INSTRUCTIONS FOR THE GUIDANCE OF SURVEYORS ON

MCA Newbuild Fishing Vessel Guidance for Fishing Vessels of Less than 24m RL

MSIS27 CHAPTER 1 ANNEX 24

Rev 11.23



Preface

0.1 These Marine Survey Instructions for the Guidance of Surveyors (MSIS) are not legal requirements in themselves. They may refer to statutory requirements elsewhere. They do represent the MCA policy for MCA surveyors to follow.

0.2 If for reasons of practicality, for instance, these cannot be followed then the surveyor must seek at least an equivalent arrangement, based on information from the owner/operator. Whenever possible guidance should be sought from either Consultant Fishing Vessel Surveyors or Survey Operation Branch, in order to maintain consistency between Marine Offices.

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Recent Amendments

The amendments made in the most recent publication are shown below, amendments made in previous publications are shown in the document Amendment History.

Version Number	Status / Change	Date	Author Reviewer	Content Approver	Next Review Date/Expiry
					Date
<mark>07.20</mark>	Old Para numbers Para. 1.7 – Marking of CM number. Para. 6.1 – Modified to reference Yard Inspection process contained in MSIS 27 Chapter 1 Annex 25. Para. 10.1 – Hydraulic Completion Certificate added. Para. 10.2 – No. 5 amended to 6. Yard Inspections section deleted. Previous Chapter 5 & 6 renumbered. Para. 3.1 – CA Amended to FVCA Part 6 – FVCA Surveyor Monitoring Added	07.20	D Fenner	G Stone	31/08/2023
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10.23	 Amendments to reflect FVCA may now do plan approval for an inspect vessel of less than 15m LOA 	10.23	D Fenner	L Page	30.11.24
<mark>11.23</mark>	 Update link to MSF1364 R.08.21 	11.23	D Fenner	L Page	30.11.24

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CHAPTER 1

1.1 Introduction

- 1.1.1 As required by the Codes of Practice for the Safety of Small Fishing Vessels (MSN 1871 and MSN 1872, as amended) for a vessel 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.
- 1.1.2 MCA provide survey and certification services for all new fishing vessels. Some of that work for less than 15m Length Overall (LOA) fishing vessels is delegated to authorised Fishing Vessel Certifying Authorities (FVCAs). The following guidance is directed at surveyors, FVCAs, builders and outfitters of newbuild fishing vessels up to 24m Registered Length (RL), where the construction is not being overseen by a Recognised Organisation to their own Standards and procedures. This service is only provided for vessels that are to be registered in the UK as commercial fishing vessels.
- 1.1.3 This guide has been provided for industry to describe the process to follow through building a new fishing vessel of less than 24m RL. This guide should be read in conjunction with the Construction and Outfit Standards for Fishing Vessels.
- 1.1.4 This guide is subject to review at the discretion of the MCA. Where changes are made to this guide those changes will be highlighted and the revision table updated accordingly.

1.2 Advice and Guidance

1.2.1 If you have any doubts regarding the contents of this guide or require guidance in respect of the Fishing Vessel Construction and Outfit Standards or Codes of Practice, your local Maritime and Coastguard Agency Marine Office should be able to assist.

1.3 Definitions

'The Construction Standards' means either the 'Construction and Outfit Standards for Fishing Vessels of less than 15m Length Overall' or 'Construction and Outfit Standards for Fishing Vessels of 15m Length Overall to 24m Registered Length'.

CHAPTER 2 - Procedures to Follow for Construction of a Newbuild fishing vessel less than 24m Registered ILength

- 2.1 General
- 2.1.1 MCA will be undertaking all plan approvals for newbuild fishing vessels of 15m LOA and over to 24m RL. Authorised FVCAs can undertake plan approval for new build vessels of less than 15m LOA. Before building a vessel, drawing approval is required for the vessel intended to be built.
- 2.1.2 MCA will be undertaking all newbuild surveys of fishing vessels 15m LOA and over. Surveys of fishing vessels less than 15m LOA will be undertaken by an authorised FVCA on behalf of the MCA. Please refer to Fishing vessel certifying authorities - GOV.UK (www.gov.uk) for details of Fishing Vessel Certifying Authorities and their current authorisations with MCA and contact your chosen FVCA directly for details of how to apply for Plan Approval, and the process to be followed.
- 2.1.3 Where reference to MSF forms are contained within these guidelines, these are MCA forms which are to be used for all plan approval work and vessels being built of 15m LOA and over. For less than 15m LOA newbuild vessels an FVCA may use their own forms.-which may have differing references but should contain the same information.

2.2 All Vessels

- 2.1.1 The build of a vessel should not begin until the required drawings (Chapter 3) have been approved and the requirements of paragraph 2.10 of this chapter in terms of yard inspections has been met, in the case of GRP vessels (see Section 6 below), the moulding premises have been inspected.
- 2.2.2 Additionally, the survey and/or plan approval process cannot begin until MCA has received the required funds. Failure to follow these procedures may result in a refusal of certification.
- 2.2.3 Following the process in either Annex D or E a Notice of Intent to Build form (<u>MSF1356</u>) should be submitted to the Marine Office closest to where the vessel is to be built. This is the start of the application process for every newbuild fishing vessel of less than 24m RL regardless of length. A list of Marine Offices can be found on the following link –

https://www.gov.uk/government/organisations/maritime-and-coastguardagency/about/access-and-opening

- 2.2.4 On receipt of the Notice of Intent to Build form (<u>MSF1356</u>), the form shall be assessed against the services which are required for the **vessel** intended to be built. If any questions arise following the assessment, for example plan approval has not been requested but plan approval is required, these shall be raised directly with the customer.
- 2.2.5 A check should be made of when the last yard inspection of the builder was undertaken, in line with paragraph 2.10 of this chapter. If an inspection is required, then the builder should be notified of this requirement and arrangements made to conduct the inspection. In terms of charging for this inspection, it may be that a new MSF5100 is required. The builder should be contacted to discuss.
- 2.2.6 Once the Notice of Intent to Build form has been assessed, the Newbuild Fishing Vessel database should be updated with the relevant information.
- 2.2.7 Once assessed An estimate of fees (MSF1354) will be provided, indicating the estimated costs for the services requested and which are to be provided by the MCA. For guidance purposes only a table is attached at Annex A showing estimated hours. Annex B provides a sample of a fees estimate letter.
 Once received an estimate of fees (MSF1354) will be produced.
- 2.2.8 In the guide there are requirements placed on varying individuals, for example Builder, Owner etc. Responsibility to ensure that those individuals meet the requirements of this guide is with the customer who is requesting this service from the MCA and or FVCA. If any of the requirements are not met, certification for the vessel may not be issued.
- 2.2.9 A unique MCA identifier (for tracking purposes) starting CM will be provided along with the estimate of fees. This number must be used in all correspondence (including correspondence with an FVCA if the vessel is less than 15m LOA). The identifier is also required to be marked on the hull of the newbuild. Where the builder has been issued with an SFIA number previously by Seafish, this number can be used for marking of the hull in line with paragraph 2.2.10. below, however, the CM number issued by the MCA should be used in all correspondence.
- 2.2.10 It is the builder's responsibility to mark the seven-digit unique number on the vessel in a plain typeface, clearly legible, with a letter height of at least 10mm. It must be permanently marked by the builder in a clean and visible position to the satisfaction of the attending surveyor.

The number may be (i) engraved on a metal plaque with fixings drilled to prevent removal, (ii) moulded in the hull, (iii) carved into part of the structure, (iv) welded to the structure, or fixed in some similar manner to the approval of the attending surveyor who will check the marked number as part of the survey process. Certification will not be granted if the number is not marked on the vessel in the correct manner.

- 2.2.11 Where a vessel gains certification, the Construction Certificate or Partial Declaration or Survey will have the same unique number clearly printed on it to identify the boat and a copy of the certificate will be supplied to the owner (as well as the RSS where applicable).
- 2.2.12 Where a vessel does not gain certification, but a number has been issued, records shall be kept to show that the vessel with that unique number does not have certification. If the vessel has been marked, it will be the builder's responsibility to remove the marking from the boat.
- 2.2.13 The unique number is provided as a means of identifying the boat with corresponding MCA records. It is not an indication that the boat has been certified.

Vessels Less than 15m LOA

- 2.2.14 For vessels less than 15m LOA, the surveys will be overseen by an authorised FVCA. A authorised FVCA should be contacted and details provided to the MCA on the Notice of Intent to Build form (MSF1356). The FVCA should be contacted prior to initial contact with the MCA.
- 2.2.15 Once the Notice of Intent has been assessed the MCA shall notify the nominated FVCA of the vessels CM number and provide copies, or confirm builders copies, of approved drawings as advised on the Notice of Intent, in order that they can start to oversee the newbuild.
- 2.2.16 As per paragraph 2.10 of this Chapter (Yard Inspections), if only vessels <12m are built at the yard, the FVCA will verify with the yard when the last inspection was undertaken. A copy of the previous report should be made available to the FVCA by the yard.
- 2.2.17 MCA reserves the right to decline a request for new build survey. The MCA will not supply a service until application and requested funds have been received.

Plan Approval Only

- 2.2.18 If you would like the drawing approval to be dealt with separately for vessels of less than 15m LOA, such as when multiple vessels are to be built from the same set of drawings, or where the build and outfit will be carried out by different companies, your chosen FVCA will be able to advise on the specific process to be followed.
- 2.2.19 If you would like the drawing approval to be dealt with separately for vessels of 15m LOA and over, such as when multiple boats are to be built from the same set of drawings, then a Notice of Intent to Build form (MSF1356) will need to be completed but instead of sending this to your local Marine Office please send directly to our Stability and Plan Approval Unit. The preferred method of receiving applications and drawings is electronically through the email address: stability.unit@mcga.gov.uk.
- 2.2.20 For non-electronic submissions the address is -

MCA Stability & Plan Approval Unit Albex House 1 Marchfield Drive Paisley Renfrewshire PA3 2RB

2.3 Requirements for builder or designer

- 2.3.1 Builders or designers unfamiliar to MCA or FVCA (for vessels less than 15m LOA) will be required to provide MCA or FVCA (for vessels less than 15m LOA) with evidence¹ of their capability to successfully manage new build projects.
- 2.3.2 Builders or designers shall instruct their subcontractors and suppliers of materials, components and systems that MCA's rules apply, and that certificates shall be provided to the MCA or FVCA (for vessels less than 15m LOA) as and when required by the rules and this guide.

¹ Evidence may incorporate successful outcome of similar projects carried out for a classification society, another administration, CA or successful outcome of design projects of similar nature. A folio of documentation, safe history of operation of a vessel would all be considered in providing appropriate evidence. For new yards / builders documentary evidence of build procedures, training, material quality, environmental considerations and control would be considered.

2.3.4 Ensure you are aware of the structure to be included in the length overall. It is advised liaising with the MCA or FVCA 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

2.4 Steel Vessels

- 2.4.1 All welding of structures, machinery installations and equipment shall be carried out by approved welders, with approved welding consumables and at facilities recognised by MCA, FVCA or a Classification Society.
- 2.4.2 Requirements for approval of facilities, welders, manufacturers of welding consumables, welding consumables and welding procedures can be found in applicable rules, for example, IACS/BS Standards.
- 2.4.3 Welding operators should be qualified or coded to an approved standard and be proficient in the type of work to be undertaken. It is up to the builder to make sure that this is the case. The builder will be required to sign a declaration (<u>MSF1362</u>) during build attesting to this. The process of controlling issuance of this certification will be verified as part of the build process as detailed in part 6 of this Chapter.

2.5 Wood and Composite Materials

- 2.5.1 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 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

2.6 All Vessels

- 1 an "Asbestos Free Declaration", including structures and equipment on board (required for Steel vessels as well)
- 2 list of relevant subcontractors to the building yard

3 list of relevant subcontractors to the manufacturer of systems and components to be delivered for the product, if applicable.

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

2.7 Applicable rules

- 2.7.1 The rules that apply for construction of a new vessel are those in force at the date of "contract for construction" (Seafish Standards as at Jan 2020 or as amended to be the Fishing Vessel Construction Standards and the relevant Code of Safe Working Practice currently <u>MSN</u> <u>1871</u>, as amended and <u>MSN 1872</u>, as amended). MCA may upon special consideration and in agreement with the parties involved decide on the rules to be applied.
- 2.7.2 The term date of "contract for construction" shall be construed as follows:
 - The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to MCA by the party applying for the newbuilding.
 - The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.
- 2.7.3 Vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for MCA purposes. However, vessels within a series may have design alterations from the original design provided:
 - a. such alterations do not affect matters related to the Construction Standards as amended or
 - b. if the alterations are subject to MCA requirements, these alterations are to comply with the MCA requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the MCA requirements in effect on the date on which the alterations are submitted to MCA for approval.

- 2.7.4 The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.
- 2.7.5 If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which 2.7.1 and 2.7.2 above apply.
- 2.7.6 If a contract for construction is amended to change the ship type, the date of "contract for construction"² of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.
- 2.7.7 The date of 'Keel Laid' or a similar stage of construction will be taken as:a. The date when the construction commences, OR
 - b. When assembly of the vessel has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material whichever is less.
- 2.7.8 For GRP (FRP) vessels, the date on which the first structural reinforcement of the complete thickness of the approved hull laminate schedule is laid either in or on the mould.
- 2.7.9 No build should commence until the requirements of section 2.2 of this chapter has been met. Failure to follow these procedures could result in certification not being issued.
- 2.7.10 If the vessel's structural drawings/plans change at a later date for the purposes of building a different vessel than originally intended, the certifying authority may determine that variance is significant enough to reset the keel laid date.
- 2.7.11 All vessels will be marked appropriately with an MCA reference.
- 2.7.12 In order to prevent 'stock piling' of blocks, the keel laid date will only remain the official date providing the build is continued and completed (this need not include outfitting) within 12 months of keel laid date unless otherwise agreed with the MCA.

² See IACS PR 29 Rev.0 – "Definition date for contract for construction"

- 2.7.13 The certifying authority shall provide the shipyard/builder with the keel laid date determination via correspondence/<u>MSF1353</u> certificate (see Annex C).
- 2.7.14 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.
- 2.7.15 Where requirements from international maritime conventions have been adopted in MCA's rules, compliance with these requirements is mandatory.
- 2.7.16 Should a fishing vessel be presented for acceptance on the basis of a design approved by another flag administration this will be considered by the flag in panel as per change of flag requirements. However, the vessel would be considered as a new vessel.

2.8 Plan approval (vessels 15m LOA and over)

- 2.8.1 Once MCA have received payment, we will review the drawings and documents. The review process can take up to 20 working days, not including extra time if amendments are requested. This should be taken into consideration when submitting the application. The original fee estimation does not include additional work where amendments are required.
- 2.8.2 The following documentation shall be submitted:
 - drawings, plans and specifications required for plan approval as specified in the applicable chapters of the Construction Standards and according to documentation lists contained in Chapter 3 of this Annex.
 - corresponding technical descriptions, calculations and data, including material specifications
 - outline specification for the vessel.
- 2.8.3 Any documents submitted for re-approval shall be especially marked to identify revised sections.
- 2.8.4 Where subcontractors and suppliers are involved, the customer shall co-ordinate the submission of required plans and documents, in addition to co-ordinating any approval comments given by MCA.
- 2.8.5 The vessel structure and layout detailed on the drawings will need to meet the requirements of the Construction Standards for drawing and

document approval to be granted. This will need to be taken into account when producing the drawings. See paragraph 2.9 regarding applications for equivalent arrangements.

- 2.8.6 Documents subject to approval will be examined by MCA. The results of the examination will be stated in a letter of approval. Any comments (including comments which require surveyor confirmation during the build), conditions and limitations will be stated on the letter returned with approved plan/documents. Any points requiring confirmation by an attending surveyor will be referenced in the reports required and issued throughout the newbuild process. Copies of approved documents will be provided to FVCAs for vessels less than 12m RL.
- 2.8.7 The plan approval may be revoked at any time if subsequent information indicates that the proposal was contrary to the Construction Standards.

2.9 Plan approval (vessels of less than 15m LOA)

2.9.1 For details of the process for Plan Approval by an authorised FVCA, please refer to the relevant FVCA.

2.10 Equivalent Arrangements – All vessels

2.10.1 Any equivalences require approval from the MCA. MCA may consider deviations from the requirements where demonstration of the arrangement is shown to be at least equivalent to the requirements. Approval must be obtained using form <u>MSF1261</u> prior to build. Any change to the design of the vessel may render the approval of the equivalence invalid. In such case a new approval will be required detailing the arrangements onboard the vessel as built.

2.11 Yard Inspections

- 2.11.1 All vessel builders can be expected to undergo monitoring visits at intervals not exceeding 5 years. Full details of the process are contained here (MSIS 27 Chapter 1 Annex 25).
- 2.11.2 It is the builders responsibility to ensure that their yard is inspected at intervals not exceeding 5 years. Where a builder has not built a vessel during a period which exceeds 5 years, then an inspection will be required prior to commencement of build.
- 2.11.3 Where only vessels of less than 15m LOA are constructed, this work may be undertaken by the authorised FVCA. The FVCA should notify

MCA, via the Marine Office closest to the yard, when a yard inspection has been undertaken and share a copy of the report.

2.11.4 When a yard inspection has been completed the <u>Newbuild Fishing</u> <u>Vessel database</u> should be updated with the date the inspection took place. A copy of the relevant report should be stored in the company folder.

2.15 GRP Vessels only:

Where a GRP vessel is being constructed, the moulding premises will be inspected to ensure they comply with the requirements laid out in the Construction Standards.

2.12 Survey During Construction

- 2.12.1 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.
- 2.12.2 Chapter 5 provides guidance as to the expected stages of build where a survey will be required.
- 2.12.3 MCA or FVCA (for vessels less than 15m LOA) may increase the scope based on observed quality during construction.
- 2.12.4 MCA or FVCA (for vessels less than 15m LOA) 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 less than 15m LOA). The surveys at the builder's premises may consist of a combination of visual inspection, tests, measurements and review of records.
- 2.12.5 A minimum of four weeks' notice should be given to the local Marine Office or FVCA (for vessels less than 15m LOA) 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.

2.12.6 It is the builder's responsibility to inform the local Marine Office or FVCA (for vessels less than 15m LOA) 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.

2.13 Functional testing

- 2.13.1 Where specified by the Construction Standards, testing shall be carried out in the presence of a surveyor, and related requirements for test programmes shall be observed.
- 2.13.2 A test programme for harbour and sea trials shall be prepared by the builder and accepted by MCA or FVCA. The programme shall specify systems and components to be tested, and the testing procedure. MCA or FVCA may, in order to verify compliance, request additional tests and/or data to be recorded.
- 2.13.3 The tests shall give evidence as to satisfactory operation and performance in accordance with the Construction Standards. When testing control and safety systems, failure modes shall be simulated as realistically as possible.

2.14 Installation of systems and equipment

2.14.1 Systems and equipment to be installed on new buildings and that serves as a part of the main functions shall in general be new³.

2.15 Documents to submit upon completion of build by the builder.

- 2.15.1 Documents to submit upon completion of the vessel by the builder:
 - MCA environment/material data sheets (<u>MSF1361</u>) GRP Vessels only
 - MCA, or other tank pressure testing certificate⁴ (MSF1364) All vessels 7m LOA and over

³ If second-hand equipment complies with applicable rules for the newbuilding, it may upon special consideration be installed on new buildings, provided the owner has given a written acceptance.

⁴ 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.

- MCA electrical completion certificate (<u>MSF1363</u>) All vessels 7m LOA and over
- MCA Hydraulic Completion Certificate (<u>MSF1369</u>) All vessels with hydraulic systems.
- 5. Gas certificate, supplied and signed off by a marine certified gas technician All vessels 7m LOA and over (where applicable)
- 6. MCA Declaration of Welding Operators Competency form (<u>MSF1362</u>) (steel and aluminium vessels)
- 7. Mill certificates for propshafts, hull plating and main structural members Steel and aluminium vessels only
- 2.15.2 Documents 1 to 6 will not be accepted unless signed and dated by the relevant person.
- 2.15.3 All the above documents are to be submitted to the MCA or FVCA.

CHAPTER 3 - Drawings and Plans required for approval by MCA

The diagrams required for approval are documented within the relevant Fishing Vessel Construction Standard (see Chapter 2, Part 4). The list below should be read in conjunction with the relevant Standard.

- 3.1 Vessels less than 7m LOA:
 - General Arrangement
 - Hull Construction drawings
 - Welding details (for steel and aluminium vessels)
 - GRP laminate schedule, evidence of humidity and temperature control
- 3.2 Vessels 7m LOA to 24m RL:
 - General Arrangement
 - Lines Plans
 - Hull construction drawings, transverse sections and bulkheads
 - Superstructure construction drawings, including the wheelhouse
 - Welding details (for steel and aluminium vessels)
 - Crew accommodation layout
 - Water freeing arrangements
 - Steering gear and rudder
 - Propeller, shaft and bearings
 - Bilge pumping
 - Electrical arrangement
 - Freeboard Plan
- 3.3 Drawings may be submitted digitally by email in pdf or AutoCAD dwg format. Extraordinarily drawings may be accepted by post in hard copy format.
- 3.4 Construction drawings should generally include a profile of the vessel, a plan view of the hull structure, a plan view of the main deck and section through the vessel. In the case of GRP vessels, the drawings should also include lay-up details and sizes of connection overlaps. It is also important to show the locations of watertight bulkheads, the minimum freeboard measurement and the main scantling dimensions of the vessel (scantling length L, breadth B, and depth D as defined in the constructions standards, along with breadth 'b' in the case of catamarans). Where welding details are required, these may be included on the main construction drawings or as a separate schedule.
- 3.5 The general arrangement drawing will need to identify the purpose of each compartment in the vessel.

- 3.6 For vessels of 7m LOA to less than 15m LOA, it is recommended that the drawings show the locations of hatches and doors so that it can be seen where access and escape routes are. If these are not shown at drawing approval stage, there is a risk that such arrangements will be rejected during survey if they are not found to be compliant with the standards. Details are required where the deck is fully sealed, including the sizes of the compartments below deck as this will affect bilge pumping or closed-cell foam requirements will be required.
- 3.7 For vessels 15m LOA to less than 24m RL in size, locations of hatches and doors must be shown on the drawing. General arrangement drawings for any size of vessel should also show other important items such as heavy deck machinery.

CHAPTER **4** - Survey Attendance and Certification Requirements for Newbuild Fishing Vessels

4.1 Certification

4.1.1 Failure to follow the procedures contained in this guide may result in a refusal of certification.

Vessels less than 7m LOA

- Vessels less than 7m LOA
 - Hull Construction Certificate (MSF 1367)
- Vessels between 7m LOA and 12m RL
 - Hull Construction Certificate (MSF 1367), and
 - Outfit Compliance Certificate (MSF 1368)
- Vessels between 12m RL and less than 15m LOA:
 - Partial Declaration of Survey (MSF 1326 or MSF1370) if vessel was constructed prior to 30 October 2023 under survey of the MCA; or
 - Partial Declaration of Survey (MSF 1326 or MSF1370) if vessel was under construction or Plan Approval on 30 October 2023 (see Section 5 above);
 - Hull Construction Certificate (MSF 1367) and Outfit compliance certificate (MSF 1368) if construction commenced on or after 30 October 2023 and is surveyed by a Fishing Vessel Certifying Authority with a signed Agreement with the MCA.

Vessels between 15m LOA and less than 24m RL

 Partial Declaration of Survey of a Fishing Vessel (Hull and Machinery) on Completion of Build and intended for the UK Flag (15m Length Overall to less than 24m Registered Length) (MCA) (MSF1326)

Partial Declaration of Survey of a Fishing Vessel (Hull and Machinery) on Completion of Build and intended for the UK Flag

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(15m Length Overall to less than 24m Registered Length) (Class) (<u>MSF1371</u>)

- Partial Declaration of Survey of a Fishing Vessel (Hull and Machinery) on Completion of Build and intended for the UK Flag (less than 15m Length Overall (MCA) (MSF1370)
- Partial Declaration of Survey of a Fishing Vessel (Hull and Machinery) on Completion of Build and intended for the UK Flag (less than 15m Length Overall (Class) (MSF1373)
- 4.1.3 If required, vessels less than 24m RL can be issued with a keel laying certificate (<u>MSF1353</u>), a copy is attached at Annex C. This certificate can only be used for vessels which fall within the scope of this guide.
- 4.1.4 MCA Surveyors shall note that Technical Support Team technicalsupportteam@mcga.gov.uk shall be informed when a vessel is issued with a Partial Declaration.
- 4.2 Construction stages required to be surveyed:
- 4.2.1 Construction of vessels less than 7m LOA

All materials

- Prior to fitting of sealed compartment
- Upon completion of the hull
- 4.2.1.1 At the discretion of the MCA or FVCA surveyor for vessels fitted with sealed compartments, good quality photographs may be supplied in lieu of the first inspection. The photographs should clearly show the shell and framing, and should include the following:
 - 1. View down on hull looking forward.
 - 2. View down on hull looking aft.
 - 3. Close-ups of the frame stiffening.
 - 4. View looking aft at transom.
 - 5. View looking down on the fore peak compartment.
- 4.2.1.2 In the case of catamarans, photos of each hull, looking forward and aft, should be included, in addition to general photos of the vessel.
- 4.2.1.3 All photos should be supplied attached to an email or, alternatively, they may be included in a pdf or Word document providing there are no more than 2 photos per page.

- 4.2.2 Construction of vessels 7m LOA 20m LOA
- 4.2.1.2 Certification may be refused if a vessel of 7m LOA or over is found to be beyond the stage agreed at first inspection.

GRP hulls

- 1st visit Early framing stage in mould (this build stage may vary dependent on the build method, in such cases the first inspection stage is to be agreed with the MCA or FVCA prior to construction).
- 2nd visit (vessels over 12m RL only) On completion of hull framing, beamshelf and machinery seatings.
- 3rd visit On completion of hull / after release from mould with the main internal bulkheads fitted (includes decks/soles where applicable).

Wooden hulls

- 1st visit Inspection of the keel and main timber to be used in the construction.
- 2nd visit Erected frames prior to planking.
- 3rd visit Planking on its completion.
- 4th visit Decks and superstructure.

Steel and aluminium hulls

- 1st visit Fully framed stage or an equivalent build stage⁵.
- 2nd visit (vessels over 12m RL only) When hull is fully plated or an equivalent build stage⁵.
- 3rd visit On completion of hull (includes decks/soles where applicable).

Steel and aluminium hulls 20m LOA – 24m RL

⁵ Where the build programme does not follow a conventional sequence of construction. MSIS 27/CH 1/Rev 11.23/Page 25 of 48

- 1st visit 50% framed stage or an equivalent build stage⁵.
- 2nd visit When hull is fully framed or an equivalent build stage⁵.
- 3rd visit Hull fully plated or an equivalent build stage⁵.
- 4th visit On completion of hull (includes decks).

4.3 Outfit Inspections

- 4.3.1 Outfit of all vessels 7m LOA 20m LOA
 - 1st visit When engine is installed (or equivalent).
 - 2nd visit (Vessels over 12m RL only) When nearing completion.
 - 3rd visit On completion (including witness of trials).
- 4.3.2 Outfit of all vessels 20m LOA 24m RL
 - 1st visit When engine is installed or an equivalent build stage⁶.
 - 2nd visit 50% of fit-out or an equivalent build stage⁶.
 - 3rd visit When nearing completion or an equivalent build stage ⁶.
 - 4th visit On completion (will include witness of trials).
- 4.3.2 For outfitting of 7m LOA to 15m LOA vessels and from 15m LOA to less than 24m RL Guidance Reports will be completed. These are numbered <u>MSF1359</u> and <u>MSF1352</u> respectively.

4.4 Notes on Outfit Inspections

4.4.1 If a vessel is less than 10m LOA and has a completely sealed main deck (i.e. no access to below deck areas) then only one outfit inspection will be required upon completion (in addition to the hull inspections).

⁶ Where the build programme does not follow a conventional sequence of construction. MSIS 27/CH 1/Rev 11.23/Page 26 of 48

- 4.4.2 If a vessel is less than 10m LOA and is being built and fitted out by the same builder then the last hull inspection may be combined with the 1st outfit inspection, except where Note 4.1 is applied and only at the discretion of the MCA or FVCA.
- 4.4.3 For vessels 7m LOA and over: Where the requested service is for hull only certification with the outfit carried out by another applicant, and where there are still outstanding deficiencies from the final hull inspection which have not been completed to the satisfaction of MCA/FVCA prior to the hull leaving the builders yard, then the final hull inspection report will be issued to the other applicant upon receipt of their completed application for survey, to ensure any outstanding hull deficiencies are addressed.
- 4.4.4 It is the builder's responsibility to inform the local Marine Office or FVCA (for vessels less than 15m LOA) when the vessel is ready for a particular 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.

4.5 Attendance During Survey

- 4.5.1 During a survey, the attending surveyor will verify that the vessel complies with the approved drawings and Construction Standards where applicable at that particular stage of the build. For a full list of forms see MSIS 27 Annex 16.
- 4.5.2 Any deficiencies will be noted and, where possible, the surveyor will discuss these with the builder or outfitter at the time of the survey.
- 4.5.3 All deficiencies will be recorded, and a report of survey will be issued.

CHAPTER 5 – Instructions for Fishing Vessel Certifying Authority

5.1 General

5.1.1 This Chapter should be read in conjunction with the FVCA Agreement which will be in place between the MCA and FVCA.

5.2 Points of Contact with MCA

- 5.2.1 The following points of contact should be used :
 - Construction Standards Enquires with regards equivalent arrangements, drawings/plan approvals, Construction Standards working group – stability.unit@mcga.gov.uk
 - Newbuild Fishing Vessel Guide Process and Procedures Any enquiries relating to the process to be followed or procedures contained within in the guide, including referenced additional material – HQSurvey@mcga.gov.uk
 - FVCA Agreement Clarifications, information to be submitted or requirements thereof externalmonitoring@mcga.gov.uk

5.3 Request for Survey

- 5.3.1 For all vessels, regardless of size, initial contact will be with the MCA as per Chapter 1. This is for the purpose of verifying that plans are either to be approved, or for a series of vessels, the approved plans have not changed. The MCA will also issue the builder/owner with a unique number pre-fixed with the letters CM. This number will form the reference for the vessel and should be used in all correspondence.
- 5.3.2 Where a vessel is less than 15m LOA, then contact with the FVCA by the builder/owner will also need to be made. The MCA will advise the builder/owner of this as part of the initial contact with MCA.
- 5.3.3 Once contact is made, the FVCA should provide the builder/owner with a letter/contract which clearly details the service being provided and the estimated cost to provide that service. Reference to stability requiring approval, preferably in advance, should be made.

5.4 Procedures

- 5.4.1 This guide forms part of the agreement between the MCA and authorised FVCAs.
- 5.4.2 The FVCA should develop its processes for carrying out its work following the processes as detailed in this guide and in the Construction Standards.
- 5.4.3 It is recommended that forms used by the FVCA should contain the same information and be in a similar format as those MCA forms detailed in this Guide.

5.5 Documents Submitted to the MCA

- 5.5.1 All documents submitted to the MCA either during the process or on completion of the build should be sent in the following format to Technical Support Team <u>technicalsupportteam@mcga.gov.uk</u>. the local marine office where initial contact by the builder/owner was made:
- 5.5.2 The naming of documents comprises of the vessels CM number, Folder Code, Date in YYYYMMDD format and document type arranged as follows:

CMNo-FolderCode-DateYYYYMMDD-Documenttype.

- 5.5.3 A dash "-" is used between each term and no special characters such as # or "," are to be used. For example: CM00000-EXQ-20281228-CORR
- 5.5.4 Should there be two or more documents types created on the same day then the document number should be added to the end of the name.

CM00000-EXQ-20281228-CORR-001 CM00000-EXQ-20281228-CORR-002

Folder Codes - CONS (Construction), GENSI (General Survey and Inspection), STAB (Stability)

Document Type - Correspondence (General Correspondence of value to ongoing issues), MSF... (MSF form / certificate relevant to the vessel (include number)), Misc (Miscellaneous)

5.6 Review of Construction Standards

5.6.1 As a FVCA, you will be invited to be a member of the Construction Standards Working Group. The ToR for that Group will be made available if the FVCA chooses to be a member.

5.7 Vertical Contract Audits of FVCA Surveyors

- 5.7.1 In line with the supervision requirements of the FVCA Agreement, surveyors authorised by an FVCA will be subject to Vertical Contract Audits. These audits will take the form of a monitoring assessment whereby a suitable MCA surveyor will attend a survey alongside an FVCA surveyor to ensure that the processes put in place by the FVCA, as well as the activity being undertaken by the FVCA surveyor, follows the requirements laid down in the documents covered by the FVCA Agreement.
- 5.7.2 The process which will be followed is similar to that undertaken by the MCA of their own surveyors as contained in MSIS 40 Activity Monitoring. Form <u>MSF5568</u> can be used for this activity, however, it should be noted that the following sections are not relevant for this activity :

A.2, B.9, B.10, B.16, C.18, Section D, Section E

- 5.7.3 At the completion of any Activity Monitoring undertaken on an FVCA surveyor, feedback should be documented by the MCA surveyor and provided to the FVCA surveyor.
- 5.7.4 A copy of the report (<u>MSF5568</u>) should be sent to the appropriate FVCA in addition to the MCAs BIA branch. The reports will be considered by MCAs auditors as part of FVCA monitoring visits.
- 5.7.5 Where concerns are raised which identify concerns with respect of the competence of the FVCA surveyor to undertake the work of the FVCA agreement, these concerns will be shared with other FVCAs who have authorised the surveyor to undertake work under the FVCA agreement.
- 5.7.5 Where the MCA are made aware of concerns regarding the competence of an FVCA surveyor, we retain the write to undertake additional monitoring of that surveyor. This will be discussed with the FVCA(s) whom have authorised the surveyor.
- 5.7.6 This activity is not chargeable.

<mark>5.8</mark>	Monitoring during period of Interim Authorisation
<mark>5.8.1</mark>	During any period of interim FVCA Agreements, increased monitoring will be undertaken by the MCA to ensure that any new FVCA is undertaking the work as required by the MCA.
5.8.2	During this period the FVCA must notify the local Marine office, closest to where an inspection is to take place, and provide the name of the FVCA surveyor undertaking the work and the nature of the work. If the FVCA surveyor has already been monitored during the interim authorisation period then the local Marine office need not be advised.
5.8.3	Upon receiving a request to monitor an FVCA surveyor, the MCA shall make arrangements with the FVCA surveyor to undertake a monitoring exercise.
<mark>5.8.4</mark>	Where a surveyor may be authorised by more than one FVCA, that surveyor need only be monitored once unless concerns are raised to require further monitoring.
<mark>5.9</mark>	Monitoring during period of Full Authorisation
<u>5.9.1</u>	It is expected that every authorised FVCA surveyor is monitored at least every three years.
<mark>5.9.2</mark>	It is the responsibility of the FVCA and their surveyors to ensure that they maintain this requirement.
<mark>5.9.3</mark>	If an FVCA surveyor is due to be monitored they, or the FVCA on their behalf, must contact the local Marine office closest to where an inspection is to take place to arrange for an MCA surveyor to monitor the FVCA surveyor.
<mark>5.9.4</mark>	Where a surveyor may be authorised by more than one FVCA, that surveyor need only be monitored once in three years unless concerns are raised to required further monitoring.
<mark>5.9.5</mark>	If a request for an FVCA surveyor to be monitored cannot be achieved by the MCA, this will not prevent the intended FVCA inspection from being undertaken, however, it will require the FVCA surveyor whom is to be monitored to continue to make contact with the local Marine Offices nearest to where future planned inspections are to take place until such time as the FVCA surveyor is monitored.

5.10 Pre-Registration Surveys (as required by MGN630)

5.10.1 As documented in MGN 630 and contained within the FVCA agreement, FVCAs may undertake pre-registration surveys. This section provides some guidance to FVCAs when developing their processes and procedures for this work particularly for vessels of less than 15m LOA and areas of vessels where special focus should be given.

5.10.1 Steel vessels

5.10.1.1 All external areas of the hull plating and means of connection, should be examined, e.g. for damage, corrosion pitting, welding failure, rivet head wastage. Internally, the hull plating, framing and means of connection, in double bottoms, holds, 'tween decks, peaks and machinery spaces, should be examined. Freeboard/weather deck and superstructure deck plating and beams, should be examined.

5.10.1.2 Surveyors should carry out a detailed examination of the outer hull, in particular;

- the 'wind and waterline',
- any fishroom bilge sump,
- the bottom and keel area, for any signs of grounding damage,
- areas in way of fishing gear, e.g. trawl doors or clam dredges etc,
- bilge keels and their connection to the hull,
- welds, for wear or electrolytic erosion,
- plates, in general, for electrolysis or for localised pitting (possible when earth fault present)
- any riveted butts and seams,
- bow areas, for contact damage,
- areas around previous repairs, particularly if repairs were due to reduced hull thickness,
- any doubler plates, or other un-reported repairs,
- gut and stone chutes bottom plating that form part of the hull, as these areas are particularly prone to wear,
- sacrificial anodes, and
- discharge pipes from toilets/sewage units.

5.10.2 Plate thickness

5.10.2.1 Non-destructive testing (NDT) plate thickness readings, of the hull plating at the 'wind and waterline' and at L/4 bands, should be taken. Additional readings should be taken in any suspect areas highlighted by the surveyor for particular examination e.g. fish room bilge sump, any damaged areas, and any other areas where signs of corrosion or

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thinning are evident. Normally about 5 readings per plate are sufficient, with a additional readings in any highlighted areas. Preferably any paint should be removed to bare steel and, in areas of severe pitting, the pits ground flush to achieve accurate readings. The deck plating should be similarly tested.

5.10.2.2 The testing should be carried out by a competent person.

- 5.10.2.3 If the surveyor has any doubts about the plating thickness, a further examination should be carried out and, in borderline cases, drill tests undertaken, i.e. a hole drilled through the plating, and the plate thickness physically measured, following which the hole is sealed up by welding.
- 5.10.2.4 Isolated areas of pitting, with a depth not exceed 50% of the plate thickness, may be repaired by welding, subject to the use of qualified welders, and approved procedures and materials, e.g. classification society approved. In general, hull plate areas below 3mm in thickness should be renewed. Renewed plates should be of sufficient size to reduce problems of excessive stress being locked in, due to shrinkage on cooling. Where the extent of pitting is considered excessive in areas, e.g. >10% of plate area, or due to the depth, the risk of heat distortion or cracking will increase and the defective plate should be cropped out and renewed. Such repairs may require NDT on completion, to the surveyors satisfaction.
- 5.10.2.5 Doubling plates are normally only acceptable as a temporary repair, in certain circumstances, e.g. to increase the strength of plating and stiffeners but not on bottom plating (excluding temporary repairs) and only if there is sufficient material in the parent plate to effect an effective weld. Details of the fitting of doubler plates, e.g. welding, plate size, etc should be to requirements of the Standards. The welding detail requires special attention. Surveyors should ensure that they have the necessary competence before surveying such repairs. Any doubler plates fitted should be tested and the owner advised of the time limit affect permanent repairs.
- 5.10.2.6 Surveyors should carry out a detailed internal examination, in particular the plating, framing and means of connection etc. in ballast tanks, double bottom tanks, holds, between decks, peaks and machinery spaces. In other spaces ceiling sparring, linings and insulation should be removed, where necessary, to enable inspection of shell plating and frames etc. to be carried out. The plating and beams of the freeboard/weather and superstructure decks should be surveyed. Areas where any pockets where water may accumulate should be particularly examined and limber/drain holes exposed.

- 5.10.2.7 Areas below floor plates and around bilge wells should also be examined (if practical a hose test should be carried out, e.g. from forward and aft of engine room bulkheads).
- 5.2.10.8 Where loose ballast is stored in any space a portion should be removed to check that no chafing has taken place.
- 5.10.3 Wooden Vessels
- 5.10.3.1 All external areas of the keel and planking should be examined, for damage, rot, etc. Caulking of garboard and other seams should be thoroughly tested. Internally, the hull (moulding, plating or planking), framing and means of connection, in double bottoms, holds, 'tween decks, peaks and machinery spaces, should be examined. Freeboard/weather deck and superstructure deck structures (moulding, plating or planking and beams) should be examined. Surveyors should take account of what is observed on the outside of the vessel, when surveying the inside. Prior to carrying out a detailed examination of the outer hull, the surveyor should look inside the vessel and determine those areas that require to be opened up to facilitate examination of the inner hull. The amount of opening up required will initially be determined by what has been observed up to this point, although further opening up may be required depending upon what is subsequently observed.
- 5.10.3.2 Vessels which are fully sheathed are not accepted. Where vessels have sheathing in areas used for protection, such as hauling areas then this may be reported on and not taken of any visual inspection of the inside of the vessel in that area.
- 5.10.3.3 Surveyors should carry out a detailed examination of the outer hull, in particular;
 - a) the keel should be examined for any signs of damage from grounding, working of the scarfed joints etc. and signs of softness or infestation particularly in way of end grain, including the deadwood;
 - b) the hull planking should be examined; to ensure that seams are tight, there are no indications of leaks and no signs of collision or other damage, that may affect the hull strength. No caulking material should be visible. If it is visible, the area has either been incorrectly caulked, needs re-caulking or the plank edges are worn and may require to be replaced. Plank butt blocks should be checked to ensure they are secure and that fastenings in general are sound;

- c) the planking, from garboard to gunwhale, should be examined. Plank seams should be examined to assess the condition of the caulking and paying compound, checking for softness of the plank edge and any signs of infestation. Each plank should be hammer tested every ~1,5m and caulking thoroughly checked, by screwdriver or similar tool, fore and aft and up to the deck level;
- d) the hull should also be examined for signs of tingles (local patches, often of thin copper or lead) over the seams, an indication of problems with leaks. When a tingle plate is found on a seam, (usually a seam just forward of the stern gland), it is common to find the area has been frequently re-caulked, unsuccessfully, and the tingle plate has become the best option available, (note that these should be considered a temporary measure only and permanent repairs should be completed as soon as possible);
- e) attention should be given to areas of end grain exposure (hood ends, butt joints, around hull penetrations etc.) as they are prone to rot and infestation by marine borers. Difficult to paint areas are particularly prone to this, e.g. behind keel coolers, keel strap to keel connections and under inlet grids, such areas often remain unpainted year after year. Also particularly prone are vessels left for periods exceeding one year between painting. The vessels operating location can also be a factor, as some docks and quays are more affected by rot than others. Internal areas with poor air circulation will also generally give ideal conditions for rot to develop. In areas where rot is suspected, but there is no indications of a problem with movement or fastenings, then any rot present is unlikely to be causing a significant weakening of the structure,
- f) butt joints should also be examined for signs of splitting at the fastenings and fairness of the butts. If butts are not flush then the fastenings and/or the timber in way of the fastenings may have deteriorated and should be carefully examined. The condition of the hood ends, and associated fastenings, should be exposed and examined, together with the associated caulking. Areas around inlets and discharges should be examined for softness,
- g) fastenings should only be removed for examination where there is clear evidence of problems (e.g. signs of rust, nail sickness, loose fastenings or timbers etc.) or where there is no clear evidence of examination in the past 5 years. In such cases, an adequate number of fastenings, usually in every fourth timber of bilge planking, on each side should be drawn out, at various parts of the hull, and examined to ascertain their condition and that of

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the timbers through which they pass. If the vessel is iron fastened, a number of bolts should be driven out, with at least 6 taken from the lower deck bindings on each side. Where such a sample indicates no or only minor problems, no additional fastenings need be removed. If serious problems are evident then additional fastenings should be removed, to establish the extent of the problem. If these fastenings also show signs of serious problems then the surveyor should consider examining a random sample of fastenings over a larger area, in an attempt to establish if the problem extends to the entire vessel. Prior to removal of fastenings, nail heads which show rust trails should be exposed. then hammer and punch tested, this will usually give an indication of the fastenings condition. Where fastenings shatter or break up on being struck the most appropriate action is to arrange for adjacent re-nailing rather than fastening removal. It should be noted that electrolysis can occur in wooden vessels resulting in wastage of the fastenings. This is likely to happen if the main engine etc. has not been correctly earthed, or the hull earthing plate (often a square plate about 500mm x 500mm) is painted over.

- h) if fitted, one chain plate bolt should be backed out, abreast of each rigging and, if in an unsatisfactory condition, additional bolts backed out, as considered necessary. Where metal sheeting is fitted, one sheet from the upper turn of bilge should be stripped off on each side, in line with any rigging, to permit examination,
- vessels that have been regularly tied-up along side with other vessels may have been subject to squeezing, resulting in possible caulking and fastening damage, and will require careful examination of the caulking and fastenings,
- j) it should be noted that hog, particularly in older vessels, is not necessarily an indication of a hull strength problem, but evidence of sag usually is a sign of reduced hull strength. Surveyors should carefully examine vessels for any indication of transverse hog as this can be a sign of inadequate strengthening inside and possible cracks to frames at or around the keel line,
- k) it should also be noted that anodes attached to hull steelwork on wooden vessels, such as boxed keels, steel sheathing and rudders should be maintained in good condition,
- I) the hull framing and deck beams, particularly at the ends, beam shelf, lodging and hanging knees etc. and floors should be examined for any indications of rot or collision damage. Limber holes should be checked to ensure that they are not blocked and

that there is no significant rot or softness of the wood in way of limber holes. Frames and floor connections to the keel and the keel bolts should also be examined. If there appears to be significant signs of corrosion or indications of movement in the bolts then consideration should be given to removing a sample to assess their condition. Stem and stern structures should be examined internally for any signs of contact damage,

- m) the deck planking should be examined as in (b) above,
- n) the bulwarks, decks and any deckhouses should be examined and the surveyor should be satisfied with their condition and strength. Particular areas to look out for include:
 - where water may collect resulting in rot,
 - caulking of decks especially in way of deck fittings and connections at deckhouses,
 - springing of the deck that may indicate loose fastenings or loss of strength in the deck planking/framing,
 - raised plank butts or covering boards,
 - stanchions and frame tops that may appear to be sound but could be hollowed out,
 - connection between deck and deckhouse or hatch coaming, and
 - areas in way of drains and inside any deck lockers.
- 5.10.3.4 Surveyors should carry out a detailed internal examination. If the vessel is fitted with concrete ballast, or other permanent ballast with a concrete capping, the edges of the concrete should be firm next to the planking. Any cracking or gaps at the edges could lead to problems with fastenings and signs of rust may be an indication that problems already exist with the fastenings.

5.10.4 Fibre-reinforced plastic vessels

5.10.4.1 All external areas of the moulded hull should be examined, e.g. for damage, gel coat cracking, osmosis, blistering. Surveyors should note any deterioration, e.g. delamination, fractures, osmosis etc. of the components of the laminate particularly in the vicinity of bolt holes, in order to ascertain if the material is suitable to withstand the imposed loads. With vessels of sandwich construction, particular attention should be given to the possibility of delamination. Internally, the hull moulding and framing should be examined. Freeboard/weather deck structures should similarly be examined. Surveyors should examine the vessel carefully and report on the condition describing the appearance of the vessel and the general overall condition. The report

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should indicate if structural alterations are apparent and give detailed information on the condition of the following items;

- hull, including outer shell, and hull connections with other structural components;
- b) fastenings, primary and secondary bonds and bonded joints;
- c) decks, waterways and sheer strake;
- d) deck and hold beams and knees;
- e) floors, frames and longitudinals;
- f) apron and breasthooks, etc;
- g) keelson and sister keelsons;
- h) hatchways, hatch coamings and hatchway fittings;
- i) deck openings, skylights, ventilators and companionways;
- superstructures and structures which cover deck openings; and

k) engine bearers.

- 5.10.4.2 The outer gel coat surface of hull mouldings is to reach a minimum state of cure with a Barcol hardness test reading of 30. Any hull moulding failing to meet a minimum surface hardness test reading of 30 must be reported. (Barcol readings stated are by use of Barcol Impressor Model GYZJ 934-1).
- 5.10.4.3 The Surveyor should report on the general construction used for the vessel and the quality of the build.
- 5.10.4.4 The fastenings in all types of fibre-reinforced plastic vessel should be carefully examined and where bolt fastenings are used for any connection the surveyor should consider the removal of a sample of bolts for examination at time of survey.
- 5.10.5 All vessels
- 5.10.5.1 The rudder and all other outside fittings and their fastenings should also be examined.
- 5.10.5.2 A surveyor may require any part of the ceilings, linings, deck covering, etc to be removed, and any tank opened up and cleaned as

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considered necessary, to permit a proper examination of the vessels structure. Limbers and air courses should be removed and holds cleared, prior to surveys.

- 5.10.5.3 Portions of the deck planking, composite or tiling should be reported where deterioration is evident or suspected.
- 5.10.5.4 All tanks, that are an integral part of the hull, may be internally examined and, if the surveyor considers it necessary, pressure tested, with either liquid or air to a pressure equivalent to the maximum load experienced in service, oil fuel tanks 300mm greater than maximum head or 1bar if heated, others to top of air pipe (maximum air pressure should not exceed 0,2bar over pressure).
- 5.10.5.5 Oil fuel tanks need not be examined internally; (a) unless as a result of an external examination, (b) once the vessel is 12 years old, or (c) for any other reason the surveyor considers it necessary.
- 5.10.5.6 Tanks used exclusively for the carriage of fresh water or treated fresh water ballast should be examined, unless the surveyor considers it unnecessary, e.g. if examining a pair of identical tanks where one is found in good internal condition.
- 5.10.5.7 Surveyors should examine arrangements for the sealing of spurling pipes, especially canvas or concrete sealing/capping, to ensure that it remains watertight and can be readily returned to a watertight state after deploying the anchor(s). Noting that canvas supported by close fitting steel plates are more efficient at preventing the ingress of water. If cement is used, the quantity of cement must be adequate not only to plug the spurling pipes but also to prevent lateral movement of the cables within. In new vessels, the owners and builders should be advised to locate and arrange chain lockers such that, if inadvertent flooding does occur, it is limited in extent.

5.10.5.8 Surveyors should also examine mooring bollards and cleats;

- a) to ensure the deck attachments are of adequate strength and in good condition. Welded attachments should be carefully examined;
- b) that any holding down bolts are not corroded. Mild steel bolts should be examined annually, and renewed every two years, if necessary, or replaced by stainless steel bolts;
- c) that the under deck stiffening remains adequate;

d) stern glands;

e) propellers;

f) shafts & brackets;

g) bulkheads;

h) decks; and

) cathodic protection

5.10.6 Special considerations for RIBs

- 5.10.6.1 The system for surveying RIBs will remain as it did when Seafish operated the Registration Surveys. Surveyors should survey the rigid hull section against the Seafish standards and record any visible scantlings which could be recorded), including an overall condition report regarding the GRP or aluminium rigid hull, and sponson condition and connections.
- 5.10.6.2 Surveyors should also ensure that the vessel could pass a swamp test and self-draining test and have adequate stability for the maximum load for that vessel, for example if the vessel was built to RCD Cat C, a vessel is considered suitable for a maximum load (including persons) of 660kg. The load must never exceed the maximum load. MCA may apply a lesser load may be applicable depending on freeboard and stability check.
- 5.10.6.3 The term "maximum load" is to be understood as the "recommended maximum load". This shall not exceed the total load that may be added to the light craft mass without exceeding the requirements for stability, freeboard, flotation and seating requirements. As a minimum it shall take account of the mass of the following:
 - a) the number of persons at 83 kg each
 - b) basic equipment;
 - stores and cargo/catch, dry provisions, consumable liquids [not covered by d) or e)], and miscellaneous equipment not included in the light craft mass or in b);
 - consumable liquids (fresh water, fuel) in portable tanks filled to the maximum capacity;

- e) consumable liquids (fresh water, fuel) in permanently installed tanks filled to the maximum capacity;
- f) a liferaft or dinghy when intended to be carried.
- 5.10.6.4 In the following text "recommended maximum load" = W, and moulded beam = B
- 5.10.6.5 In view of the lifting and depositing of pots, we would be seeking an asymmetric loading, and a WB/12 type test. The Heel Test process is explained in detail in the Instructions to Surveyors (MSIS 9), Chapter 1, Approval of Stability Information...page 27, para A2.2.2 refers to WB/12
- 5.10.6.6 Where available the Owners Manual should be provided as per EN ISO 10240. The owner's manual for the craft shall provide necessary information for safe operation of the craft, equipment and systems with due consideration for the environment.
- 5.10.6.6 The MCA may assign category as per craft design category/categories, as marked on the builder's plate, and statements explaining the design category(ies) as follows:
 - Category A: This craft is designed to operate in winds that may exceed wind force 8 (Beaufort scale) and in significant wave heights of 4 m and above (see Note 1 below), and is largely selfsufficient. Abnormal conditions such as hurricanes are excluded. Such conditions may be encountered on extended voyages, for example across oceans, or inshore when unsheltered from the wind and waves for several hundred nautical miles.
 - Category B: This craft is designed to operate in winds up to Beaufort force 8 and the associated wave heights (significant wave height up to 4 m, see Note 1 below). Such conditions may be encountered on offshore voyages of sufficient length, or on coastal waters when unsheltered from the wind and waves for several dozens of nautical miles. These conditions may also be experienced on inland seas of sufficient size for the wave height to be generated.
 - Category C: This craft is designed to operate in winds up to Beaufort force 6 and the associated wave heights (significant wave height up to 2 m, see Note 1 below). Such conditions may be encountered in exposed inland waters, in estuaries, and in coastal waters in moderate weather conditions.

 Category D: This craft is designed to operate in winds up to Beaufort force 4 and the associated wave heights (occasional maximum waves of 0,5 m height). Such conditions may be encountered in sheltered inland waters, and in coastal waters in fine weather.

Annex A – Guidance on Hours to Undertake Work

The below table is provided as a guide only when estimating fees for work to be undertaken to oversee work prescribed in this guide.

The fees estimate referred to variously in the guide will also include travelling time which has not be accounted for below.

	Admin /		Hull		Outfit	
	Aumin /	Approvals ⁷	rovals ⁷ Insp		Inspections	
	Scrutineering		No.	Hours	No.	Hours
Less than 7m LOA	3	5	2	10	0	0
7m to 10m LOA Sealed Deck or Out-fit at Builders Yard (GRP)	4.5	6	2	12	1	5.5
7m LOA to 10m LOA (GRP)	5	8	2	11	2	11
7m to 10m LOA (Metal)	5	10	2	16.5	2	16.5
10m to 12m RL (GRP)	5	8	2	13	2	13
10m to 12m RL (Metal)	5	15	2	17.5	2	17.5
7m to 12 RL (Wood)	6	10	4	21.5	2	11
12m RL to less than 15m LOA (GRP)	6	10	3	20	3	20
12m RL to less than 15m LOA (Metal)	6	15	3	26	3	26
12m RL to less than 15m LOA (Wood)	6.5	10	4	20	3	20
15m LOA to 20m LOA (Metal)	10.5	20	3	35	3	35
15m LOA to 20m LOA (GRP)	10.5	13	3	31	3	31
20m LOA to 24m RL (Metal)	10.5	25	4	50	4	50
20m LOA to 24m RL (GRP)	10.5	16	4	42	4	42

⁷ The hours listed does not include time for approval of stability information if required. MSIS 27/CH 1/Rev 11.23/Page 43 of 48

Annex B – Sample of Fees Estimate Letter

MO Address

Unique Ref: CM XXXXX

Copy to: Stability & Plan Approval Department

13 November 2023

Dear Sir/Madam

Survey of Proposed New XXXXXX Vessel at XXXXXX

We are pleased to confirm that we can provide survey services for the construction of the above proposed new vessel in accordance with the requirements of the Fishing Vessel Construction and Outfit Standards and the relevant Code of Practice as issued by the Maritime and Coastguard Agency, to the extent requested on the application forms (MSF5100 & MSF 1356).

Your point of contact is **XXXXXX** of **XXXXXX** Marine Office.

The number of inspections applicable for this service is estimated to be *Hull and *Outfit based upon Annex A of MCA Newbuild Fishing Vessel Guidance.

We understand that Plan Approval has been undertaken under unique reference number and that the above vessel will be built to this approval.⁸

We understand that Plan Approval is required to be undertaken as part of this project. The number of hours required for Plan Approval is estimated to be .¹⁰

Please refer to the guide for full guidance. The fees are an estimate of services and costs.

⁸ Delete as appropriate

Carving and Marking Note, the Certificate of Measurement and the Tonnage Certificate (15m LOA – 24m RL only) will be required as part of the outfit survey.

Our estimated fees to undertake the above is £ excluding travel and subsistence within the UK. Fees may be paid in full or in instalments. In all cases fees shall be in advance of each stage visit.

Please complete form MSF 5100 and return to the Marine Office. Funds will be required before work is commenced.

Should you have any queries please contact your point of contact above.

Yours faithfully,

XXXXXX Marine Office

Annex C – Sample of 'Keel Laid' Certificate

Maritime &	Certific (or Simila	cate of Laying of Keel r Stage of Construction)
Agency	This is to certify that the	stage of construction:
of the Hull Nur	nber	
was reached c	n	
According to the determined by a assigned for ke marked with:	e yard, the total net steel computations ist el laying amounts to	⁷ aluminium / FRP / wood weight . The weight of the hull sections t ⁹ and these hull sections are clearly
Marking (Hull	No. – Date):	
Stamping Posi	tion:	
The 'keel laying date for this Hu continued, lates This certificate according to the	date' YYYY-MM-DD may Il No, if the newbu at until YYYY-MM-DD (1 y has been issued without p building contract applica	/ only be accepted as official keel laying ilding construction activities will be ear). prejudice of the term 'LAYING OF KEEL' ible.
Date / Place : .		

Dale / Place	
Name	:
Signature	:

⁹ The amount of steel / aluminium / FRP / wood laid must be greater than 50 tonnes or 1% of the estimated mass of all structural material, whichever is the least amount. The latest MCA rules for construction of fishing vessels apply.

Annex D – Operating Protocol under 12m



Annex E – Operating Protocol over 12m

