PART 1

GENERAL REQUIREMENTS

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SECTION SUBJECT

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Section 1.1 - Standards

1.1.1 These Construction Standards, hereinafter called **"Fishing Vessel Construction Standards"** or **"Standards"**, apply to the construction of any new commercial fishing vessel of less than 15m length overall (LOA), for which certification of compliance with the Standards is required.

1.1.2 Tables found in Parts 4, 6 and 7 are for the construction of hulls of a displacement design. For fast planing and high speed hulls, details are to be submitted for consideration.

1.1.3 Where building yards have developed and produced standard designs of vessels, alternative scantlings, and/or working practices, these may be specially considered in relation to these Standards, upon submission of full details.

1.1.4 Vessels are to conform to these Standards, and be completed in accordance with the specification. Any variations to the arrangement, scantlings, materials, or equipment used in the construction of the vessel that may alter the content of the original undertaking, are to be notified to MCA and Fishing Vessel Certifying Authority (FVCA) for consideration and shall be at least equivalent to the requirements, prior to the proposed variation being carried out. Approval must be obtained using MSF 1261.

1.1.5 It is the responsibility of the Builder, main Contractor or, (in case of Owner completion) the Owner for the quality of workmanship throughout the vessel, which should be in accordance with best practice and to good marine standards.

1.1.6 The Surveyor is to confirm and approve compliance with these Standards. Quality control procedures are the responsibility of the Builder/Owner.

1.1.7 The Builder of any new vessel is to ensure that the completed structure, machinery, equipment, and outfit, will provide the strength and service for the safe operation of the vessel in all operating conditions likely to be met in the vessel's area of operation.

1.1.8 Fishing vessels of unusual form and dimensions or those that may be designed as high speed planing hulls require further details to be submitted for approval.

1.1.9 Compliance with these Standards does not relieve the Designer or Builder of a vessel of their responsibilities to the Owner for the specification requirements or performance of the completed vessel.

1.1.10 The Builder is to allow the Surveyor full access to facilities during normal working hours to carry out their duties in surveying for compliance with these Standards.

1.1.11 These Construction Standards may be used for guidance during the repair of fishing vessels.

1.1.12 MCA or the FVCA may refuse the inspection and survey of any vessel that is considered to be not suitably covered by the scope of these Standards. **The MCA will not supply a service until application and requested funds have been received.**

1.1.13 A unique MCA CM file reference number (for tracking of correspondence) will be provided along with the estimate of fees. This number must be used in all correspondence.

1.1.14 Where an Owner undertakes the completion and fit out of a new vessel, the Owner will be considered as assuming full responsibility for this work. This responsibility also includes the work and design by any Subcontractors that may be appointed to assist in completing the vessel. In such cases it is the Owner's responsibility to ensure that all parties involved are familiar with the requirements of these Standards and any other mandatory requirements that are necessary to complete the vessel.

Section 1.2: Applicable Rules

1.2.1 All vessels are to fully comply with any statutory requirements, current at the time of their construction and with MCA code of practice relevant to the size and type of vessel.

1.2.2 For a vessel in a series of identical vessels under construction to the class of, or of a design previously approved by another administration or classification society, MCA may accept the design approved by that organisation provided a review by MCA has demonstrated that the design in principle meets the safety and reliability level of MCA's rule requirements.

1.2.3 Where requirements from international maritime conventions have been adopted in MCA's rules, compliance with these requirements is

Section 1.3 - Compliance procedures and certification

1.3.1 It is the responsibility of the Builder/Owner of a new vessel to be constructed to these Standards to inform the MCA and in the case of vessels of less than 12m RL, a designated FVCA of the intention to build and register the vessel.

1.3.2 Builders and owners must ensure they are aware of the structure to be included in the length overall. It is advised liaising with the Lead Surveyor if you have any doubts. Of particular note, pods and brackets for the attachment of outboard engines are usually included. A copy of MCA guidance can be found :

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/652359/MSIS27_Chapter_1_Annex_3_Rev_1017.pdf

1.3.3 Where a vessel is to be constructed and certified to these Standards, the Builder/Owner is to inform MCA, and in the case of vessels of less than 12m RL, an FVCA, of the intention to build a new vessel, and is to provide the following information after application for survey:-

(i) Dimensions and power;
(ii) Intended use (method of fishing);
(iii) Number of crew;
(iv) Construction material;
(v) Estimated design speed;
(vi) Area of operation;
(vii) Place of build (hull);
(viii) Place of outfit (where differing from build location);
(ix) Proposed date of commencement of construction;
(x) Proposed date of completion of vessel.
(See also Part 2, Paragraph 2.1.1)

Wood and Composite Materials

1.3.4 The following documentation from the builder or designer (workshop and yard) and from subcontractors shall be submitted when requested by MCA or FVCA (for vessels of less than 12m RL):

- information related to the builder’s or designer’s quality control and quality management system
- information related to the builder's procedures for managing materials that are excluded from use on board by statutory and/ or class requirements

All Vessels

1.3.5 For all vessels, the following documentation is also required:

- an “Asbestos Free Declaration”, including structures and equipment on board (required for Steel vessels aswell)
- list of relevant subcontractors to the building yard
- list of relevant subcontractors to the manufacturer of systems and components to be delivered for the product, if applicable.

1.3.6 To assess compliance with the rules MCA may require additional documentation.

1.3.7 Documents to submit upon completion of the vessel by the builder:

1. MCA environment/material data sheets (MSF 1361) – GRP Vessels only

2. MCA, or other tank pressure testing certificate[1] (MSF 1364) – All vessels 7m LOA and over

3. MCA electrical completion certificate (MSF 1363) – All vessels 7m LOA and over

4. Gas certificate, supplied and signed off by a marine certified gas technician – All vessels 7m LOA and over (where applicable)

5. MCA Declaration of Welding Operators Competency form (MSF 1362) (steel and aluminium vessels)

6. Mill certificates for hull plating and main structural members – Steel and aluminium vessels only

7. MCA Hydraulic Completion Certificate (MSF1369) – Al vessels over 7m LOA and over

1.3.8 Documents 1 to 5 in 1.3.7 above will not be accepted unless signed and dated by the relevant person.

1.3.9 All the above documents are to be submitted to the lead surveyor.

[1] At the discretion of MCA, where tanks are stamped by the manufacturer to a recognised standard (CE/ISO) then this may be acceptable in lieu of a test certificate.

1.3.10 Upon completion of a vessel built and surveyed in compliance with these Standards, MCA or the FVCA will issue a certificate in accordance with Paragraph 1.3.12.

1.3.11 Construction standard compliance certification will not be issued where the Surveyor has not inspected the vessel to their satisfaction during the construction period, or if fees and documents are still outstanding.

1.3.12 Categories of certification

Vessel length	Certification requirement
0 to <7m LOA	Hull Construction (MSF1367)
7m LOA to <12m RL[2]	Hull Construction (MSF1367) & Outfit Compliance (MSF1368)
12m RL to <15m LOA	Partial Declaration (MSF1326)

1.3.13 Certificates attesting the vessel has been constructed to meet with the requirements contained in these Standards, including all documentation to facilitate registration of the vessel will be issued upon completion.

Section 1.4 - Registration

1.4.1 The Owner should take all steps necessary to effect registration of the vessel by contacting the Registry of Shipping and Seamen.

Section 1.5 - Building premises

1.5.1 Building premises are to be suitable for the particular construction material proposed, and are to be in accordance with the requirements of these Standards, where applicable.

1.5.2 Separate locations may be approved for the construction of the hull and the fitting out of the vessel. When a hull is to be transported for fitting out and completion elsewhere, the construction is to be progressed to a stage commensurate with the method of transport to be used. When a partially completed vessel is to be towed or propelled afloat, the Builders should ensure that the vessel's stability and weathertightness is adequate prior to removal from the Builder's yard. Advice is to be sought by the Builder/Owner from the MCA when towing by sea.

[2] RL – Registered Length

1.5.3 For a hull of GRP construction, hull certification will only be issued where the Moulders of the hull also fit the internal framing and stiffeners to bare hull assemblies to ensure correct bonding and maintenance of adequate rigidity and shape for onward transportation. Certification of mono-hulls without decks fitted will only be considered on the basis as described above. Catamarans must be completed with the bridge deck structure completed by the Moulders.

1.6 Survey During Construction

1.6.1 Attending surveyors will verify:

- that the construction and scantlings comply with the Construction Standard requirements and the approved plans, and that the required materials are being used,
- that the materials, components and systems have been certified in accordance with the Construction Standards (or an alternative as agreed prior to construction with MCA)
- that the work is carried out in compliance with the Construction Standards.
- that satisfactory tests are carried out to the extent and in the manner prescribed by the Construction Standards.

1.6.2 MCA or FVCA (for vessels of less than 12m RL) may increase the scope based on observed quality during construction.

1.6.3 MCA or FVCA (for vessels of less than 12m RL) may base its verification methods on the quality system (such as ISO 9001 etc.) as implemented in the builder's fabrication processes and as accepted by MCA or FVCA (for vessels of less than 12m RL). The surveys at the builder's premises may consist of a combination of visual inspection, tests, measurements and review of records.

1.6.4 Two weeks' notice should be given to the lead surveyor by the builder/outfitter during construction, in order to ensure that a surveyor is available to attend. A notice period less than two weeks may not guarantee a surveyor is available to attend.

1.6.5 It is the builder's responsibility to inform the lead surveyor when the vessel is ready for an inspection. If the vessel is found to be not at the required stage, then a further inspection may be required with associated additional costs. Any vessel found to be beyond the early

framing stage or other agreed stage for the first inspection (vessels 7m LOA and over) may result in refusal of certification.

Section 1.7 - Testing of structures

1.7.1 Where applicable, weathertight and watertight structures including sub-divisions are to be tested in accordance with these Standards and to any other statutory requirements.

1.7.2 Freshwater, ballast, oil fuel, and other tanks, void spaces and collision bulkheads should be either water or air pressure tested at the discretion of MCA or the Fishing Vessel Certifying Authority.

1.7.3 Where water tested, the head in integral tanks is to be not less than 2.4m above the tank top or to the overflow point whichever is the greater.

1.7.4 Where tested by air pressure, the test pressure is to be no greater than 0.2kg/cm^2 (2.85 psi).

1.7.5 Fish stowage tanks and vivier tanks are to be tested by filling with water to overflow level.

1.7.6 Radiographic or ultrasonic examination may be required for welded structures or components. Where other means of non-destructive testing are being considered, details are to be submitted to the Surveyor for prior approval.

1.7.7 Weathertight/watertight hatches, doors and windows should be hose tested on completion.

Section 1.8 - Materials

1.8.1 All materials used in the construction of a new vessel are to be in accordance with the approved specification.

1.8.2 The specification of steel, aluminium, wood and GRP materials is to be in accordance with the requirements of the appropriate sections of these Standards.

1.8.3 When selecting materials and equipment to be used in the vessel construction, Designers and Builders of new vessels will need to pay special regard to the working conditions to which the vessel will be subjected, and should take all measures to ensure that any material or appliance fitted in accordance with the requirements of these Standards is suitable for the purpose intended, having regard to its

location in the vessel, the area of operation, and the weather conditions which may be encountered by the vessel.

1.8.4 The Commission of the European Union's general mutual recognition clause should be noted. The clause states:-

Any requirement for goods or materials to comply with a specified standard shall be satisfied by compliance with

(i) a relevant standard or code of practice of a national standards body or equivalent body of a Member State of the European Community; or

(ii) any relevant international standard or code of practice of a national standards body or equivalent body of a Member State of the European Community; or

(iii) a relevant specification acknowledged for use as a standard by a public authority of any Member State of the European Community; or

(iv) traditional procedures of manufacture of a Member State of the European Community where these are the subject of a written technical description sufficiently detailed to permit the assessment of the goods or materials for the use specified; or

(v) a specification sufficiently detailed to permit assessment for goods or materials of an innovative nature (or subject to innovative processes of a manufacture such that they cannot comply with a recognised standard or specification) and which fulfil the purpose provided by the specified standard.

provided that the proposed standard, code of practice, specification or technical description provides, in use, equivalent levels of safety, suitability and fitness for purpose.

1.8.5 Where the phrase "or equivalent" is used in these Standards, details of the standard applied are to be advised to MCA.

Section 1.9 - Stability general

1.9.1 It is the responsibility of Owners and Skippers under safety legislation to use all reasonable means to ensure fishing vessels go to sea in a seaworthy state. Adequate stability and freeboard contribute greatly to a vessel's seaworthiness and survival capabilities in extreme conditions.

1.9.2 Information gathered from casualties to small fishing vessels shows that, in many cases, insufficient attention has been given to matters of

stability and freeboard, and this can be avoided if care is taken to ensure that a vessel is suitable for its intended mode of fishing and the area in which it will operate.

1.9.3 For any new vessel, stability should be properly assessed by a person having appropriate professional experience. Alterations of more than a minor nature should not be made to fishing gear, structure or ballast without first checking to confirm that the vessel's stability characteristics and freeboard are not reduced below acceptable standards.

1.9.4 It is the Builder and/or Owners responsibility that any statutory stability criteria and associated requirements have been complied with for the completed vessel.

Section 1.10 - Definitions

In these Standards the following expressions have the following meanings:-

1.10.1 **"Accommodation space"** means corridors and lobbies, stairways, lavatories, cabin offices, crew spaces, pantries not containing cooking appliances, and spaces similar to any of the foregoing and trunks to such spaces.

1.10.2 **"Amidships"** is the mid-length of "Length" as defined in Statutory Instrument 1998 No. 1916 The Merchant Shipping (Tonnage) (Fishing Vessels) (Amendment) Regulations 1998

1.10.3 **" 'B' Class division"** means those divisions formed by bulkheads, decks, ceilings or linings which:-

(i) Are so constructed as to be capable of preventing the passage of flame to the end of the first thirty minutes of the standard fire test;

(ii) Have an insulation value such that during the standard fire test the average temperature of the unexposed side will not rise more than 140°C above its initial temperature. Nor will its temperature at any one point, including any joint, rise more than 225°C above its initial temperature within the time listed below:-

B-30 Standard ..... 30 minutes

B-15 Standard ..... 15 minutes
B- 0 Standard ..... 0 minutes

(ii) Are constructed of suitable non-combustible materials and their supporting members or structures are also constructed of non-combustible materials.

1.10.4 **"Breadth (B)"** is the maximum breadth of the vessel, measured amidships to the moulded line of the frame in a vessel with a metal hull and to the outer surface of the hull or normal planking in a vessel with a hull of any other material.

1.10.5 **"Code"** means the Maritime and Coastguard Agency (MCA) Code of Practice for the applicable vessels size and category.

1.10.6 **"Control station"** are those spaces in which the ships radio or main navigation equipment or the emergency source of power is located, or where the fire recording or fire control equipment is centralised.

1.10.7 **"Dead ship condition"** means the condition in which the main and auxiliary machinery is not operational due to the due to the absence of starting power

1.10.8 **"Deckhouse"** means see "Superstructure" as defined in section 1.9.33.

1.10.9 **"Decked vessel"** means a vessel with a continuous watertight weather deck that extends from stem to stern and has positive freeboard throughout, in any condition of loading the vessel.

1.10.10 **"Deep beams"** means those beams increased in scantlings and fitted in way of openings and those areas of deck on which masts, winch and superstructures are fitted.

1.10.11 **"Depth of vessel (D)"** means the scantling depth as defined for respective materials of construction.

1.10.12 **"Draught"** means the vertical distance from the moulded base line amid-ships to the operating waterline of a vessel.

1.10.13 **"Enclosed superstructure"** means a superstructure with:-

(i) Enclosing bulkheads of efficient construction.

(ii) Access openings, if any, in those bulkheads fitted with permanently attached weathertight doors of a strength

equivalent to the unpierced structure that can be operated from either side.

(iii) Other openings in sides or ends of the superstructure fitted with efficient weathertight means of closing;

(iv) a bridge or poop should not be regarded as enclosed unless access is provided for the crew to reach machinery and other working spaces inside those superstructures by alternative means which are available at all times when bulkhead openings are close.

1.10.14 **"Fishing vessel"** has the same meaning as in Section 313 of the Merchant Shipping Act 1995.

1.10.15 ***"Freeboard"*** means the distance measured vertically downwards from the upper edge of the freeboard deck to the waterline.

1.10.15 **"Hull extension"** is a separately constructed intact section which is full breadth and depth of the area it is permanently fitted to, and follows the design lines of the vessel; this section is included in the length overall of the vessel.

1.10.16 **"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.

1.10.17 **"Length" (L)** unless otherwise specified shall refer to the scantling length "L" as defined for respective materials of construction.

1.10.18 **"Length overall" (LOA)** means the overall length measured from the foreside of the foremost permanent fixed structure to the aft side of the aftermost permanent fixed structure of the vessel.

1.10.19 **"Length registered" (RL)** means 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);.

1.10.20 **"MCA"** is an abbreviation for Maritime and Coastguard Agency, an Executive Agency of the Department of Transport.

1.10.21 **"Main deck"** means the lowest continuous weathertight deck.

1.10.22 **"Main frames"** are those frames extended from the top of floors or double bottom to the lowest continuous deck abaft of the collision bulkhead and forward of the after peak bulkhead.

1.10.23 **"Moulded depth"** means

(a) 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;

(b) 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;

(c) 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,

(i) "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

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

1.10.24 **"Multi-hull vessel"** means any vessel which in any normally achievable operating trim or heel angle, has a rigid hull structure which penetrates the surface of the sea over more than one separate or discrete area.

1.10.25 **"Navigable speed"** means the minimum ahead speed at which the vessel can be effectively steered.

1.10.26 **"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;.

1.10.27 **"Open type vessel"** means a vessel where water coming onto the vessel normally drains to the bilge.

1.10.28 **"Pod/Outboard Bracket"** is a fitted hull appendage which is not full breadth or depth of the area it is connected to, and does not follow the design lines of the vessel; but is included in length overall when it is required to be fitted for the normal operation of the vessel.

1.10.29 **"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;.

1.10.30 **"Shelter deck"** means a superstructure deck above the level of the main weathertight deck and which is exposed to the weather.

1.10.31 **"Sole"** is the flooring in open vessels.

1.10.32 **"Spacing"** means the distance apart of members such as frames, stringers and stiffeners, as defined in the Tables.

1.10.33 ***"Superstructure"*** means 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

1.10.34 **"Superstructure deck"** means the complete or partial deck or the top of a superstructure, deckhouse or other erection situated at a height of more than 1.8m above the freeboard deck. Where this height is less than 1.8 metres, the top of such deckhouses or other erections shall be treated in the same way as the working deck

1.10.35 **"Surveyor"** refers to either a Surveyor employed by the Maritime and Coastguard Agency (MCA) or by a Fishing Vessel Certifying Authority acting under a signed Agreement with the MCA to undertake specific work on its behalf.

1.10.36 **"Watertight"** in relation to structures and/or fittings means capable of preventing the passage of water through it in either direction, under a head of water for which the surrounding structure is designed.

1.10.37 **"Weather deck"** means deck that is exposed to the elements.

1.10.38 **"Weathertight"** in relation to structures and/or fittings means it is designed to prevent the passage of water into the vessel in any sea condition.

1.10.39 **"Working deck" or "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, the lower deck may be accepted as the freeboard deck provided that the deck is situated above the deepest operating waterline.