fighting, flooding controls and survival equipment. If a vessel carries 5 or more crew, a muster list shall be provided with clear instructions for each member of the crew, which shall be followed in case of emergency. An example Muster List is contained in MGN 570.

8.4 Records of Inspections and Drills

8.4.1 The times, dates and particulars of inspections and drills shall be recorded and available for future inspection.

CHAPTER 9 – RADIO AND NAVIGATION

9.1 General

9.1.1 This Chapter applies to all vessels

9.2 Radio equipment

9.2.1 All vessels must carry a VHF Radio, (DSC), fixed or hand held. On Decked vessels that go beyond 30 miles, this radio must be fixed.

9.2.2 When operating offshore in Sea Area A1, a VHF radio shall be adequate to contact a coastal radio station in good conditions. For vessels operating in Sea Areas 2 and beyond it is strongly recommended that additional means of communication with greater range such as a Medium Frequency radio are carried. Vessels with Liferafts shall carry a Portable VHF Radio.

9.2.3 Sea Areas are defined as follows:

- A1 means an area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available, as may be defined by a Contracting Government.
- A2 means an area, excluding sea area A1, within the radiotelephone coverage of at least one MF coast station in which continuous DSC alerting is available, as may be defined by a Contracting Government.
- A3 means an area, excluding sea areas A1 and A2, within the coverage of an Inmarsat geostationary satellite in which continuous alerting is available (76 °N and 76 °S).
- A4 means an area outside sea areas A1, A2 and A3.

9.2.4 Coastguard Operations Centres “CGOC’s” maintain a listening watch on VHF Channel 16 via loudspeaker. The primary means of distress and urgency alerting should be via VHF DSC. On medium frequency (MF), the only means of distress and urgency alerting available is via MF DSC.

9.2.5 The CGOC’s provide the UK’s Radio Medical Advice Service for vessels at sea. To seek medical advice or medical evacuation, call the Coastguard on VHF Radio whereupon you will be placed in direct contact with the appropriate medical expertise. This service is free.

9.2.6 The vessel’s crew shall be familiar in the operation of the hand held VHF and the EPIRB and be trained in the setting up and operation of the portable radio equipment.

9.2.7 Reference shall be made to The Merchant Shipping (Radio)(Fishing Vessels) Regulations, SI 1999 No. 3210 as amended, or any superseding document.

9.3 Radio Licences and Qualifications

9.3.1 All vessels fitted with a radio must have a radio licence, which can be obtained from:

http://licensing.ofcom.org.uk/radiocommunication-licences/ships-radio/

The contact details of the licencing team are:

Spectrum Licensing
Riverside House
2a Southwark Bridge Road
London
SE1 9HA

Spectrum Licensing
Tel: 020 7981 3131 or 0300 123 1000
Fax: 020 7981 3235
Textphone: 020 7981 3043 or 0300 123 2024 - Please note that these numbers only work with special equipment used by people who are deaf or hard of hearing.
E-mail: spectrum.licensing@ofcom.org.uk

9.3.2 Failure to obtain a radio licence (which also records the Ship's unique Maritime Mobile Service Identity (MMSI) (DSC Identifying Code)) may result in the DSC function operating incorrectly in an emergency, as unregistered identifying codes are re-allocated.

9.3.3 Vessels with operational Radio kit, for example GMDSS or VHF, must have a person on board with the appropriate operators certificate. Further information on obtaining an operators certificate can be obtained from MCA Seafarer Training and Certification Branch on 023 8032 9231 by email exams@mcga.gov.uk

9.4 Navigation Lights, Shapes and Sound signals

9.4.1 Vessels shall be equipped to enable display of the navigation lights, shapes and sound signals appropriate to all possible modes of operation, in daylight, darkness and in restricted visibility, in accordance with international requirements.

9.4.2 The Vessel details, it's call sign and MMSI number shall be readily displayed near the helm to assist the skipper in emergencies.

9.4.3 Reference shall be made to:

The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations, SI 1996 No. 75 as amended and Merchant Shipping Notice 1781, or any superseding documents.

9.4.4 MGN 393 (M&F) - Navigation Light Units: Maintenance and the Use of New Technology Light Sources, such as Light Emitting Diodes (LEDs), as Navigation Lights on SOLAS and non-SOLAS Vessels (or any superseding document) provides guidance on the requirements and performance standards, for new technology light sources such as LED Lights. In addition, LED lights shall comply with ISO19009.

9.5 Navigation Equipment

9.5.1 Every vessel shall carry a magnetic compass

9.5.2 Every vessel constructed of GRP and Wood shall carry a radar reflector. Vessels constructed of other materials shall carry a radar reflector at the discretion of the MCA Vessels shall have, if less than 150gt, and if practicable, a radar reflector or other means to enable detection by ships navigating by radar at both 9 and 3 GHz. Further guidance is contained in MGN349 (M&F) Carriage of Radar Reflectors on Small Vessels, or any superceding document.

9.6 Electronic Aids to Navigation

9.6.1 Any electronic aids to navigation shall be tested frequently and well maintained. Reference shall be made to MGN 379 – Navigation: Use of Electronic Navigation Aids, or any superseding information or guidance documents. This Guidance Note emphasises the need for correct use of navigational equipment by watch-keepers and in particular to:

- Be aware that each item of equipment is an aid to navigation.
- Be aware of the factors which affect the accuracy of position fixing systems.
- Appreciate the need to cross check position fixing information using other methods.
- Recognise the importance of the correct use of navigational aids and knowledge of their limitations.
- Be aware of the dangers of over-reliance on the output from, and accuracy of, a single navigational aid.

9.7 Visibility from the Wheelhouse

9.7.1 *Every New Vessel (2020) shall be so constructed that the person steering has a clear view to the sea surface, 90 metres ahead, when at the principal steering position from within the wheelhouse. N*

9.7.2 Further guidance is contained in Marine Guidance Note 314 (F): Fishing Vessels: Wheelhouse Visibility, or any superseding document.

CHAPTER 10 – CREW ACCOMMODATION

10.1 All vessels

10.1.1 For all fishing vessels, the following must be appropriate to the service of the vessel and the length of time crew live on board:

.1 Maintenance of accommodation and galley spaces with due regard to hygiene and overall safe health and comfortable conditions;

.2 Ventilation, heating, cooling and lighting;

.3 Mitigation of excessive noise and vibration;

.4 Location, size, construction materials, furnishing and equipping of sleeping rooms, mess rooms and other accommodation spaces;

.5 Sanitary facilities, including toilets and washing facilities, and supply of sufficient hot and cold water.

10.1.2 Where the surveyor is not satisfied that the accommodation is adequate for the service of the vessel in respect of points 1 to 5 above, and modification to the vessel is required, the surveyor will seek to agree an appropriate time period with the owner for such modifications to be carried out, and an improvement notice will be issued for that period.

10.2 Additional Crew Accommodation requirements for New Vessels (2018), vessels joining the UK Register for the first time, or re-joining after a period of 6 months not being on the UK Register after 31 December 2018

10.2.1 On every occasion when a vessel is newly constructed, is joining the UK Register for the first time or after a period of six months or more have elapsed since the vessel left the Register or the crew accommodation of a vessel has been reconstructed, such vessel, if crew accommodation is to be fitted, shall comply with the requirements of paragraphs 10.2.2 to 10.2.41 to the satisfaction of the MCA.

10.2.2 There shall be adequate headroom in all accommodation spaces.

10.2.3 Where sleeping rooms are provided, there shall be no direct openings into sleeping rooms from fish rooms and machinery spaces, except for the purpose of emergency escape. Where reasonable and practicable, direct openings from galleys, storerooms, drying rooms or communal sanitary areas shall be avoided unless expressly provided otherwise.

10.2.4 Accommodation spaces shall be adequately insulated; the materials used to construct internal bulkheads, panelling and sheeting, and floors and joinings shall be suitable for the purpose and shall be conducive to ensuring a healthy environment. Sufficient drainage shall be provided in all accommodation spaces.

10.2.5 Emergency escapes from all crew accommodation spaces shall be provided as necessary.

10.2.6 Accommodation spaces, where they exist, shall be such as to minimize noise and vibration.

10.2.7 Accommodation spaces shall be ventilated and adequately heated, taking into account climatic conditions. The system of ventilation shall supply air in a satisfactory condition whenever crew are on board.

10.2.8 Ventilation arrangements or other measures shall be such as to protect non-smokers from tobacco smoke.

10.2.9 All accommodation spaces shall be provided with adequate light. Wherever practicable, accommodation spaces shall be lit with natural light in addition to artificial light

10.2.10 Where sleeping spaces have natural light, a means of blocking the light shall be provided.

10.2.11 Adequate reading light shall be provided for every berth in addition to the normal lighting of the sleeping room.

10.2.12 Emergency lighting shall be provided in sleeping rooms.

10.2.13 Where a vessel is not fitted with emergency lighting in mess rooms, passageways, and any other spaces that are or may be used for emergency escape, permanent night lighting shall be provided in such spaces.

10.2.14 Where the design, dimensions or purpose of the vessel allow, the sleeping accommodation shall be located so as to minimize the effects of motion and acceleration but shall in no case be located forward of the collision bulkhead

10.2.15 The number of persons per sleeping room and the floor area per person, excluding space occupied by berths and lockers, shall be such as to provide adequate space and comfort for the crew on board, taking into account the service of the vessel.

10.2.16 To the extent not expressly provided otherwise, the number of persons allowed to occupy each sleeping room shall not be more than six. A separate sleeping room or sleeping rooms shall be provided for officers, wherever practicable.

10.2.17 The maximum number of persons to be accommodated in any sleeping room shall be legibly and indelibly marked in a place in the room where it can be conveniently seen.

10.2.18 Individual berths of appropriate dimensions shall be provided. Mattresses shall be of a suitable material.

10.2.19 Sleeping rooms shall be so planned and equipped as to ensure reasonable comfort for the occupants and to facilitate tidiness. Equipment provided shall include berths, individual lockers sufficient for clothing and other personal effects, and a suitable writing surface.

10.2.20 Sleeping accommodation shall be situated or equipped, as practicable, so as to provide appropriate levels of privacy for men and for women.

10.2.21 Mess rooms shall be as close as possible to the galley, but in no case shall be located forward of the collision bulkhead.

10.2.22 Vessels shall be provided with mess-room accommodation suitable for their service. To the extent not expressly provided otherwise, mess-room accommodation shall be separate from sleeping quarters, where practicable.

10.2.23 The dimensions and equipment of each mess room shall be sufficient for the number of persons likely to use it at any one time.

10.2.24 Sanitary facilities, which include toilets, washbasins, and tubs or showers, shall be provided for all persons on board, as appropriate for the service of the vessel. These facilities shall meet at least minimum standards of health and hygiene and reasonable standards of quality

10.2.25 The sanitary accommodation shall be such as to eliminate contamination of other spaces as far as practicable. The sanitary facilities shall allow for reasonable privacy

10.2.26 Where sanitation, galleys or mess rooms are provided, cold fresh water and hot fresh water shall be available to all fishermen and other persons on board, in sufficient quantities to allow for proper hygiene. The competent authority may establish, after consultation, the minimum amount of water to be provided

10.2.27 Where sanitary facilities are provided, they shall be fitted with ventilation to the open air, independent of any other part of the accommodation.

10.2.28 All surfaces in sanitary accommodation shall be such as to facilitate easy and effective cleaning. Floors shall have a non-slip deck covering.

10.2.29 Amenities for washing and drying clothes shall be provided as necessary, taking into account the service of the vessel,

10.2.30 Whenever possible, a cabin shall be made available for a member of the crew who suffers illness or injury.

10.2.31 Whenever possible, a place for hanging foul-weather gear and other personal protective equipment shall be provided outside of, but convenient to, sleeping rooms.

10.2.32 Appropriate eating utensils, and bedding and other linen shall be provided to all crew on board. However, the cost of the linen can be recovered as an operational cost if the collective agreement or the fisher's work agreement so provides.

10.2.33 All crew on board shall be given reasonable access to communication facilities, to the extent practicable, at a reasonable cost and not exceeding the full cost to the fishing vessel owner.

10.2.34 Cooking equipment shall be provided on board. To the extent not expressly provided otherwise, this equipment shall be fitted, where practicable, in a separate galley.

10.2.35 The galley, or cooking area where a separate galley is not provided, shall be of adequate size for the purpose, well-lit and ventilated, and properly equipped and maintained.

10.2.36 The containers of butane or propane gas used for cooking purposes in a galley shall be kept on the open deck and in a shelter which is designed to protect them from external heat sources and external impact.

10.2.37 A suitable place for provisions of adequate capacity shall be provided which can be kept dry, cool and well ventilated in order to avoid deterioration of the stores and, to the extent not expressly provided otherwise, refrigerators or other low-temperature storage shall be used, where possible.

10.2.38 Food and potable water shall be sufficient, having regard to the number of crew, and the duration and nature of the voyage. In addition, they shall be suitable in respect of nutritional value, quality, quantity and variety, having regard as well to the religious requirements and cultural practices in relation to food.

10.2.39 Accommodation shall be maintained in a clean and habitable condition and shall be kept free of goods and stores which are not the personal property of the occupants or for their safety or rescue.

10.2.40 Galley and food storage facilities shall be maintained in a hygienic condition.

10.2.41 Waste shall be kept in closed, well-sealed containers and removed from food handling areas whenever necessary.

CHAPTER 11 – CLEAN SEAS

11.1 Clean Seas

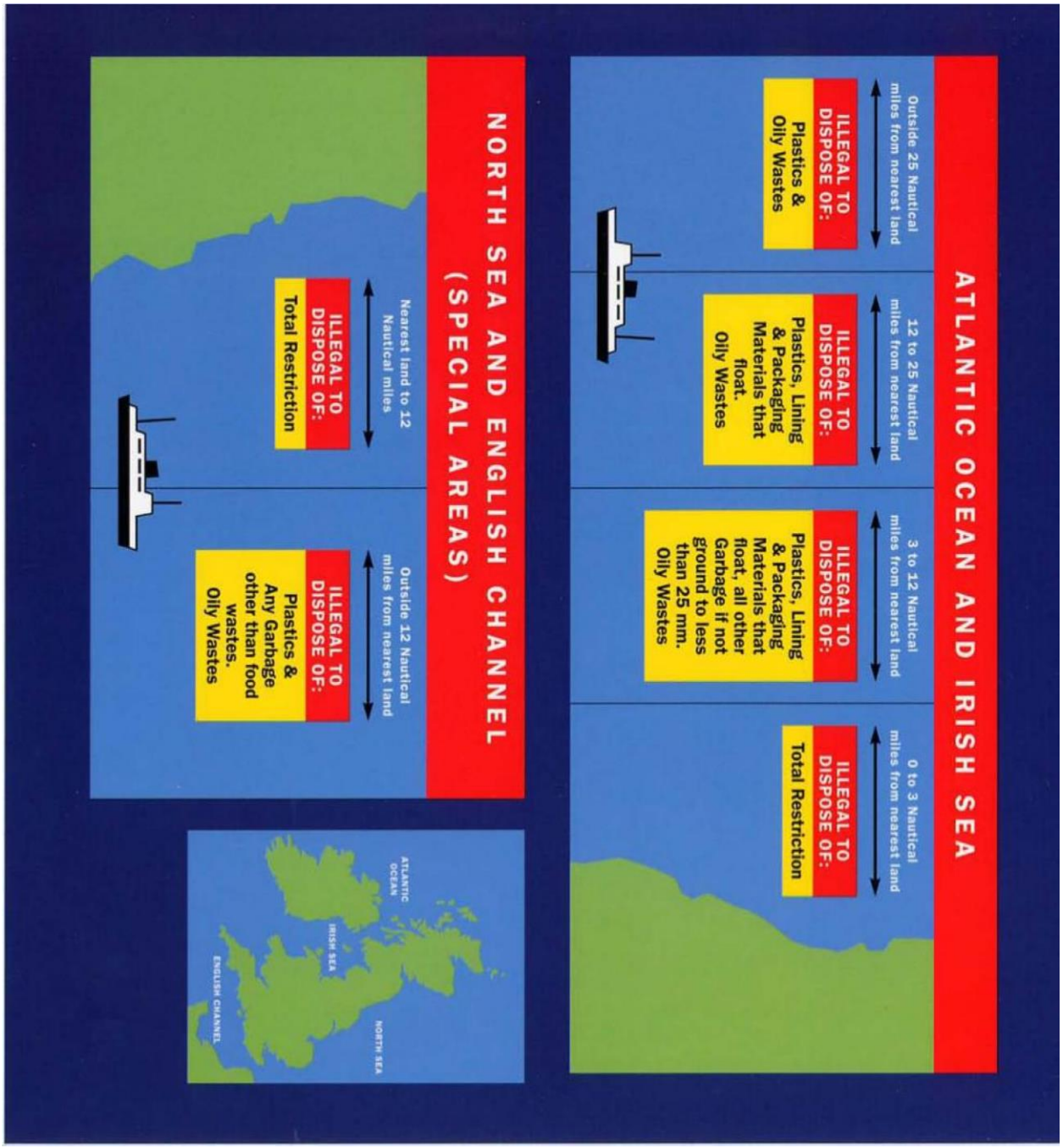
11.1.1 All vessels must comply with international, national, regional and local requirements and applicable sections of MARPOL, for the prevention of marine pollution that are applicable to the vessel and the area in which the vessel is operating. Responsibility for the vessel to be properly equipped and maintained and to ensure that the skipper receives up-to-date and adequate information, rests mainly with the owner.

11.1.2 Oily residues and garbage or refuse and other wastes must be landed ashore at proper disposal facilities and not discharged or dumped into the sea. All vessels operating under this Code must display placards informing the crew of the disposal requirements under MARPOL.

11.2 MARPOL PLACARDS

11.2.1 Every vessel shall display a placard displaying the legal requirements of dumping waste in accordance with the requirements of MARPOL. An example placard is shown below at Annex 1.

Annex 1


ATLANTIC OCEAN AND IRISH SEA
Outside 25 Nautical miles from nearest land
ILLEGAL TO DISPOSE OF:
Plastics & Oily Wastes
12 to 25 Nautical miles from nearest land
ILLEGAL TO DISPOSE OF:
Plastics, Lining & Packaging Materials that float.
Oily Wastes
3 to 12 Nautical miles from nearest land
ILLEGAL TO DISPOSE OF:
Plastics, Lining & Packaging Materials that float, all other Garbage if not ground to less than 25 mm.
Oily Wastes
0 to 3 Nautical miles from nearest land
ILLEGAL TO DISPOSE OF:
Total Restriction
NORTH SEA AND ENGLISH CHANNEL (SPECIAL AREAS)
Nearest land to 12 Nautical miles
ILLEGAL TO DISPOSE OF:
Total Restriction
Outside 12 Nautical miles from nearest land
ILLEGAL TO DISPOSE OF:
Plastics & Any Garbage other than food wastes.
Oily Wastes
ATLANTIC OCEAN
IRISH SEA
NORTH SEA
ENGLISH CHANNEL

Annex 2

Maritime & Coastguard Agency

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND SMALL FISHING VESSEL CERTIFICATE

Issued under the Provisions of the Fishing Vessels (Codes of Practice) Regulations 2017 No. 943 under the Authority of the Government of the United Kingdom of Great Britain and Northern Ireland by the Maritime and Coastguard Agency, an Executive Agency of the Department for Transport.

Particulars of Vessel

Name of Vessel		Name of Onner	
Address of Owner			
Offical RSS Number		Fishing Number	
Por of Registry		Registered Length	
Date of which keel was laid		Overal Length	
	(DD/MM/XXXX	Typ ofe if Fishing method	

THIS IS TO CERTIFY:

i) *that the vessel has been inspected and found to comply with the requirements of the Code of Practice for the Safety of Small Fishing Vessels of less than 15m Length Overall that are applicable;;t*
ii) *that the life saving appliances are sufficient for a total of …….. persons;*
iii) *that the vessel is fitted with the lights, shapes and sound signals to comply with the International Regulations for the Prevention of Collisions at Sea and is fitted with navigational equipment and carries nautical publications in accordance with the Code;*
iv) *that the vessel complies with the requirements of the requirements of the Merchant Shipping (Radio)(Fishing Vessels) Regulations 1999.*
v) *that the last Out of Water Inspection was conducted on……*

Completion date of the Inspection on which this Certificate is based.

This Certificate is valid until subject to the Annual Self Certification being completed and the conditions set out below

Signature _____ Name _____

Signature of Authorised Official Issuing the Certificate

Place Date

Conditions under which this Certificate is issued

This Certificate confirms that at the time of survey as required by the Fishing Vessels (Codes of Practice) Regulations 2017 No. 943, the vessel met the minimum legal requirements. It is the owners responsibility to ensure that following the survey, the vessel remains compliant. If the vessel does not meet the requirements of the Code of Practice the Certificate may be cancelled.

Any unauthorised modification to the vessel or its equipment may invalidate this certificate or endanger the crew. If you intend to modify the vessel seek professional guidance and inform the MCA in advance to seek MCA approval.

This Certificate is no longer valid on change of ownership of the vessel and application to MCA should be made to inspect the vessel and obtain a renewal of the Certificate for Registration Purposes.

ADDITIONAL CONDITIONS PARTICUALR TO VESSEL INSERTED HERE

An Executive Agency of the Department of Transport

Annex 3

ANNUAL SELF-CERTIFICATION

I, as Owner, will verify each year that the vessel continues to comply with the requirements of the Code and sign this Annual Self-Certification form to Certify this has been done.

Signature _____ Name _____

Signature of Owner

Date

Name of Owner		
Address of Owner		
Post Code		

I CERTIFY, IN RESPECT OF THIS VESSEL THAT:

i) The vessels, hull, machinery and all equipment carried on board remain compliant with the requirements of the Fishing Vessels (Codes of Practice) Regulations 2017 and MSN **** The Code of Practice for the Safety of Small Fishing Vessels of less than 15m Length Overall.

ii) Such safety equipment carried is in sufficient numbers for the total persons specified on the Certificate;

iii) The Safety equipment has been properly maintained and serviced in accordance with manufacturers recommendations;

iv) Where applicable, a risk assessment* of work activities has been completed in accordance with the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997;

v) that the vessel is fitted with the lights, shapes and sound signals to comply with the International Regulations for the Prevention of Collisions at Sea and is fitted with navigational equipment and carries nautical publications in accordance with the Code;

iv) that the vessel complies with the requirements of the requirements of the Merchant Shipping (Radio)(Fishing Vessels) Regulations 1999.

* The Risk Assessment is written **YES/NO (**Delete as appropriate)

The Annual Self-Certification by the owner shall take EVERY YEAR three months either side of the date of issue of the Certificate.

1st Anniversary Signature of Owner		**Date**	
2nd Anniversary Signature of Owner		**Date**	
3rd Anniversary Signature of Owner		**Date**	
4th Anniversary Signature of Owner		**Date**	

INFORMATION AS TO STABILITY OF FISHING VESSELS 12M REGISTERED LENGTH TO LESS THAN 15M LENGTH OVERALL BUILT AFTER 23 OCTOBER 2017

The Stability book to be kept on board the vessel pursuant to the requirements of this Code, shall contain the following information:

1. A statement of the vessel's name, port of registry, official number, registration letters, principal dimensions, date and place of build, gross and net tonnage displacement and minimum freeboard in the deepest foreseeable operating condition.

2. A profile plan of the vessel drawn to scale showing the names of all compartments, tanks, storerooms, crew accommodation spaces and the position of the mid-point of the length between perpendiculars (LBP).

3. A tabular statement of the capacities and position of the centres of gravity, longitudinally and vertically for every compartment available for the carriage of cargo, fuel, stores, feed water, domestic water, water ballast, crew and effects. The free surface function defined in paragraph 9 below should also be included for each tank designed to carry liquid. Details of the centroid of the total internal volume of the fish-hold(s) should be included in such information. The calculation may take into account the effect of assuming a void space between the top of the catch and the underside of the deckhead provided that under normal operating conditions, control of loading in the hold is such that the actual void space above the catch will always be equal to or greater than that assumed in such a calculation.

4. Where deck cargo and or stores is carried by a vessel the estimated maximum weight and disposition of such deck cargo should be included in the information in the appropriate operating conditions and show compliance with the stability criteria set out in the Code.

5. A diagram or tabular statement should be provided showing for a suitable range of mean draughts and at the trim stated, the following hydrostatic particulars of the vessel:

(i) the heights of the transverse metacentres;

(ii) moments to change trim one centimetre;

(iii) tonnes per centimetre immersion;

(iv) longitudinal position of the centre of flotation;

(v) vertical and longitudinal positions of the centre of buoyancy;

(vi) displacement in tonnes.

Where a vessel has a raked keel, the same datum (a horizontal line through the intersection of the hull moulded line with the vessel centreline, amidships) should be used for the hydrostatics as employed in determining the information required in paragraph 3 above. In such cases full information should be included in respect of the rake and dimensions of the keel and may be given in the form of a diagram. The positioning of the draft marks relative to this datum should be included on such a diagram.

6. A diagram or table should be provided showing cross curves of stability indicating the assumed position of the axis from which the righting levers are measured and the trim which has been assumed. Where a vessel has a raked keel a horizontal datum through the intersection of the hull moulded line with the

vessel centreline, amidships, should be used. **On existing vessels, any datum other than a horizontal line through the intersection of the hull moulded line with the vessel centreline, amidships, should be clearly defined.**

7. The information provided under paragraphs 5 and 6 above should be at such a nominal trim that represents accurately the vessel in all normal operating trims. Where calculations show that there are significant numerical variations in these operating trims the information provided under paragraphs 5 and 6 above should be repeated over such a range of trims to allow an accurate interpolation of such information at any normal operating trim.

8. Superstructure deckhouses, companionways located on the freeboard deck, including hatchway structures may be taken into account in deriving such cross-curves of stability provided that their location, integrity and means of closure will effectively contribute to the buoyancy.

9. An example should be included in such information to show the corrections applied to the transverse metacentric height and righting levers (GZ) for the effects of the free surfaces of liquids in tanks and should be calculated and taken into account as follows:

(i) the metacentric height in metres should be reduced by an amount equal to the total of the free surface functions for each tank divided by the vessel's displacement in tonnes. For each tank the free surface function is given by:

$$1.025 \times \rho i$$

where ρ = specific gravity of the liquid; I = transverse moment of inertia of the surface

($i = \frac{LB^3}{12}$ where L=length and B=breadth of the free surface in metres)

i.e. $$\text{correction} = \frac{\text{Sum of } \rho i}{\text{Displacement}}$$

(ii) the righting lever (GZ) curves should be corrected by either:

(a) adding the free surface correction calculated under (i) above to the value in metres of the calculated height of centre of gravity of the vessel above datum; or

(b) making direct calculations of the heeling moment due to the liquid surface being inclined at the selected angle of heel where such calculations take proper account of the position of liquid surface in relation to the geometric configuration of the tank. The correction to the righting lever (GZ) at any selected angle of heel should then be the summation of the individual heeling moments of the tanks considered, divided by the vessel's displacement.

10. A stability statement and diagram should be provided for the usual condition of the vessel:

(a) in the lightship condition:

the vessel should be assumed to be empty except for liquids in machinery and in piping systems including header tanks. The weight and position of the centre of gravity of any permanent ballast or fishing gear should be indicated;

(b) in each of the following circumstances so far as they may be applicable to the vessel in its foreseeable operating conditions:

(i) on departure from port:

the vessel should be assumed to be loaded with the necessary equipment, materials and supplies including ice, fuel, stores and water;

(ii) on arrival at fishing grounds:
as sub-paragraph (i) above but account taken of the consumption of fuel and stores;

(iii) on arrival at fishing grounds:

as sub-paragraph (ii) above but the appropriate icing-up allowance as set out in paragraph 14 below should be taken into account;

(iv) on departure from fishing grounds:

the vessel should be assumed to be loaded with its maximum catch, but account taken of the consumption of fuel and stores;

(v) on departure from fishing grounds:
as sub-paragraph (iv) above but the appropriate icing-up allowance as set out in paragraph 14 below should be taken into account;

(vi) on departure from fishing grounds:

the vessel should be assumed to be loaded with 20% of its maximum catch but account taken of the consumption of fuel and stores;

(vii) on departure from fishing grounds:

as sub-paragraph (vi) above but the appropriate icing-up allowance as set out in paragraph 14 below should be taken into account;

(viii) on arrival at port with maximum catch:
account should be taken of the consumption of fuel and stores;

(ix) on arrival at port with 20% maximum catch:

account should be taken of the consumption of fuel and stores;

(x) if any part of the catch normally remains on deck, further statements and diagrams appertaining to that condition in all the appropriate circumstances set out in subparagraphs (iv) to (ix) inclusive should be provided;

The total free surface correction for the effect of liquid in tanks should be applied to each loading condition set out in the foregoing provisions of this paragraph. The free surface correction should take into account the amounts of fuel, lubricating oil, feed and fresh water in the vessel in each such loading condition.

(c) Working instructions, specifying in detail the manner in which the vessel is to be loaded and ballasted, should be included within the Trim and Stability Manual. The instructions should generally be based upon the conditions that are specified in paragraph (b) above. For vessels in which no provision has been made for the carriage of deck cargo, the working instructions should also contain the following statement:

"Provision has not been made within the vessel's stability for deck stowage of catch. Catch landed on deck should be stowed below as soon as is possible and prior to landing further catch"

11. Where provision is made in a particular area of the vessel for the washing and cleaning of the catch which could lead to an accumulation of loose water a further statement and diagram should be provided appropriate to that condition which takes into account the adverse effects of such loose water, it being assumed that:

(i) the amount of loose water on deck is determined by the size and disposition of the retaining devices; and

(ii) in all other respects the vessel is loaded in accordance with (iv) or (vi) of paragraph 10 above, whichever is the less favourable with regard to the vessel's stability.

12. Each stability statement should consist of:

(i) a profile drawn to a suitable scale showing the disposition of the deadweight components;

(ii) a tabular statement of all the components of the displacement including weights, positions of centres of gravity, transverse metacentric height corrected for free surface effects, trim and draughts;

(iii) a diagram showing a curve of righting levers (GZ), corrected for free surface effects and derived from the cross-curves of stability, showing, if appropriate, the angle at which the lower edges of any opening which cannot be closed watertight will be immersed. The diagram should also show the corresponding numerical values of the stability parameters defined in section 3.34 and 3.36 or 3.35 and 3.36 of this Code.

13. The information provided under sub-paragraph (iii) of paragraph 12 above should be supplemented by a graph or tabular statement showing the maximum permissible deadweight moment over a range of draughts which should cover foreseeable operating conditions. At any given draught this maximum permissible deadweight moment value is the total vertical moment about a convenient base line, of all the component weights of the total deadweight which, at that draught, will ensure compliance with the minimum stability criteria requirements of the Code. If an allowance for the weight due to icing-up is required, this should be taken into account by a suitable reduction in the permissible moment. Where the stability information is supplied in accordance with the requirements of this paragraph the tabular statement required in accordance with sub-paragraph 12(ii) above should include the deadweight moment appropriate to each condition and an example should be added to the stability information to demonstrate the assessment of the stability.

14. The icing-up allowance which represents the added weight due to ice accretion on the exposed surfaces of the hull, superstructure, deck, deckhouses and companionways should be calculated as follows:

(i) full icing allowance:

all exposed horizontal surfaces (decks, house tops, etc.) should be assumed to carry an ice weight of 30 kilogrammes per square metre.

The projected lateral area of the vessel above the waterline (a silhouette) should be assumed to carry an ice weight of 15 kilogrammes per square metre. The height of the centre of gravity should be calculated according to the heights of the respective areas and in the case of the projected lateral area the effect of sundry booms, rails, wires, etc., which will not have been included in the area calculated should be taken into account by increasing by 5% the weight due to the lateral area and the moment of this weight by 10%.

This allowance should apply in winter (1st November to 30th April inclusive in the northern hemisphere) to vessels which operate in the following areas:

(a) the area north of latitude 66º30'N. between longitude 10ºW. and the Norwegian Coast;

(b) the area north of latitude 63ºN. between longitude 28ºW. and 10ºW.;

(c) the area north of latitude 45ºN. between the North American continent and longitude

28ºW.;

(d) all sea areas north of the European, Asian and North American continents east and west of the areas defined in (a), (b) and (c) above;

(e) Bering and Okhotsk seas and Tatar Strait;

(f) South of latitude 60ºS.

(ii) Half of the full icing allowance:

this should be taken as one half of that calculated under sub-paragraph (i) of this paragraph and should apply in winter to vessels which operate in all areas north of latitude 61ºN. between longitude 28ºW. and the Norwegian Coast and south of the areas defined as the lower limit for the full icing allowance between longitude 28ºW. and the Norwegian Coast.

15. Information should be provided in respect of the assumptions made in calculating the condition of the vessel in each of the circumstances set out in paragraph 10 above for the following:

(i) duration of the voyage in terms of days spent in reaching the fishing grounds, on the grounds and returning to port;

(ii) the weight and disposition of the ice in the hold at departure from port including the heights of stowage;

(iii) consumption rates during the voyage for fuel, water, stores and other consumables;

(iv) ratio by weight of the ice packed with the catch in the fish hold;

(v) melting rates for each part of the voyage of the ice packed with the catch and the ice remaining unused in the hold.

16. A copy of a report of an inclining test of the vessel and the derivation therefrom of the lightship particulars should be provided.

17. A statement should be given by or on behalf of the owner of the vessel that the statements and diagrams supplied with respect to the operating conditions set out in paragraph 10 above are based on the worst foreseeable service conditions in respect of the weights and disposition of fish carried in the hold or on deck, ice in the hold, fuel, water and other consumables.

18. Maximum free surface moments should be included within the Loaded Departure condition, and as a minimum, factored according to tank percentage fill for all other conditions.

19. Generally, buoyant structures intended to increase the range of positive stability should not be provided by fixtures to superstructures, deckhouse, masts or rigging.

Annex 5

DAMAGE STABILITY REQUIREMENTS FOR MULTIHULL FISHING VESSELS OF 12M REGISTERED LENGTH TO LESS THAN 15M LENGTH OVERALL

Damage Stability Criteria for Multihull Vessels

1.1 This section applies to all new multihull vessels and vessels being modified.

1.2 Multihull vessels should be fitted with engine rooms that are separated by a watertight bulkhead.

1.3 In assessing survivability, the following standard permeabilities should be used: -

Space	Permeability %
Appropriated for stores	60
Appropriated for stores but not by a substantial quantity thereof	95
Appropriated for accommodation	95
Appropriated for machinery	85

Appropriated for liquids 0 or 95 whichever results in the more onerous requirements.

Other methods of assessing floodable volume may be considered, to the satisfaction of the MCA.

1.4 In assessing survivability the vessel should meet the damage stability criteria for one of two methods. The first (denoted Option 1) considers minor hull damage scenarios with limited equilibrium trim and heel angles after damage. This has historically been used by monohulls and some catamarans. The second method (denoted Option 2) considers minimum length single compartment damage scenarios with more onerous residual stability, combined with increased allowable equilibrium angles after damage. This Option 2 has been developed to address particular stability issues raised by low waterplane area vessels with deep hulls which typically have large intact freeboards such as catamarans.

2. Damage Stability, Option 1:

2.1 Vessels should be so arranged that after minor hull damage or failure of any one hull fitting in any one watertight compartment, it will satisfy the residual stability criteria below. This may be achieved by fitting water-tight subdivision or alternative methods to the satisfaction of the MCA. Minor damage should be assumed to occur anywhere in the vessel but not on a watertight subdivision.

2.2 In the damaged condition, the residual stability should be such that:

.1 the angle of equilibrium does not exceed 7 degrees from the upright,

.2 the resulting righting lever curve has a range to the downflooding angle of at least 15 degrees beyond the angle of equilibrium,

.3 the maximum righting lever within that range is not less than 100mm,

.4 the area under the curve is not less than 0.015 metre radians.

.5 this damage should not cause the vessel to float at a waterline less than 75mm from the weatherdeck at any point.

3 Damage Stability, Option 2:

3.1 Damaged Stability should be calculated with any one compartment flooded. The extent of damage should be:

.1 A damage length of 10% Length should be considered in the calculations. Where the distance between two transverse watertight bulkheads is less than the damage length, one or more bulkheads should be disregarded in the damage stability calculations, such that the compartment length considered is equal to or greater than the damage length. The damage length given above need not be applied within the forepeak and aftpeak compartment(s).

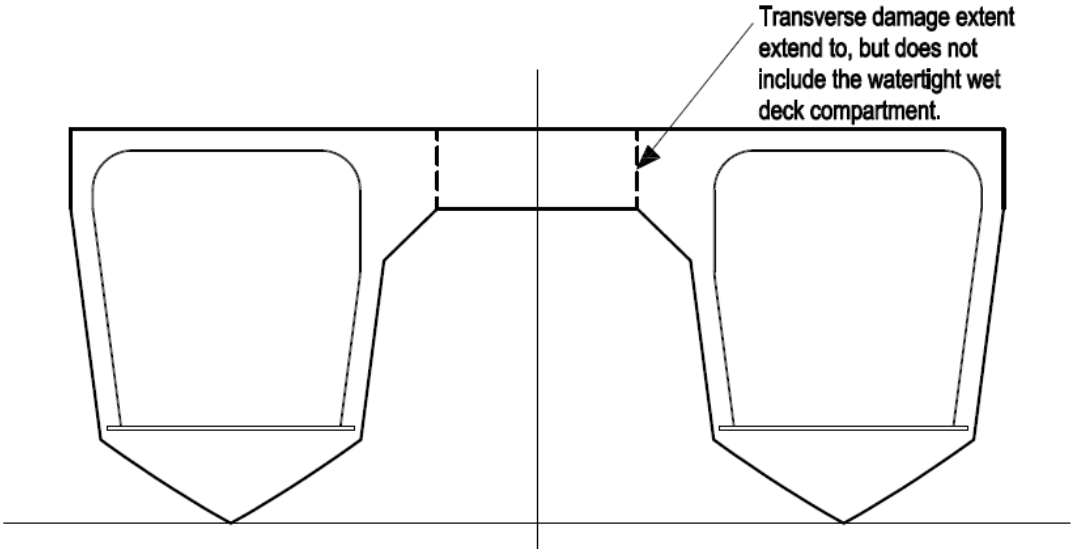
.2 The transverse extent of damage should be up to and including the centreline of the vessel. A catamaran need only be considered to have damaged the full width of one hull, provided the two hulls are totally independent i.e. there are no cross connecting spaces that could allow flooding to progress into the other hull. See Figure 1. Trimarans should be considered to have damaged wing and centre compartments up to the centre line of the vessel.

.3 The vertical extent of damage should be taken for the full vertical extent of the vessel, and

.4 The shape of the damage should be assumed to be a rectangular block.

Watertight compartments aft of the transom that do not form part of the hull length and do not extend below the design waterline (such as overhangs and appendages) need not be considered in the damaged length assessment.

Figure 1



3.2 Spaces that are normally occupied at sea are to be provided with at least two independent means of escape preferably at opposite sides / ends of the superstructure that allow positive freeboard independent of its location.

3.3 Any weathertight doors or openings leading from undamaged spaces, that are normally occupied at sea, to the weatherdeck should be regarded as downflooding points for the purposes of the damage stability calculation.

3.4 Damage to all the compartments of each hull of a multihull vessel forward of a point 5%L aft of the forward extremity of the watertight hulls shall be assessed to ensure that it does not result in a more onerous damaged stability condition.

3.5 In the damaged condition, the residual stability and damaged waterline should be such that:

1. the angle of equilibrium (combined heel and trim) does not exceed 15 degrees from the upright, sufficient non-slip deck surfaces and suitable holding points e.g. rails, grab bars etc., are provided along escape routes and accessing escape routes. Additionally, practical consideration should be given to the means of accessing, launching and embarking liferafts.

2. the resulting righting lever curve has a range to the downflooding angle of at least 20 degrees beyond the angle of equilibrium,

3. the maximum righting lever within that range is not less than 200mm, and

4. the area under the curve is not less than 0.045 metre radians.

5. the final equilibrium waterline should be below the lowest point of any opening which is not closed by an approved watertight closure. This includes air pipes, hatch covers, doors and any other weathertight closure.

6. this damage should not cause the vessel to float with a freeboard less than 75mm from the lowest point of the weatherdeck. This may be relaxed on application to the Administration, provided that all of the following are met:

.1 the immersed portion of the weather deck is not a life saving appliance storage area;

.2 it is not part of an assembly station, evacuation point or part of an evacuation route; and

.3 that no more than 10% L of the deck edge on the damaged side is immersed in the process, and that negative freeboard measured from the deck edge is limited to a maximum of 300 mm.

ANNEX 6

OFFSET LOAD TEST

1.1 An offset load test should be conducted when the vessel is loaded according to the operating conditions as specified in 3.8.1.2 of the IMO Publication “Safety Recommendations for Decked Fishing Vessels of Less than 12m in Length and Undecked Fishing Vessels”.

1.2 A weight equivalent to 25 x LOA x B (kgs) should be distributed along one side of the vessel,

where:

LOA and B, in metres, *Length overall and beam*

1.3 The stability is deemed satisfactory when the angle of heel does not exceed 15° and the freeboard to the deck is not less than 75 mm at any point.

1.4 The owner must agree with the MCA to use one of the following Operating Conditions listed in 3.8.1 of “Safety Recommendations for Decked Fishing Vessels of Less than 12m in Length and Undecked Fishing Vessels” for the test:

.1 departure for the fishing grounds with full fuel, stores, ice, fishing gear, etc.;

.2 departure from the fishing grounds with full catch, 30 percent stores, fuel etc;

.3 arrival at home port with full catch and 10 percent stores, fuel, etc: and

4 arrival at home port with 10 percent stores, fuel etc., and minimum catch, which should normally be 20 percent of full catch, but may be upto 40 percent of full catch provided the competent authority is satisfied that operating patterns justify such a value.

1.5 The same vessel condition should be repeated at each subsequent test.

Annex 7 – Definitions of Decked and Open Vessels

Decked Vessels

A decked vessel is defined as a vessel that has a continuous watertight weather deck with positive freeboard in all loading conditions. An open vessel is defined as a vessel which is not a decked vessel and open vessels should have a positive clear height at side. These requirements are for New Vessels (2020), vessels joining the Register for the first time or have previously been registered but have been unregistered for 6 months or more and are applying to rejoin the Register. Existing vessels which already comply with these requirements must also continue to maintain their vessel in accordance with these requirements

“Positive freeboard”; for decked vessels means:-

For decked vessels with a continuous watertight weather deck which is neither stepped or recessed or raised, when fully loaded with cargo and non-cargo deadweight items certificated to be carried (each person taken as 75kg), the vessel should, when in an upright condition, have a freeboard measured down from the lowest point of the weather deck of not less than 300mm for a vessel of 7m in length or under and not less than 627mm for vessels of 14.99m in length. For a vessel of intermediate length the freeboard should be determined by linear interpolation.

For decked vessels with a continuous watertight weather deck which may be stepped, recessed or raised, when fully loaded with cargo and non-cargo deadweight items certificated to be carried (each person taken as 75kg), the vessel should, when in an upright condition, have a freeboard measured down from the lowest point of the weather deck of not less than 200mm for a vessel of 7m in length or under and not less than 345mm for vessels of 14.99m in length. For a vessel of intermediate length the freeboard should be determined by linear interpolation. The raised portions of the watertight weather deck should extend across the full breadth of the vessel and the average freeboard over the length of the vessel should be no less than the requirement for freeboard of a vessel with a continuous watertight weather deck which is neither stepped, recessed or raised. The following table sets out the stations that should be taken to measure the freeboard of a vessel to determine the average.

	Station
After Half	After perpendicular (A.P.) 1/6(L) from A.P. 1/3(L) from A.P. Amidships
Forward Half	Amidships 1/3(L) from F.P 1/6(L) from F.P. Forward perpendicular (F.P.)

An internal hull moulding built to create a cockpit or cabin sole is not to be considered a watertight weather deck unless the space below the sole is permanently protected from water ingress (except for watertight hatches which are to be kept closed at sea) and provides a space to be used for either accommodation, shelter of persons, stowage, or permanent reserve buoyancy.

Open Vessel

An Open vessel means a vessel which is not a decked vessel and open vessels should have a positive clear height at side. Open vessels can be fitted with decks but if there are no freeing ports is it not considered decked.

These requirements are for New Vessels (2020), vessels joining the Register for the first time or have previously been registered but have been unregistered for 6 months or more and are applying to rejoin the Register. Existing vessels which already comply with these requirements must also continue to maintain their vessel in accordance with these requirements

“Positive Clear Height at Side”; for open vessels means:-

The distance between the waterline (in an upright and fully loaded condition) and the lowest point on the gunwale is not less than 400mm for a vessel of 7m in length or under and not less than 690mm for a vessel of 14.99m in length. For a vessel of intermediate length the clear height at side should be determined by linear interpolation. The clear height at side should be measured to the top of the gunwale or capping or to the top of the wash strake if one is fitted above the capping.

A vessel fitted with an internal moulding or sole boards where the space below the sole is not permanently protected from water ingress (except for watertight hatches which are to be kept closed at sea) and does not provide a space to be used for either accommodation, shelter of persons, stowage, or permanent reserve buoyancy should be treated as an open vessel.

ANNEX 8 – THE WOLFSON STABILITY GUIDANCE METHOD

THE WOLFSON METHOD HAS BEEN DEVELOPED FROM A MCA RESEARCH PROJECT. SKIPPERS AND OWNERS MAY FIND IT USEFUL.

CONTENTS

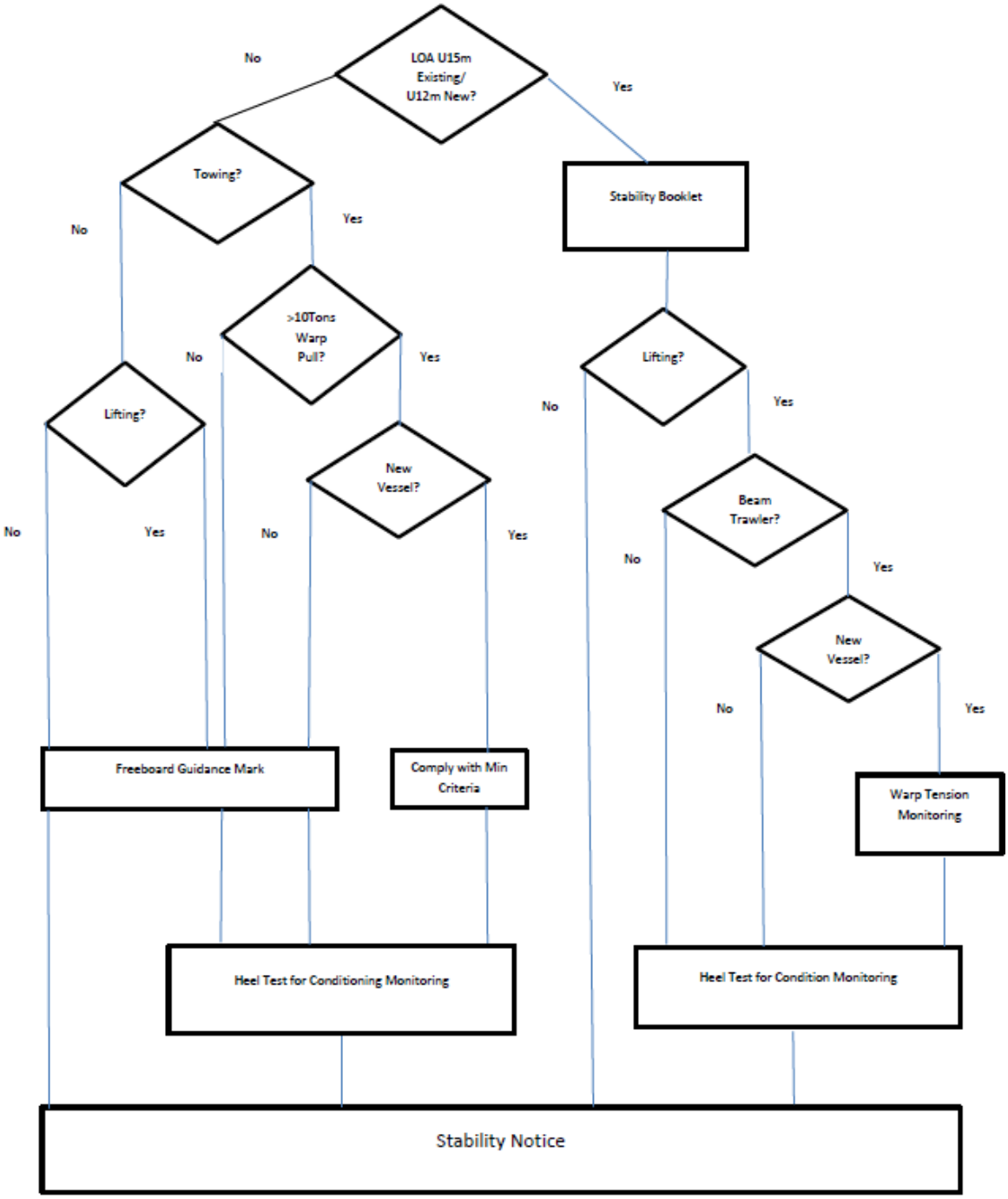
1. INTRODUCTION

This document summarises the methods used to prepare Stability Notices for fishing vessels. It is based on the recommendations of Research Projects 559 and 560 carried out by the Wolfson Unit of Southampton University. The researchers recommend that each vessel display a Stability Notice in a prominent position in the wheelhouse. This notice would provide guidance on how certain loading or lifting operations will reduce the safety of the vessel, and on the limiting sea states in which such operations should be conducted. Three safety zones are defined, and assigned the colours green, amber and red on the Stability Notice to represent the relative levels of safety.

Definitions of Decked and Open (undecked) vessels are contained in Annex 7 above.

Figure 1 presents a simplified summary of the proposals for stability assessment and documentation for fishing vessels, depending on their age, size, and whether they are equipped for towing or lifting. For vessels that have a full stability analysis, the method of providing safety guidance is based on an assessment of the residual stability when loaded or lifting. For vessels with no stability information the guidance is based on the residual freeboard when loaded or lifting.

Figure 1. Flow Chart of the system of assessment and guidance for fishing vessels


LOA U15m Existing/ U12m New?
No
Yes
Towing?
No
Yes
Stability Booklet
>10Tons Warp Pull?
No
Yes
Lifting?
No
Yes
Lifting?
No
Yes
New Vessel?
No
Yes
Beam Trawler?
No
Yes
New Vessel?
No
Yes
Freeboard Guidance Mark
Comply with Min Criteria
Warp Tension Monitoring
Heel Test for Conditioning Monitoring
Heel Test for Condition Monitoring
Stability Notice

2. CALCULATION OF THE SAFETY ZONE DEFINITIONS

Three safety zones are defined:

Green: "Safe" in all but extreme sea states

Amber: "Low level of safety" and should be restricted to low sea states

Red: "Unsafe, and danger of capsize" unless restricted to calm conditions and with extreme Caution

The safety of a vessel is dependent on its size and stability in relation to the sea state. For a vessel of a given size and stability, the lowest, or critical, sea state that could result in capsize can be estimated. The safety zone boundaries are defined by the significant waves heights Hs_{amber} and Hs_{red} as follows:

Green/amber boundary: $Hs_{amber} = \sqrt{1+0.4LOA} - 1$

Amber/red boundary: $Hs_{red} = (Hs_{amber})/2$

The loading and lifting cases that are most likely to occur, and which reduce the stability to these values, should be presented on the Stability Notice.

3. CALCULATION OF THE CRITICAL LOADING AND LIFTING CASES

3.1 Minimum stability for vessels with full stability analysis:

The critical loading or lifting cases that correspond to the green/amber and amber/red safety zone boundaries are defined by the residual range of stability and righting moment:

Green/amber boundary: Range $\sqrt{RM\max} = 20B(Hs_{amber})$

Amber/red boundary zone: Range $\sqrt{RM\max} = 20B(Hs_{red})$

Where Range is the residual range of positive stability in degrees

RMmax is the maximum residual righting moment, having taken account of any heeling moments due to offset weights, lifting or wind, in tonne.metres

B is the maximum beam in metres

The potential for significant downflooding should be considered, and the stability curve terminated at the downflooding angle.

3.2 Minimum freeboard for vessels with no stability data:

For vessels with no stability data, the critical loading or lifting cases that correspond to the safety zone boundaries are defined by the residual minimum freeboard. That is the minimum height of the lowest part of the weather deck above the waterline. The only vessel dimensions required are the overall length and beam.

<u>Decked Vessels</u>

Green/amber zone boundary: Min.Freeboard = $\frac{B}{L}$ X (Hs_{amber})

Amber/Red zone boundary: Min.Freeboard = $\frac{B}{L}$ X (Hs_{red})

An example of a Stability Notice for a decked vessel is shown in Appendix 1, Figure 2.

Undecked Vessels

Because of the increased risk of swamping by wave action, no green safety zone is defined for undecked vessels.

Amber/red zone boundary Min.Freeboard = $\frac{2.6B}{L}$ X (Hs_{red})

An example of a Stability Notice for an open vessel is shown in Appendix 1, Figure 3.

4. INFORMATION TO BE PRESENTED

The following information should be included for each case presented on the Stability Notice:-

- For the maximum recommended sea state for the amber and red zones, the significant wave height.
- The range of minimum residual freeboards appropriate for each zone.
- For loading cases, definitions of the critical loadings that are identifiable on board.
- For lifting cases, the range of heel angles appropriate to each zone, and, or
- Where a load cell is fitted, the range of lifting loads appropriate to each zone.

5. CALCULATION METHODS FOR VESSELS WITH FULL STABILITY ANALYSIS

5.1 Loading cases

It is preferable for consultants to use software that automates the calculation to such a degree that it can be based on all of the standard loading conditions, in the same way as a maximum allowable KG calculation might be performed. It should be possible then to identify the worst conditions as those with the lowest loads at the safety zone boundaries.

If it is not practical to consider all loading conditions, care should be taken to ensure that the worst condition is selected. The condition with the lowest stability might have the highest freeboard, and it is not always possible to identify by inspection which condition might have the lowest level of safety when additional loads are applied, particularly when lifting. Conventional assessment does not consider righting moment, and the condition with the lowest GZ values might not be the condition with the lowest righting moment.

It is necessary to consider all possible loading cases that might be hazardous to the vessel. These might include overloading holds, filling hoppers, holding catch on deck, and lifting from all blocks with capacity. Example lifting cases for a beam trawler are presented in Figure 4.

It may be necessary to consider combinations of loading and lifting, particularly where it is likely that a combination of the two will take place, or where normal operations will result in very large variations of loading condition and stability. Examples of possible presentations are shown in Figure 5 and Figure 6. Figure 4 is preferred because it identifies the increased danger of lifting when adversely loaded.

It is anticipated that, in most cases, such a study will provide redundant information, and every effort should be made to simplify the Stability Notice by minimising the number of loading cases presented. Redundant information will occur if maximum possible loads or lifts do not result in a reduction of stability to the amber zone. Simplification of the information may also be possible where different loading cases have similar critical loads, and therefore may be groups together with a common value.

6. ACCURACY OF DATA

When operating with minimal stability, small changes to the loading case can result in large changes to the predicted value of the critical sea state. This is because the range of stability, which is the dominant parameter, can reduce rapidly, particularly with asymmetric loading, or lifting, cases. Whilst accuracy of the calculations is necessary to ensure that reliable information is provided, it should be borne in mind that the information is based on estimates of vulnerability which depend on many variables. This method does not offer a precise prediction of capsize, and so presentation of information to a high degree of accuracy is not appropriate.

Calculated values should be rounded to levels that are reasonable, bearing in mind the instrumentation or observations to which they relate. As a general rule of thumb, rounding of values to within 10% should be appropriate. The following examples are offered for guidance:

Parameter	**Units**	**Decimal Places**
Seastate	metres	0 or 1
Load	tonnes	0 or 1
Freeboard	metres	1
Heel angle	degrees	0

Vessels under 8 metres should have their freeboard calculated to two decimal places.

7. VESSEL ILLUSTRATIONS

Simple illustrations should be incorporated to clarify the nature of the information provided. These may be simple diagrammatic line drawings of the profile or cross section of the vessel, as appropriate to identify each loading case considered. Whilst it is not necessary for these to be scale drawings of the vessel, the fishermen will be more likely to relate to them if they bear a close resemblance to the vessel.

8. NOTES ON MAINTAINING STABILITY

The notice should include notes entitled “Simple Ways to Maintain Stability” or similar. These notes should be relevant to the vessel, its gear and catch handling arrangements and the fishing method. Suggestions for notes are contained in Section 3 above of this MGN (pages 3 to 4).

9. PHOTOGRAPH

A photograph of the full profile of the vessel should be included, and labelled with the date it was taken. The date should correspond with the preparation of the Stability Notice.

10. FREEBOARD MARKS

The researchers propose that Freeboard marks are applied on all vessels for which the guidance information has been based on minimum freeboards rather than on a full stability analysis.

The marks should be placed on both sides of the vessel. In selecting the location, the most likely reason for reduced freeboard should be borne in mind. If a large load is added well forward of aft, or is lifted from a point that is well forward of aft, the load might induce a large trim, resulting in the minimum freeboard being at a different longitudinal location compared with the upright case. While the research is based on the minimum freeboard it is not possible to calculate the exact location of minimum freeboard because freeboard might be reduced with a number of different load configurations. A consistently useful position is 25% LOA (forward from the aft end i.e. 75% abaft the fore end).

The marks should be applied in a colour that contrasts with the surrounding topsides.

To calculate the size of the marks for a vessel, Beam (B) and Length Overall (LOA) of the vessel is needed. The shape and size of the mark varies between Decked and Undecked vessels.

The safety zone boundaries are based on Significant Wave Heights, Hs_{amber} and Hs_{red} which need to be calculated in the first instance using the equations below.

Hs_{amber} (metres) = $\sqrt{(1+0.4\times LOA)}-1$

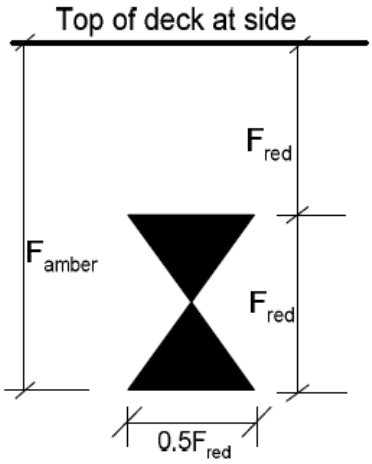
Hs_{red} (metres) = $(Hs_{amber})/2$

Once this has been calculated, the green/amber boundary (F_{amber}) and the amber/red boundary (F_{red}) of the mark need be calculated as shown below, which will then indicate the size of the mark.

Decked Vessels

F_{amber} (cm) = $100\times HS_{amber}\times\left(\frac{B(metres)}{LOA(metres)}\right)$

F_{red} (cm) = $\frac{(F_{amber})}{2}$

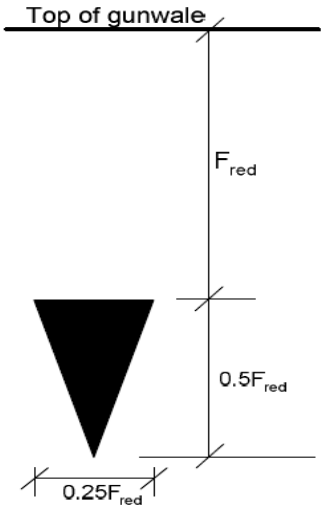


Undecked Vessels

F red (cm) = $2.6 \times B \times HS_{red} \ / LOA \times 100$

Height of the Mark (cm) = 0.5 x F red

Width of the Mark (cm) = 0.25 x F red



The marks are only there as a reference, in the same way that the loadline on a merchant vessel is there for reference. Three safety zones are defined:

Green: "Safe" in all but extreme sea states – waterline below the mark.

Amber: "Low level of safety" and should be restricted to low sea states – waterline within mark.

Red: "Unsafe, and danger of capsize" unless restricted to calm conditions and with extreme caution – waterline above the mark.

APPENDIX 1 – EXAMPLES OF STABILITY NOTICES FOR VESSELS WITHOUT A STABILITY INFORMATION BOOKLET

The operator should also keep the Wolfson Stability Guidance note posted in view in the wheelhouse as this gives advice on lifting / hauling / loading operations in given weather conditions. This looks as per the examples below. Both Notices would also include further information on "Simple Efforts for maintaining stability and an option to include a photograph.

Example 1 - Decked Vessel with <u>13.91LOA & 4.89B (Beam)</u>

1* The safety zone boundaries are based on Significant Wave Heights, **Hs/amber** and **Hs/red** which need to be calculated in the first instance using the equations example below:

Hs_{amber} (metres) = $\sqrt{(1 + 0.4x13.91)} - 1$ = Hs_{amber} 1.56

Hs_{red} (metres) = $\frac{1.5}{2}$ = Hs_{red} 0.78

<u>Round -up as follows: Hs_{amber} = 1.6 & Hs_{red} 0.8</u>

2* Minimum Freeboard

Once this has been calculated, the green/amber boundary (**F**amber) and the amber/red boundary (**F**red) of the mark need be calculated as shown below, which will then indicate the size of the mark.

a) The formula for the green/amder boundary is F_{amber} (cm) = 100 x HS_{amber} x { $\frac{B(metre)}{LOA(Metres)}$ } =

In this example this will be

F_{amber} (cm) = 100 x 1.56 x $\frac{4.89}{13.91}$ which can also be expressed as

F_{amber} (cm) = 100 x 1.56 x 0.35154565 = F_{amber} **54.8** (Round-up) to **<u>55cm</u>**

b) The formula for amber/red boundary is F_{red} (cm) = $\frac{(F_{amber})}{2}$

F_{red} (cm) = $\frac{54.8}{2}$ = 27.4 (Round up) F_{red} = <u>27 cm</u>

The data would then be inserted into the model Mark shown below.

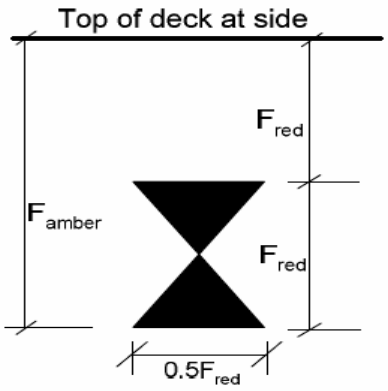
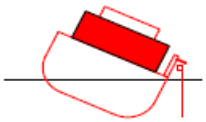
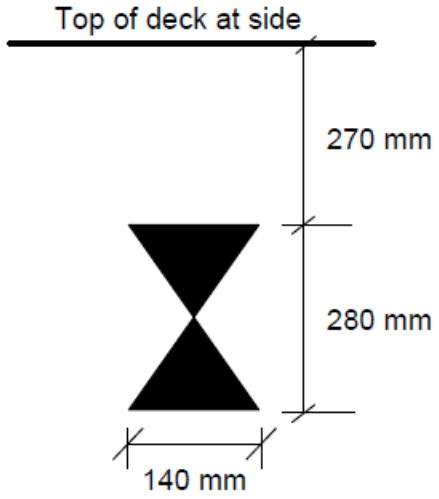


Figure 2: 13.91m Decked Vessel – Notice and Mark with calculations set out in Example 1 above included.

WOLFSON UNIT

STABILITY NOTICE				
Name 0 No. 0 Owner 0 Length 13.91 metres Beam 4.89 metres	Loading & Lifting Guidance	Safety Zone	Minimum Freeboard	Maximum Recommended Seastate
	Good margin of residual freeboard	Good margin of safety	At least 55 cm	
	Loading or lifting reduces minimum freeboard to less than 55 cm	Low level of safety	27 to 55 cm	1.6 metres
	Excessive loading or lifting reduces minimum freeboard to less than 27 cm	Danger of capsize	Less than 27 cm	0.8 metres

Freeboard Guidance Mark - size and location



Example 2 - Open-decked Vessel with 6.44 LOA & 2.66 B

1* The safety zone boundaries; are based on Significant Wave Heights, **Hs/amber** and **Hs/red** which need to be calculated in the first instance using the equations example below:

Hs_{amber} (metres) = $\sqrt{(1 + 0.4x\ 6.44)} - 1$ = Hs_{amber} 0.89

Hs_{red} (metres) = $\frac{0.89}{2}$ = Hs_{red} 0.44

Round -up as follows: Hs_{amber} = 0.90 & Hs_{red} 0.45

2* Minimum Freeboard

Undecked Vessels and the increased risk of swamping by wave action, no green safety zone is defined for undecked vessels.

The formula for the Amber/red zone boundary Min. Freeboard (Fb) = $\frac{2.6xBeam}{LOA}$ x (**Hs** red)

In this example this will be Amber/red zone boundary = Min. Fb = $\frac{2.6x2.66}{6.44}$ x 45 = 48

Minimum Fb = 48cm

3* Freeboard Mark calculation

The Freeboard Mark Calculation is

F_{red} (cm) = $2.6 \times B \times HS_{red} / LOA \times 100$

In this example, this is:

F_{red} (cm) = $\frac{2.6 \text{ x } 2.66 \text{x} 45}{644}$ = 48cm Freeboard Mark = 48 cm

The data would then be inserted into the model Mark shown below.

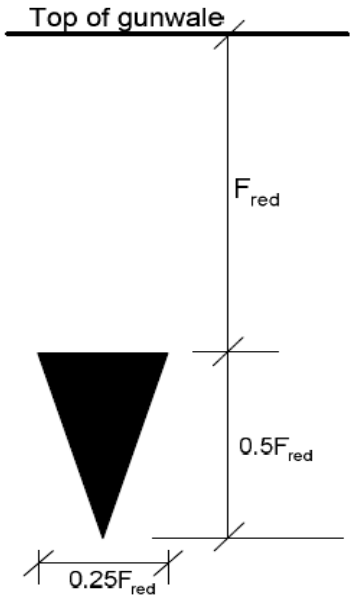
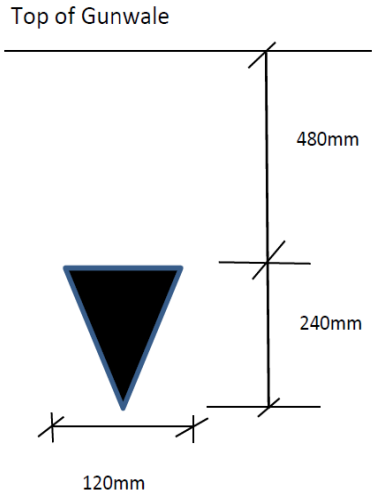
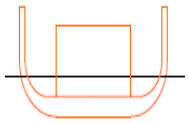
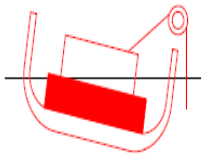


Figure 3: 6.44m Open Vessel

Notice and Mark with calculations set out in Example 2 above included.



STABILITY NOTICE				
Name **Noname** No. **0** Owner **Mrs Potter** Length **6.44 metres** Beam **2.66 metres**	**Loading & Lifting Guidance**	**Safety Zone**	**Minimum Freeboard**	**Maximum Recommended Seastate**
	Even with a freeboard of at least 48 cm, swamping may be a hazard	**Low level of safety**	At least 48 cm	
	Excessive loading or lifting reduces minimum freeboard to less than 48 cm	**Danger of capsize**	Less than 48 cm	0.4 metres

ANNEX 9.1

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS

Equipment need not be MCA approved provided it is fit for its intended purpose.

OPEN Vessels less than 7 metres (L)

Item	Remarks/compliance	Expiry/Service Date
Lifejackets – 1 per person		
1 Lifebuoy (with 18 metre buoyant line attached)		
2 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal, buoyant or hand held		
1 Fire Bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B) – if vessel has in-board engine (extinguisher should be capable of dealing with all fire types, including hydrocarbons)		
1 Fire Blanket (light duty) if vessel has galley or cooking area		
1 Satellite EPIRB or Personal Locator Beacon(s) - 1 per person		
VHF Radio – DSC fixed, or hand held.		
Bailer		
Approved Navigation Lights & Sound Signals		
Anchor and cable/warp		
Compass		
Waterproof Torch		
Medical Kit in accordance with The Merchant Shipping and Fishing Vessels (Medical Stores) Regulations 1995 No.1802 or any superseding regulations		
Radar Reflector		
CO Alarms for every enclosed space that has a fired cooking or heating appliance or where engine exhausts penetrate the wheelhouse or crew space		
Wolfson Freeboard Guidance Notice		
Record of relevant Stability requirement (See Chapter 3)		
Means of Recovering unconscious/helpless person from water and, if single handed, means of getting back on board vessel, deployable from water.		

Note: The checklist represents the minimum safety equipment requirements and owners should consider carrying additional safety equipment. It is recommended that if you carry Personal Locator Beacons, a Satellite EPIRB should also be carried and if you carry an EPIRB, that you carry Personal Locator Beacons for each member of the crew. Carriage of a liferaft is also recommended. Coastguard Operations Centres maintain a listening watch only on VHF Channel 16. The primary means of distress and urgency alerting should be via VHF DSC.

ANNEX 9.2

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS:

Equipment need not be MCA approved provided it is fit for its intended purpose.

OPEN Vessels 7 metres (L) and above to less than 12 metres (L)

Item	Remarks/compliance	Expiry/Service Date
Liferaft(s) - sufficient capacity for all persons on board vessel and appropriate for area of operation – See Annex 2 for guidance		
Lifejackets - 1 per person		
2 Lifebuoys (1 with 18 metre buoyant line attached) or 1 Lifebuoy (with 18 metre buoyant line) +1 Buoyant Rescue Quoit		
3 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal (buoyant or hand held)		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose or 1 Fire Bucket and lanyard		
1 Satellite EPIRB (for Vessels of 10m L and over) (Vessels of 10m and over that are single handed may replace the EPIRB with a Personal Locator Beacon)		
1 Satellite EPIRB or Personal Locator Beacon(s) – 1 per person (for vessels of 7m (L) to less than 10m (L))		
VHF Radio – DSC fixed, or hand held		
Bilge Alarm, if bilge not visible		
Bilge Pumps in accordance with section 4.9.2 of the Code		
Approved Navigation Lights & Sound Signals		
Anchor and cable/warp		
Compass		
Waterproof Torch		
Medical Kit in accordance with The Merchant Shipping and Fishing Vessels (Medical Stores) Regulations 1995 No.1802 or any superseding regulations		
Radar Reflector		
CO Alarms for every enclosed space that has a fired cooking or heating appliance or where engine exhausts penetrate the wheelhouse or crew space		
Wolfson Freeboard Guidance Notice		
Record of relevant Stability requirement (See Chapter 3)		
Means of Recovering unconscious/helpless person from water and, if single handed, means of getting back on board vessel, deployable from water.		

Note: The checklist represents the minimum safety equipment requirements and owners should consider carrying additional safety equipment. It is recommended that if you carry the Satellite EPIRB, you also carry Personal Locator Beacons for each member of the crew, and if you carry Personal Locator Beacons, you also carry a Satellite EPIRB. The liferaft, which is mandatory, should be fitted in accordance with the manufacturer's instructions. Coastguard Operations Centres maintain a listening watch only on VHF Channel 16. The primary means of distress and urgency alerting should be via VHF DSC

Liferafts must be carry a Portable VHF Radio

ANNEX 9.3

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS:

Equipment need not be MCA approved provided it is fit for its intended purpose.

OPEN Vessels 12 metres (L) and above to less than 15 metres (LOA)

Item	Remarks/compliance	Expiry/Service Date
Liferaft(s) - Sufficient capacity for all persons on board vessel and appropriate for area of operation – See Annex 2 for guidance		
Lifejackets - 1 per person + 2 spare		
2 Lifebuoys (1 with 18 metre buoyant line attached) or 1 Lifebuoy (with 18 metre buoyant line) +1 Buoyant Rescue Quoit		
3 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal (buoyant or hand held)		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose or 1 Fire Bucket and Lanyard		
VHF Radio – DSC fixed, or hand held		
1 Satellite EPIRB (Vessels that are single handed may replace the EPIRB with a Personal Locator Beacon)		
Bilge Alarm, if bilge not visible		
Bilge Pumps in accordance with section 4.9.2 of the Code		
Approved Navigation Lights & Sound Signals		
Anchor and cable/warp		
Compass		
Waterproof Torch		
Medical Kit in accordance with The Merchant Shipping and Fishing Vessels (Medical Stores) Regulations 1995 No.1802 or any superseding regulations		
Means of Recovering unconscious/helpless person from water and, if single handed, means of getting back on board vessel, deployable from water.		
Radar Reflector		
CO Alarms for every enclosed space that has a fired cooking or heating appliance or where engine exhausts penetrate the wheelhouse or crew space		
Wolfson Freeboard Guidance Notice		
Record of relevant Stability requirement (See Chapter 3)		

Note: The checklist represents the minimum safety equipment requirements and owners should consider carrying additional safety equipment. In addition to the Satellite EPIRB, Personal Locator Beacons are also recommended for all crew on vessels that are not single handed. The liferaft, which is mandatory, should be fitted in accordance with the manufacturer's instructions. Coastguard Operations Centres maintain a listening watch only on VHF Channel 16. The primary means of distress and urgency alerting should be via VHF DSC.

Liferafts must be carry a Portable VHF Radio

ANNEX 9.4

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS: Equipment need not be MCA approved provided it is fit for its intended purpose.

DECKED Vessels of less than 10 metres (L)

Item	Remarks/compliance	Expiry/Service Date
Liferaft(s) (for vessels of 7 metres (L) and over) - sufficient capacity for all persons on board vessel and appropriate for area of operation – See Annex 2 for guidance		
Lifejackets - 1 per person		
2 Lifebuoys (1 with 18 metre buoyant line attached) or 1 Lifebuoy (fitted with 18 metre buoyancy line) +1 Buoyant Rescue Quoit		
3 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal (buoyant or hand held)		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
Gas Detector		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
Fire Detectors for accommodation and engine spaces		
1 Fire Pump + Hose or 1 Fire Bucket and lanyard		
1 Satellite EPIRB or Personal Locator Beacon(s) – 1 per person		
VHF Radio – DSC fixed, or hand held		
Bilge Pumps in accordance with section 4.9.2 of the Code		
Bilge Level Alarm		
Approved Navigation Lights & Sound Signals		
Anchor and cable/warp		
Compass		
Waterproof Torch		
Medical Kit in accordance with The Merchant Shipping and Fishing Vessels (Medical Stores) Regulations 1995 No.1802 or any superseding regulations		
Radar Reflector		
CO Alarms for every enclosed space that has a fired cooking or heating appliance or where engine exhausts penetrate the wheelhouse or crew space		
Wolfson Freeboard Guidance Notice		
Record of relevant Stability requirement (See Chapter 3)		
Means of Recovering unconscious/helpless person from water and, if single handed, means of getting back on board vessel, deployable from water.		

Note: The checklist represents the minimum safety equipment requirements and owners should consider carrying additional safety equipment. It is recommended that if you carry the Satellite EPIRB, you also carry Personal Locator Beacons for each member of the crew, and if you carry Personal Locator Beacons, you also carry a Satellite EPIRB. The liferaft, which is mandatory for vessel of 7 metres (L) and over and strongly recommended for vessels under 7 metres (L), should be fitted in accordance with the manufacturer's instructions.

Coastguard Operations Centres maintain a listening watch only on VHF Channel 16. The primary means of distress and urgency alerting should be via VHF DSC.

Liferafts must be carry a Portable VHF Radio

ANNEX 9.5

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS:

CHECK LIST OF REQUIREMENTS: Equipment need not be MCA approved provided it is fit for its intended purpose.

DECKED Vessels 10 metres and above (L) to less than 12 metres (L)

ITEM	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person + 2 spare		
Liferaft(s) - sufficient capacity for all persons on board vessel and appropriate for area of operation – See Annex 2 for guidance		
2 Lifebuoys (1 with 18 metre buoyant line attached) or 1 Lifebuoy (fitted with 18 metre buoyant line) +1 Buoyant Rescue Quoit		
3 Parachute flares		
2 Hand-held flares		
1 Smoke Signal (buoyant or handheld)		
Gas Detector		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
Fire Detectors for accommodation and engine spaces		
1 Fire Pump and hose or 1 Fire Bucket and lanyard.		
1 Multi-purpose Fire Extinguishers (fire rating 5A/34B and 1 fixed Fire Extinguishing system for the machinery space		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
1 Satellite EPIRB (Vessels that are single handed may replace the EPIRB with a Personal Locator Beacon)		
VHF Radio - DSC fixed or hand held		
Bilge Pumps in accordance with section 4.9.2 of the Code		
Bilge Level Alarm		
Approved Navigation Lights & Sound Signals		
Anchor and cable/warp		
Compass		
Waterproof Torch		
Medical Kit in accordance with The Merchant Shipping and Fishing Vessels (Medical Stores) Regulations 1995 No.1802 or any superseding regulations		
Radar Reflector		
CO Alarms for every enclosed space that has a fired cooking or heating Appliance or where engine exhausts penetrate the wheelhouse or crew space		
Wolfson Freeboard Guidance Notice		
Record of relevant Stability requirement (See Chapter 3)		
Means of Recovering unconscious/helpless person from water and, if single handed, means of getting back on board vessel, deployable from water.		

Note: The checklist represents the minimum safety equipment requirements and owners should consider carrying additional safety equipment. In addition to the Satellite EPIRB, Personal Locator Beacons are recommended for all crew on vessels that are not single handed. The liferaft, which is mandatory, should be fitted in accordance with the manufacturer's instructions. Coastguard Operations Centres maintain a listening watch only on VHF Channel 16. The primary means of distress and urgency alerting should be via VHF DSC.

Liferafts must be carry a Portable VHF Radio.

ANNEX 9.6

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS: Equipment need not be MCA approved provided it is fit for its intended purpose.

DECKED Vessels 12m and above (L) to less than 15 metres (LOA)

ITEM	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person and 2 spare		
Liferaft(s) - sufficient capacity for all persons on board vessel and appropriate for area of operation – See Annex 2 for guidance		
2 Lifebuoys (1 with 18 metre buoyant line attached) or 1 Lifebuoy (fitted with 18 metre buoyant line) +1 Buoyant Rescue Quoit		
3 Parachute flares		
2 Hand-held flares		
1 Smoke Signal (buoyant or handheld)		
Gas Detector		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
Fire Detectors for accommodation and engine spaces		
1 Fire Pump and hose or 1 Fire Bucket and lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B) and 1 fixed Fire Extinguishing system for the machinery space		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio - DSC fixed or hand held		
1 Satellite EPIRB (Vessels that are single handed may replace the EPIRB with a Personal Locator Beacon)		
Bilge Pumps in accordance with section 4.9.2 of the Code		
Bilge Level Alarm		
Approved Navigation Lights & Sound Signals		
Anchor and cable/warp		
Compass		
Waterproof Torch		
Medical Kit in accordance with The Merchant Shipping and Fishing Vessels (Medical Stores) Regulations 1995 No.1802 or any superseding regulations		
Means of Recovering unconscious/helpless person from water and, if single handed, means of getting back on board vessel, deployable from water.		
Radar Reflector		
CO Alarms for every enclosed space that has a fired cooking or heating Appliance or where engine exhausts penetrate the wheelhouse or crew space		
Wolfson Freeboard Guidance Notice		
Record of relevant Stability requirement (See Chapter 3)		

Note: The checklist represents the minimum safety equipment requirements and owners should consider carrying additional safety equipment. In addition to the Satellite EPIRB, Personal Locator Beacons are recommended for all crew on vessels that are not single handed. The liferaft, which is mandatory, should be fitted in accordance with the manufacturer's instructions. Coastguard Operations Centres maintain a listening watch only on VHF Channel 16. The primary means of distress and urgency alerting should be via VHF DSC

Liferafts must be carry a Portable VHF Radio.

ANNEX 10 – SCOPE OF INSPECTION

Survey & Inspection requirements

The following is a generalised list for guidance of the areas that a surveyor will request to be shown at an inspection of a Fishing Vessel of less than 15m LOA

The inspection is a general survey of the hull and equipment, machinery and systems to confirm that the ship complies with the relevant rule requirements and is maintained in a satisfactory condition.The list is not exhaustive and should be read in conjunction with “Fishing Vessel Surveys and Inspections – Planning for your next MCA visit”.

Documentation:

Review of documentation, alarms, signs and markings
Certificates (Small Fishing Vessel Certificate (declaration signed); Certificate of Registry)
Crew Certificates, Fisherman’s Working Agreement, Medical Certificates
Review of maintenance

Hull:
Decks & plating above the WL
Mooring equipment
Hatches
Ventilators and air pipes
Watertight and weather tight doors
Machinery casing and ventilation trunking
Windows, deadlights and side scuttles
Scuppers, discharges and valves
Freeing ports and shutters
Bulwarks
Fire dampers
Means of escape
Survey of tanks and system

Machinery:
High pressure fuel system
Shielding of fuel piping system
Insulation of hot surfaces exceeding 220 degrees C
Steering gear – examination and test
FO systems
HO Systems
Propulsion System
Steering System
Electrical equipment and installation
Auxiliary equipment
Control & monitoring system
The following systems shall be tested for proper functioning:
— machinery alarm and safety system
— manual control of machinery
— remote control of propulsion machinery
— Fire detection alarm system
— Water ingress alarm system
— remote stops, sensors, trips.

Navigational safety:
Publications
Charts
Lights and shapes
Operation of navigational equipment
Position keeping
Radios

Safety:
Fire protection systems – pumps, hoses, hydrants, fixed & portable equipment, detection
Test of fire & general alarm
Electrical systems – insulation, cables, emergency source of power, batteries
QCV’s; fuel transfer pumps; fans
Bilge systems, bilge alarms; self-draining compartments
Emergency communications
Cleanliness – bilges free of oil and dropped objects
All Life Saving Apparatus
Drills
Draught marks shall be verified in order – where required
Stability check in accordance with vessel age and size

Refrigeration:
Check system for integrity, gas tight boundaries, ventilation
Check escape arrangements

Out of water:

Survey of hull outside
Rudder, shaft, bearing, propeller
Ship side valves
Shaft and bearings including shaft seals
Ship side valves & overboard discharges
Steel thickness measurements in accordance with vessel age and size – to include air pipes, ventilators, coamings and hatch covers, bulkheads,
Anchoring equipment including calibration
Examination of masts, standing rigging
Examination of automatic vent head closures
Examination of settling/day tanks overflow and alarm arrangements
Pressure testing of tanks as deemed necessary
All piping
Towing points and towing equipment.
Foundations, bearing and hinge points[6]
Blocks

Deficiencies

Major deficiencies shall be rectified before renewal inspection is completed.

Minor deficiencies are rectified within 2 weeks or some other specified time period depending on availability of spare parts. Possible deficiencies shall normally be rectified before the renewal survey is regarded as completed.

The MCA may accept that minor deficiencies, recorded as to be rectified within 2 weeks. Exceptionally a longer time limit, normally not exceeding 3 months after the survey completion date may be given.

[6] Where wastage is suspected thickness measurements shall be carried out

ANNEX 11 - WHEN TO APPLY FOR AN INSPECTION

Inspection Type	By When	How long before due date can you arrange
Renewal Inspection	Expiry of Small Fishing Vessel Certificate	6 months prior to expiry
Change of Ownership	Before commencement of Fishing Operations, except with the agreement of MCA	N/A
Modification of vessel	By arrangement with MCA – You must notify MCA, prior to work commencing, of any intended modifications to the vessel prior to work starting. The vessel must not commence fishing operations until the MCA has approved the modifications	N/A
Change of Fishing Method	By arrangement with MCA – You must notify MCA, prior to work commencing, of any intended changes to the Fishing Method prior to work starting. The vessel must not commence fishing operations until the MCA has approved the modifications	N/A
Annual Self Certification	Annually before anniversary date of Small Fishing Vessel Certificate	N/A

Annex 12 – F Gas leaks

How often you must check for F gas leaks

How often you must check for leaks depends on the:

- amount of F gas in the equipment
- global warming potential of the F gas (how much the F gas contributes to global warming)

Frequency of equipment leak checks for common HFCs

Maximum period of time between leak checks	Maximum equivalent weight of carbon dioxide (tonnes)	HFC 23 (kg)	HFC 227ea (kg)	HFC 404A (kg)	HFC 410a (kg)	HFC 134a (kg)
1 year	5	0.3	1.6	1.3	2.4	3.5
6 months	50	3.4	15.5	13	24	35
3 months	500	34	155	127	240	350

Automatic leak detection

You must fit a leak detection system if your equipment contains F gas equivalent to 500 tonnes or more of carbon dioxide.

Mass of gases commonly used in refrigeration, air conditioning or fire protection equivalent to 500 tonnes of carbon dioxide

F gas	Mass of gas equivalent to 500 tonnes of carbon dioxide (kg)
HFC 23	34
HFC 508B	38
HFC 507A	125
HFC 404A	127
HFC 434A	154
HFC 227ea	155
HFC 422D	183
HFC 438A	221
HFC 410A	239
HFC 407C	282
HFC 134a	350

The leak detection system must alert you, or a service company responsible for your equipment, if it detects a leak.

You must have your leak detection system checked:

- every 6 years on electrical switchgear
- every year on all other equipment containing F gas

Annex 13

FV Roll Test Form

Vessel Beam @ deck (m) = ……

Mark on side (m) above waterline = Beam in metres / 8 = ……

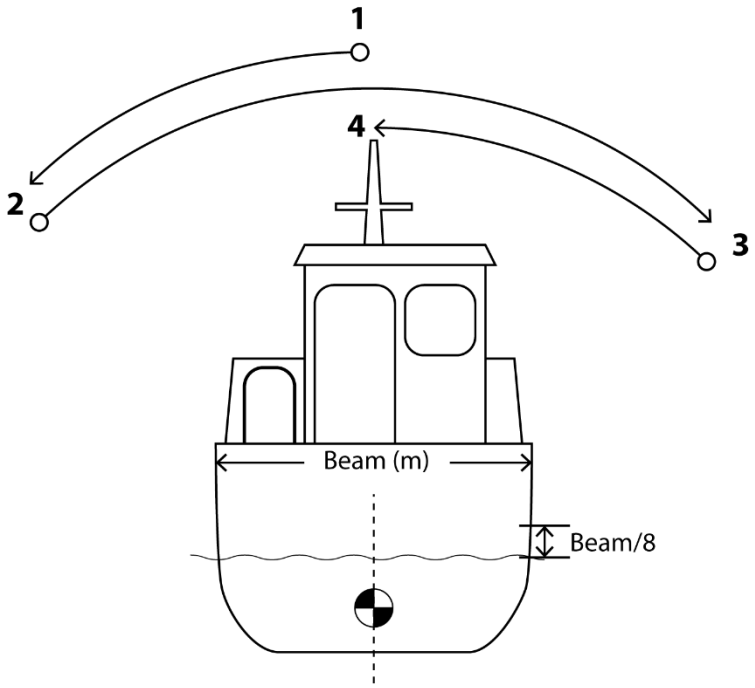
First 5 rolls (secs) = ……

Second 5 rolls (secs) = ……

Third 5 rolls (secs) = ……

Total time in secs for 15 rolls = ……../ 15 = Time for one average roll

(secs) …….



Time for 1 complete roll is as per above diagram, starting at position 1 through to position 4. Alternatively one can start from another point if preferred.

If the average roll period in seconds is longer than the beam in metres then you must contact your local MCA surveyor or Seafish Services for free advice and assistance. The MCA or Seafish Services may direct you to a qualified Naval Architect if necessary, or you could contact them directly in the first instance.

Annex 14

FV Heel Test Form

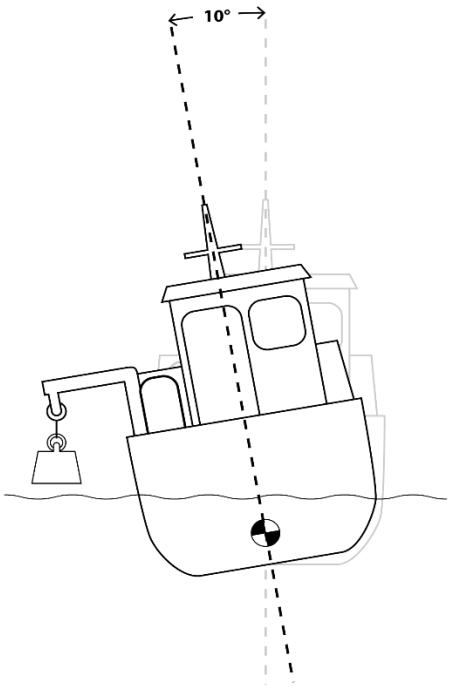
Vessel Loading Condition

Fish hold empty ☐
No Ice ☐
Fuel tanks full ☐
Deck cargo secure ☐
Weight used for test (remember this should be repeatable with the same weight)

……

……..

Date: …… Angle: ……



Repeat Tests

The repeat tests should be no more than 10% different to the original test above, if percentage of change is greater seek professional advice:

Date: …… Angle: ……

Date: …… Angle: ……

Date: …… Angle: ……