

Australian Government Australian Maritime Safety Authority

National Law— Marine Surveyors Accreditation Guidance Manual 2014

Part 2—Survey of vessels



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Chapter 1 Preliminary

1.1 Overview

- (1) The Australian Maritime Safety Authority (AMSA) as the National Marine Safety Regulator relies on the recommendations of marine surveyors to be satisfied a vessel meets the applicable safety, design, construction and equipment standards.
- (2) This Part of the manual sets out the requirements for the survey of domestic commercial vessels (DCV) which:
 - (a) are required to hold a Certificate of Survey or a Load Line Certificate,
 - (b) operate under Exemption 40 (Class C restricted operations); or
 - (c) operate under another exemption that requires survey.
- (3) Vessel surveys must be undertaken in accordance with the requirements of this manual.

Note 1 The *National Law – Marine Surveyors Accreditation Guidance Manual 2014* has two Parts. Part 1 of the manual provides a 'how to' guide to getting accredited as a Marine Surveyor under the *Marine Safety (Domestic Commercial Vessel) National Law Regulation 2013* (National Law Regulation). Part 2 (this Part) of the manual contains the survey requirements for vessels, and the survey methodology for surveyors undertaking surveys, under the National Law.

Note 2 A vessel in the course of construction is a domestic commercial vessel if the vessel is, after completion, for use as a domestic commercial vessel – see section 7 of the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* (National Law).

1.2 Scope

- (1) This part of the manual sets out the survey requirements for domestic commercial vessels which are applying for, or hold, a Certificate of Survey, a Load Line Certificate, an Exemption 40 approval or approval under another relevant exemption.
- (2) It also provides the National Regulator, Accredited Marine Surveyors, Recognised Organisations and other stakeholders with the information necessary to undertake surveys on domestic commercial vessels.

1.3 Application

- (1) This Part of the manual applies:
 - (a) Under *Marine Order 503 (Certificates of Survey National Law*, to vessels required to hold a Certificate of Survey;
 - (b) under *Marine Order 507 (Load Line Certificates National Law*, to vessels required to hold a Load Line Certificate;
 - (c) under *Marine Safety (Class C restricted operations) Exemption*, to vessels operating under Exemption 40; and
 - (d) in accordance with any other exemption that requires compliance to the manual as a condition of the exemption.
- (2) In accordance with the National Law Regulation, this Part of the manual also applies to persons undertaking surveys on domestic commercial vessels. *Note 1* The manual has been prescribed under Marine Order 503 as a standard in relation to the survey of domestic commercial vessels, in accordance with section 32 of the National Law Regulation.

Note 2 Accredited Marine Surveyors, Recognised Organisations, qualified electricians and the National Regulator are the only persons authorised to conduct those surveys on domestic commercial vessels that are required under the National Law – see Marine Order 503, Marine Order 507 and Exemption 40.

Note 3 The reference to surveys includes plan approvals – see Chapter 3 and Chapter 5 of this Part 2 of the manual.

1.4 Objective

- (1) The objectives of this Part of the manual are to:
 - (a) specify the requirements for the survey of domestic commercial vessels;
 - (b) facilitate consistent survey practices;
 - (c) provide methodology to verify a vessel satisfies the applicable requirements of the National Law; and
 - (d) outline the ways to demonstrate a vessel meets the safety outcomes required under the National Law and mentioned in the applicable legislation, exemptions and standards.

1.5 Equivalent means of compliance

(1) An equivalent means of compliance to one or more of the requirements of Chapter 3 – Chapter 8 that apply to a vessel may be approved by the National Regulator in accordance with Marine Order 503.

Note The proposed equivalent means of compliance must be at least as effective as the requirement(s) that it is to replace in order for it to be approved by the National Regulator – see Division 4 of Marine Order 503.

(2) Where the National Regulator has approved an equivalent means of compliance, the requirements of Chapter 3 – Chapter 8 that have not been replaced by the approved equivalent means of compliance continue to apply to the vessel.

1.6 Reference documents

- (1) Each document mentioned in the following table is:
 - (a) referenced in this Part of the manual; and
 - (b) the latest revision of the document, including amendments, unless stated otherwise.

Publisher	Document	Available
American Boat and Yacht Council	ABYC Standard for Technical Information Reports for Small Craft, P-6 Propelled Shafting Systems (ABYC P-6)	ABYC website at <u>http://www.abycinc.</u> org
Australian Maritime Safety Authority	Marine Safety (Domestic Commercial Vessel) National Law Act 2012 (National Law) Marine Safety (Domestic Commercial Vessel) National Law Regulation 2013 (National Law Regulation) Marine Order 501 (Administration – national law) 2023 (Marine Order 501)	AMSA website at <u>https://www.amsa.</u> gov.au

Publisher	Document	Available
	Marine Order 502 (Vessel identifiers – national law) 2017 (Marine Order 502)	
	Marine Order 503 (Certificates of survey – national law) 2018 (Marine Order 503)	
	Marine Order 507 (Load line certificates – national law) 2018 (Marine Order 507)	
	Marine Order 97 (Marine pollution prevention — air pollution) 2022 (Marine Order 97)	
	Marine safety (Certificates of survey) Exemption 2021 (Exemption 02)	
	Marine Safety (Periodic survey, equipment certification, compass adjustment and liferaft servicing) Exemption 2021 (Exemption 06)	
	Marine Safety (Temporary operations) Exemption 2020 (Exemption 07)	
	Marine Safety (Emergency services vessels) Exemption 2020 (Exemption 24)	
	<i>Marine Safety (Class C restricted operations)</i> <i>Exemption 2021</i> (Exemption 40)	
	<i>Marine Safety (Unpowered barges) Exemption</i> 2020 (Exemption 41)	
	Navigation Act 2012 (Navigation Act)	
Australian Maritime	National Standard for Commercial Vessels (NSCV)	AMSA website at https://www.amsa.
Safety	B — General requirements (NSCV Part B)	<u>gov.au</u>
Authority	C1 – Arrangement, accommodation and personal safety (NSCV C1)	
	C2 – Watertight and weathertight integrity (NSCV Part C2)	
	C3 — Construction (NSCV C3)	
	C4 — Fire safety (NSCV C4)	
	C5 — Engineering (NSCV C5)	
	C5A — Machinery (NSCV C5A)	
	C5B — Electrical (NSCV C5B)	
	C5C — LPG Systems for appliances (NSCV C5C)	
	C5D — LPG Systems for engines (NSCV C5D)	
	C6 — Stability (NSCV C6)	
	C7 — Equipment (NSCV C7)	
	F2 – Leisure craft (NSCV F2)	
Australian and New	AS 1799.1 <i>Small craft-General requirements for power boats</i> (AS 1799.1)	SAI Global website at

Publisher	Document	Available
Zealand Standards	AS/NZS 3000 Electrical installations (known as the Australian/New Zealand Wiring Rules) (AS/NZS 3000)	http://www.saiglob al.com
	AS/NZS 3004.2 Electrical installations - Marinas and boats - Boat installations (AS/NZS 3004.2)	
European Parliament And The Council Of The European Union	Directive 2013/53/EU of the European Parliament and of the Council of 20 November 2013 on recreational craft and personal watercraft and repealing Directive 94/25/EC	EUR-LEX website at <u>http://eur-</u> <u>lex.europa.eu/legal</u> <u>-</u> <u>content/EN/TXT/?q</u> <u>id=142892876154</u> <u>5&uri=CELEX:320</u> <u>13L0053</u>
International Maritime Organization	International Convention for the Prevention of Pollution from Ships as implemented in Australia through the Protection of the Sea (Prevention of Pollution from Ships) Act 1983	IMO website at <u>http://www.imo.org</u>
International Standards Organisation	ISO 6185-1 Inflatable boats, Part 1: Boats with a maximum motor rating of 4,5 kW (ISO 6185- 1) ISO 6185-2 Inflatable boats, Part 2: Boats with a maximum motor rating of 4,5 kW to 15 kW inclusive (ISO 6185-2) ISO 6185-3 Inflatable boats, Part 3: Boats with a hull length less than 8 m with a motor rating of 15 kW and greater (ISO 6185-3) ISO 6185-4 Inflatable boats – Part 4: Boats with a hull length of between 8 and 24 m with a motor power rating of 15 kW or greater (ISO 6185-4) ISO 9001 Quality management systems — requirements (ISO 9001) ISO 12215-1 Small craft - Hull construction and scantlings - Part 1: Materials: Thermosetting resins, glass-fibre reinforcement, reference laminate (ISO 12215-1) ISO 12215-2 Small craft - Hull construction and scantlings - Part 2: Materials: Core materials for sandwich construction, embedded materials (ISO 12215-3 Small craft - Hull construction and scantlings - Part 3: Materials: Steel, aluminium alloys, wood, other materials (ISO 12215-3) ISO 12215-4 Small craft - Hull construction and scantlings - Part 3: Materials: Steel, aluminium alloys, wood, other materials (ISO 12215-3) ISO 12215-4 Small craft - Hull construction and scantlings - Part 4: Workshop and manufacturing (ISO 12215-4)	ISO website at <u>http://www.iso.org</u>

Publisher	Document	Available
	ISO 12215-5 Small craft - Hull construction and scantlings - Part 5: Design pressures for monohulls, design stresses, scantlings determination - Amendment 1 (ISO 12215-5)	
	ISO 12215-6 Small craft - Hull construction and scantlings - Part 6: Structural arrangements and details (ISO 12215-6)	
	ISO/DIS 12215-7 Small craft - Hull construction and scantlings - Part 7: Scantling determination of multihulls (ISO 12215-7)	
	ISO 12215-8 Small craft - Hull construction and scantlings - Part 8: Rudders - Technical Corrigendum 1 (ISO 12215-8)	
	ISO 12215-9 Small craft - Hull construction and scantlings - Part 9: Sailing craft appendages (ISO 12215-9)	
National Marine Safety Committee	Uniform Shipping Laws Code	AMSA website at https://www.amsa. gov.au

1.7 Definitions

(1) In this Part of the manual:

ABYC means American Boat and Yacht Council.

Accredited Marine Surveyor (AMS) means a surveyor who is accredited in accordance with Part 3 of the National Law Regulation.

additional survey means a survey undertaken outside the frequency prescribed by the National Regulator, either full or partial, according to the circumstances, undertaken at the request of the Owner to verify compliance with the applicable standards.

AIS means automatic identification system.

applicable exemption means an exemption from a requirement of the National Law.

applicable legislation means that part of the legislation that expressly deals with the issue of a Certificate of Survey or a Load Line Certificate.

applicable standards means the standards that apply to the vessel in accordance with legislation.

AS/NZS means Australian and New Zealand standard.

builder means the person or entity responsible for the construction or manufacture of a vessel.

categories of surveying means the categories of accreditation mentioned in section 21 of the National Law Regulation.

certificate of classification means a document attesting that a vessel has been surveyed by a Recognised Organisation in accordance with the Recognised Organisation's class rules.

certificate of survey means a certificate issued under section 38 of the National Law.

equipment means appliances for saving or protecting life (safety equipment), communications equipment, navigation equipment, fire equipment and anchoring systems.

Note Examples include lifejackets, life rafts, buoyant appliances, lifebuoys, first aid or medical equipment, emergency beacons, distress signals, compass, radio etc.

equivalent means of compliance (EMOC) means a method of complying with the applicable standards that has been approved by the National Regulator in accordance with division 4 of Marine Order 503.

existing vessel has the same meaning as in Marine Order 503.

full survey means a survey where all aspects of the specified survey task have been completed in accordance with the requirements of this Manual.

Note Examples include all aspects of a plan approval survey, shaft survey or all aspects of a commissioning survey.

Generic equivalent solution (GES) means an EMOC that has been made on the initiative of the National Regulator and applies to all, or a class of, vessels rather than to an individual vessel.

GPS means global positioning system.

in water periodic survey means a periodic survey conducted while the vessel is afloat.

initial survey means completion of specified design, construction and commissioning surveys according to applicable legislation, exemptions and standards, to ensure that the relevant requirements are complied with and that these items are satisfactory for the service for which the vessel is intended.

leisure type activities means the type of activities permitted to be undertaken on a class 4 vessel.

Note Whilst class 2 leisure use align with those activities permissible on a class 4 vessel, the vessel, survey, operational and safety standards that must be met are those for a class 2 vessel.

load line certificate means a certificate issued in accordance with Marine Order 507.

load line convention means the International Convention on Load Lines, adopted in London on 5 April 1966, as amended and in force for Australia from time to time.

LPG means liquefied petroleum gas.

manual means the *National Law* – *Marine Surveyors Accreditation Guidance Manual 2014* as amended from time to time.

MARPOL means the International Convention for the Prevention of Pollution from Ships as implemented in Australia through the Protection of the Sea (Prevention of Pollution from Ships) Act 1983.

MARS means the National Regulator's MARitime Safety system.

notified body means a conformity assessment body that meets the requirements of Article 30 of the RCD.

out of water periodic survey means a periodic survey conducted while the vessel is out of the water to ensure the vessel complies with applicable legislation, is in a satisfactory condition and is fit for the service for which the vessel is intended.

partial survey means a survey where only some aspects of the specified survey task were completed in accordance with this Manual.

periodic survey means a recurring examination performed by a surveyor to ensure a vessel continues to meet the requirements of the applicable legislation, exemptions and standards, is in a satisfactory condition and is fit for the service for which the vessel is intended. A periodic survey may be in water or out of water.

QMS means a Quality Management System of ISO 9001:2008 or an *equivalent management system* as defined in this manual.

Note A system that is at least as effective is a system that incorporates the core elements of ISO 9001— including responsibilities, document control, process management, internal audits and corrective actions — tailored to meet the requirements of marine surveying as set out in this manual.

RCD means the Recreational Craft Directive issued by the European Parliament and the Council of the European Union, as in force from time to time.

renewal survey means a recurring examination performed by a surveyor to ensure a vessel continues to meet the requirements of the applicable legislation, exemptions and standards; is in a satisfactory condition and is fit for the service for which the vessel is intended. A renewal survey includes both in water and out of water survey.

RO means Recognised Organisation.

sister vessel means a vessel with the same structural arrangement and scantlings as a vessel previously surveyed in accordance with the National Law and which is designated as a sister vessel in accordance with clause 3.9.5.

statement of compliance means a document attesting that a vessel has been surveyed by a Recognised Organisation and that the vessel complies with the applicable standard.

survey means those activities, including design appraisals, examinations, tests, trials and verifications of a vessel, its components and equipment, conducted by a surveyor in accordance with applicable standards, exemptions and legislation, and this manual, to detect, assess, rectify and communicate compliance.

surveyor means a person authorised to undertake surveys on domestic commercial vessels in accordance with the applicable legislation.

Examples of persons authorised to conduct surveys include Accredited Marine Surveyors, Recognised Organisations, a person who holds an unrestricted electrical licence and the National Regulator – see Marine Order 503.

transitional vessel has the same meaning as in Marine Order 503.

unrestricted electrical licence means an electrical licence (however described) issued by a State or Territory that permits a person to perform all electrical work including:

- (a) installing electrical wiring; and
- (b) repairing electrical equipment.

Note The definition of unrestricted electrical licence is contained in Marine Order 503. **USCG** means United States Coast Guard.

(2) In this Part of the manual, the following terms have the meaning given by the Dictionary in NSCV Part B:

Class 1 vessel	Class 2 vessel	Class 3 vessel
Class 4 vessel	control station	crew
domestic commercial vessel (or DCV)	EPIRB	fast craft
ISO	Long	master
measured length (or <i>Lm</i>)	National Regulator	NSCV
passenger	Recognised Organisation	regulated Australian vessel
sailing vessel	service category	vessel

Chapter 2 Control of the survey process

2.1 Application

This chapter applies to all persons undertaking surveys on domestic commercial vessels in accordance with Chapter 3 – Chapter 8 of this Part of the manual.

Note 1 Accredited Marine Surveyors, Recognised Organisations, the National Regulator and for some electrical surveys – a person who holds an unrestricted electrical licence, may conduct surveys on domestic commercial vessels – see Marine Order 503, Marine Order 507 and Exemption 40.

Note 2 This chapter contains general requirements which apply to all surveys undertaken in accordance with this manual.

2.2 General requirements

The survey of a domestic commercial vessel must be conducted and documented in accordance with this Part of the manual.

Note This chapter applies to all kinds of surveys (full surveys or partial surveys) including initial, periodic, renewal, load line, Exemption 40, additional surveys and surveys of domestic commercial vessels maintained in class.

2.3 Purpose of surveys

To the extent practicable, given the scope and depth of a particular survey, the purpose of conducting a survey is to:

- (a) verify and document the extent of a vessel's compliance with the applicable legislation, exemptions and standards;
- (b) identify deterioration, wear or damage to the vessel that may impair the ability of the vessel and its equipment to comply with the applicable standards or the service for which the vessel is intended; and
- (c) report on the vessel's compliance to the applicable standards and make recommendations to the National Regulator.

2.4 Competence

Persons who survey vessels, or who carry out another function required for the survey of a vessel, its fittings or equipment, must have the appropriate training, knowledge, experience and, where appropriate, qualifications, to competently undertake the particular survey activity.

Note Only Accredited Marine Surveyors, Recognised Organisations, the National Regulator and for some electrical surveys – a person who holds an unrestricted electrical licence, may conduct surveys on domestic commercial vessels – see Marine Order 503, Marine Order 507 and Exemption 40.

2.5 Retention and transfer of information essential to safety

(1) The survey process undertaken by the surveyor must ensure that information essential to safety, which arises during the survey, is recorded for future reference and is transferred to others responsible for the safety of the vessel who might need to rely on and act upon that information.

Example Essential information may include photographs, ultrasonic thickness testing reports, wear or clearance records, and non-compliances or other potential safety issues identified during the survey.

(2) Surveyors must have in place processes to retain essential information, including records of the survey, for the period required by any applicable legislation.

Example The National Law Regulation requires records relating to a recommendation made to the National Regulator to be kept for a period of seven years beginning on the day the recommendation is made.

2.6 Transparency

The survey process must be reviewable and auditable by the National Regulator and other parties to facilitate confidence that the objectives of the National Law and this manual are being achieved.

2.7 Reliance on third parties

(1) Third parties cannot conduct a survey, or part of a survey, on behalf of the surveyor.

Note Only Accredited Marine Surveyors, Recognised Organisations, the National Regulator and for some electrical surveys –a person who holds an unrestricted electrical licence, may conduct surveys on domestic commercial vessels – see Marine Order 503, Marine Order 507 and Exemption 40.

- (2) However, third parties may undertake specified activities and inspections that support surveys, including:
 - (a) verification of safety, navigation and communication equipment;
 - (b) electrical and gas certification;
 - (c) material, manufacturer and product certification; and
 - (d) provision of destructive and non-destructive examination (NDE) reports.

Example 1 A copy of the life raft certificate obtained during survey can be retained as evidence that the surveyor has confirmed that the life raft has been serviced in accordance with the applicable standards. A surveyor would still be expected to ensure the life raft is on board, is of the correct type and size, is appropriately located, is secured correctly and is in good condition at the time of survey.

Example 2 A NDE report obtained during survey can be retained during survey as evidence that the surveyor has verified the thickness of a vessel's hull. A surveyor would still be expected to inspect the vessel's hull to confirm the overall condition of the hull and identify any defects or decficiencies.

- (3) Where third party reports are relied upon, the surveyor must make such enquiries as required to ensure that the results:
 - (a) are reliable; and
 - (b) verify that the subject of the report complies with the required standard. *Note* The quality of inputs to the survey system can have a significant impact on the quality of outputs from the survey system.

2.8 Reporting obligations and unsafe vessels

- (1) Section 33 of the National Law Regulation requires Accredited Marine Surveyors to report to the National Regulator where:
 - (a) corrective action is required to the vessel, or a thing on the vessel, due to a defect or non-conformity in the vessel or thing; and
 - (b) a matter, or an aspect of a matter, being surveyed is complex or novel, and is not covered by a standard or code mentioned in section 32 of the National Law.

(2) If, during the conduct of a survey, a surveyor becomes aware of a defect, nonconformity or novel matter relating to the vessel or a thing on the vessel, then the surveyor must report the matter to the National Regulator as soon as practicable.

Note Australian courts generally consider that 'as soon as practicable' is a flexible timeframe which needs to be interpreted having regard to all the circumstances of the person on whom the obligation is placed and involves consideration of what would be feasible for the person to comply with the obligation in those circumstances.

- (3) Any changes to the vessel:
 - (a) must be reported to the National Regulator by the owner in accordance with Marine Order 503; and
 - (b) surveyed appropriately in accordance with:
 - (i) for a vessel that has been subject to a change mentioned in Schedule 1 of Marine Order 503 – the surveys required by Marine Order 503 and Chapters 3 and 4 of this Manual; or
 - (ii) for a vessel that has been subject to other changes impacting compliance with applicable standards, an additional survey as defined in this manual.

Note Changes that may require an additional survey include significant repairs to the vessel structure, systems or equipment that potentially alter its compliance status. Routine maintenance, minor repairs and replacement of consumables items that do not impact the vessel's compliance do not require additional surveys.

- (4) Details of deficencies, non-compliances, novel matters and Marine Order 503 Schedule 1 changes, are to be:
 - (a) provided in writing to the owner of the vessel;
 - (b) provided to the National Regulator as soon as reasonably practicable, having regard to the circumstances; and
 - (c) retained by the surveyor.
- (5) In addition, where, during the course of a survey, a surveyor identifies aspects of a vessel's arrangement, construction, machinery, equipment or operational performance that are unsafe, including items which are not the subject of a specific provision under applicable legislation, exemptions and standards, the surveyor must:
 - (a) advise the owner of the vessel in writing of the problem; and
 - (b) advise the National Regulator of the matter as soon as reasonably practicable, having regard to the circumstances. *Note* A marine safety concern can be reported on the AMSA website – see https://www.amsa.gov.au/vessels-operators/incident-reporting/marine-safety-concern

2.9 Making recommendations

2.9.1 General requirements and forms

- (1) After completing a survey, the surveyor must make a recommendation to the National Regulator about the vessel's compliance with the applicable legislation, exemptions and standards.
- (2) Section 36 of the National Law Regulation requires recommendations to be in writing and in the form specified in this manual.

- (3) A surveyor who conducts a partial survey task must specify within their recommendation, and advise the owner in writing, of all outstanding elements required to complete the survey task.
- (4) The forms which apply to vessel surveys are specified in Annex 1.
- (5) A surveyor may use the forms specified within Annex 1 or may use their own forms so long as they contain at least the same level of detail as the forms specified within Annex 1.

Note Using the preferred form(s) in Annex 1 reduces the time taken for the National Regulator to consider the surveyor's recommendation(s).

(6) A surveyor using their own forms must include the following declaration on each form:

I declare that:

• I have conducted survey(s) as indicated, of the above mentioned vessel, in accordance with the applicable standards as set out in Marine Order 503 (Certificates of Survey – national law) 2018, and that to the extent evident from the inspection/s carried out I am satisfied that the vessel meets the standards.

• I consent to the Australian Maritime Safety Authority using and disclosing the information provided in this form for purposes associated with the administration of the Marine Safety (Domestic Commercial Vessel) National Law Act 2012.

• I understand and acknowledge that the Australian Maritime Safety Authority, as the National Regulator, may ask that I provide any information or document that the National Regulator reasonably considers necessary in relation to this recommendation.

Note Electronic recommendations made directly into AMSA's online surveyor portal (MARS), with appropriate supporting documentation attached, satisfy the requirement to make a recommendation in writing and in the specified form.

(7) A Recognised Organisation should include the level of detail specified in Annex 3 in their recommendation to the National Regulator.

2.9.2 Documentation supporting recommendations

- (2) Section 36 of the National Law Regulation requires recommendations to be supported by copies of all documents referred to in a recommendation, or supporting a recommendation, including the following:
 - (a) drawings and plans;
 - (b) approvals; and
 - (c) technical evaluations and calculations.
- (3) Documentation supporting a recommendation must identify:
 - (a) all steps completed during the survey in accordance with the requirements of Chapter 3 Chapter 8 of this Part, as applicable to the survey;
 - (b) any requirements of Chapter 3 Chapter 8 that apply to the survey and which were not completed, together with a detailed reason why they were not completed; and
 - (c) where a recommendation includes a recommendation to impose a condition(s) evidence that supports the recommendation to impose the condition(s).
- (4) All supporting documentation must be provided to the National Regulator with

the recommendation.

Note Photographs are a good source of evidence and should be maintained by the surveyor and provided to the National Regulator on request.

- (5) Annex 1 specifies the types of documentation the National Regulator expects to be submitted for different types of surveys.
 - (a) The documentation specified in Annex 1 as 'mandatory' must be submitted to the National Regulator to support the relevant recommendation. This includes:
 - (i) approved plans;
 - (ii) plan approval letters; and
 - (iii) Exemption 40 survey reports.
- (6) A surveyor must provide the items within Annex 1 specified as 'mandatory'.
- (7) Copies of all documentation supporting a recommendation to the National Regulator must be retained by the surveyor for a period of no less than seven years beginning on the day the recommendation is made.

2.9.3 Recommendation: Recommended

- (1) Where a surveyor recommends that a vessel meets the applicable legislation, exemptions and standards, the vessel must comply with all applicable standards.
- (2) For a periodic survey, the vessel may have minor non-compliances provided the surveyor is satisfied the non-compliances will not jeopardise the safety of the vessel or any person on board the vessel, and the surveyor provides a time period not greater than 90 days for the non-conformances to be rectified using AMSA form 586.

2.9.4 Recommendation: Recommended with conditions

Where a surveyor recommends that a vessel meets the applicable legislation, exemptions and standards, but that a condition be imposed on a vessel's certification:

- (a) the vessel must comply with the applicable legislation, exemptions and standards;
- (b) the vessel must:
 - (i) for an initial survey not have any outstanding non-conformances;
 - (ii) for a renewal or periodic survey the vessel may have minor noncompliances provided the surveyor is satisfied the non-compliances will not jeopardise the safety of the vessel or any person on board the vessel, and the surveyor provides a time period not greater than 90 days for the non-conformances to be rectified using AMSA form 586; and
- (c) the surveyor must support their recommendation with objective evidence from which a reasonable person, without seeing the vessel, would be able to conclude that imposing the condition is the correct and preferable decision.

Note Imposing a condition is a reviewable decision under the National Law. The National Regulator will not impose a condition on a certificate without sufficient justification and documentation. Documentation must enable any reviewer of the decision to be able to determine the reasons why the condition was imposed and why it was the correct and preferable decision.

2.9.5 Recommendation: with dispute

A surveyor may submit a recommendation with dispute to AMSA where the owner and surveyor believe an identified non-conformance was previously accepted by a state or territory marine safety agency:

- (a) the vessel must comply with the applicable legislation, exemptions and standards, other than the disputed deficiency;
- (b) the surveyor must provide sufficient detail of the disputed deficiency including:
 - (iii) a written statement from the owner that provides details of the disputed item and the vessel history including, where relevant, the jurisdiction that the vessel was previously surveyed under;
 - (iv) photographic evidence, where applicable;
 - (v) specific details of the standard to which the deficiency relates; and
 - (vi) evidence that the non-conformance was accepted by the previous authority.

2.9.6 Not recommended

A surveyor that wishes to advise AMSA of a vessel where non-conformances have not been rectified in a reasonable period may submit a recommendation of "not recommended", with detail of the deficiency and non-conformances including:

- (a) photographic evidence, where applicable;
- (b) specific details of the standard to which the deficiency or non-compliances relate; and
- (c) objective evidence to enable the National Regulator to determine the appropriate action.

2.10 Instructions to surveyors

- (1) The National Regulator provides instructions to surveyors to clarify the manner in which surveys should be carried out. These instructions are the National Regulator's preferred way for a surveyor to conduct or record a particular type of survey.
- (2) The instructions to surveyors must be complied with where a surveyor does not have a QMS that is compliant with ISO 9001 (or an equivalent standard) see Part 1 of the manual.
- (3) A surveyor operating in accordance with a QMS that contains survey instructions must ensure these instructions include at least the level of detail set out in this manual and instruction to surveyors.

Chapter 3 Initial survey for vessels not constructed to class rules

3.1 Application

- (1) This chapter applies to all vessels subject to Marine Order 503 unless:
 - (a) the vessel is ≥35m; or
 - (b) the vessel elects to meet class rules for the aspects mentioned in Marine Order 503.

Note 1 Initial survey requirements for Load Line Certificates are in Chapter 6.

- (2) Despite (1)(a), a vessel that is ≥35m which meets both of the following criteria may comply with this chapter:
 - (a) the vessel is an existing vessel or a transitional vessel; and
 - (b) the survey process that applied to the vessel when it was last surveyed before 1 July 2013 permitted the vessel to be surveyed by a person other than a Recognised Organisation.

Note 1 The definitions of 'existing vessel' and 'transitional vessel' are contained in Marine Order 503.

Note 2 Marine Order 503 requires vessels \geq 35m to be surveyed by a Recognised Organisation, unless the vessel is an existing or transitional vessel that has not previously been required to be surveyed by a Recognised Organisation – see section 6 of Marine Order 503. Vessels \geq 35m which must be surveyed by a Recognised Organisation are subject to Chapter 5 – those vessels must comply with class rules for the construction, machinery, anchoring equipment and electrical installation aspects of the vessel in accordance with Marine Order 503.

(3) This chapter also applies to surveyors undertaking initial surveys of domestic commercial vessels in accordance with this chapter.

Note Recognised Organisations may undertake surveys of vessels in accordance with this chapter. Where a vessel complies with class rules for the construction, machinery, anchoring equipment and electrical installation aspects of the vessel, Chapter 5 applies.

3.2 Vessels which must undergo an initial survey: new DCVs and some alterations to DCVs

- (1) In accordance with Marine Order 503, some vessels are required to undergo:
 - (a) an initial survey; or
 - (b) an initial survey for those aspects of the vessel that have changed, as well as a renewal survey for the remainder of the vessel.
- (2) The vessels to which these requirements apply are specified within Marine Order 503.
- (3) A vessel that has been subject to a change mentioned within Schedule 1 of Marine Order 503 must not be operated, unless it has successfully completed the required surveys and obtained a new certificate of survey from the National Regulator, or unless the vessel has received an exemption.
- (4) For issue of a new certificate an application must be made on form AMSA 521.
- (5) The form of the survey required is as specified in Marine Order 503 unless an alternate form of survey has been approved by the National Regulator. *Note* A person apply for an alternate survey process using AMSA form 1854 <u>https://www.amsa.gov.au/forms/application-alternate-survey-process</u>

3.3 Compliance to be verified

- (1) The surveyor, of a vessel required to undergo initial survey, must be satisfied that:
 - (a) the builder of the vessel has the capability to construct the vessel to the standards required; and
 - (b) the vessel has been subject to such checks, calculations, inspections, measurements, tests and trials as required to verify the vessel's compliance with the applicable legislation, exemptions and standards.
- (2) For compliance with (1), the construction phase surveys should include confirmation that the builder of the vessel has in place a quality control system covering the following as applicable:
 - (a) receipt, storage and issue of materials, equipment etc;
 - (b) the fabrication environment;
 - (c) weld procedures and welder performance;
 - (d) production fabrication;
 - (e) inspection of production processes;
 - (f) installation of machinery and essential systems;
 - (g) fitting-out;
 - (h) tests and trials;
 - (i) drawings and document control; and
 - (j) records.

Note The surveyor's involvement is only in that part of the quality system which controls the standards required to meet the survey requirements.

3.4 Applicable standards

The standards which apply to a vessel are contained in Marine Order 503 as specified for existing, transitional or new vessels.

3.5 Notification of intent to build a DCV

- (1) The National Regulator provides a notice of intent process for lodgement of approved design drawings and survey reports within the MARS system. *Note* The notice of intent process facilitates pre-approval and lodgement of approved drawings for a design. An application for a Certificate of Survey and/or Load Line Certificate should be used if an applicant wishes to obtain certificate(s) for a vessel.
- (2) On receipt of a notification of an intent, the National Regulator will:
 - (a) issue a unique identifier, in accordance with Marine Order 502;
 - (b) provide the applicant with a list of survey codes for upload of records; and
 - (c) authorise the nominated surveyor to lodge approved plans and records with the National Regulator.

3.6 Vessel identification

- (1) The National Regulator will issue a unique identifier for each vessel.
- (2) The unique identifier must be marked on all survey documentation including but not limited to plans, stability documentation, recommendations and reports.

- (3) To ensure that a vessel can be identified and traced throughout its life, the unique identifier must also be permanently affixed to the vessel so that it is clearly and prominently displayed on the vessel.
- (4) The unique identifier should be affixed in one of the following:
 - (a) the engine room side of either the forward or aft engine room bulkhead, on the port side or near the entry to the engine room;
 - (b) the inside of the hull adjacent to and to port of the propulsion machinery;
 - (c) the port aft side of the collision bulkhead, or the first bulkhead from bow; or
 - (d) the port inside of the transom.
 Note The unique identifier should also be displayed on the outside of the vessel. See the <u>AMSA website</u> for more information on unique identifier display requirements.
- (5) If an application for a Certificate of Survey and/or Load Line Certificate is made, the unique identifier will be issued as part of that application process and a separate application for a unique identifier is not required.

3.7 Application for a Certificate of Survey or Load Line Certificate

- (1) An application for a Certificate of Survey and/or Load Line Certificate may be made at any point in the design, construction and commissioning process. *Note* An application for a Certificate of Survey and/or Load Line certificate may be made instead of notifying the National Regulator of an intent to build a domestic commercial vessel. It may also be made after the National Regulator has been notified of the intention to build a domestic commercial vessel.
- (2) When the National Regulator receives an application for a Certificate of Survey for a vessel that requires an initial survey, the National Regulator will provide the applicant with a list of surveys required for the vessel as well as other information to support compliance and ensure that a Certificate of Survey can be issued once the vessel is constructed.
- (3) Surveyors should encourage owners and operators to apply for a Certificate of Survey and/or Load Line Certificate early in the construction or alteration process.

3.8 Phases of initial survey

- (1) The initial survey of a vessel is divided into three phases, defined as follows:
 - (a) Phase 1: Design phase and plan approval: verification that the concept and detailed design of a vessel or its alteration complies with the applicable legislation, exemptions and standards. The design phase may include, but is not limited to, the review of plans, design calculations and building specifications. Some aspects of plan approval should occur before construction or alteration of a vessel begins.
 - (b) Phase 2: Construction phase: verification that the construction of a vessel complies with applicable legislation, exemptions and standards. Construction phase surveys may include, but are not limited to, verification that a vessel is built in accordance with design documentation, quality of workmanship, verification of lines plan, verification of draft marks, quality of materials.
 - (c) Phase 3: Commissioning phase: verification of safety outcomes for compliance with applicable legislation, exemptions and standards prior to a vessel being allowed to operate. Commissioning phase surveys may

include, but are not limited to, trials and tests of a vessel (including stability) and systems essential to safety, and verifying the quantity, type and availability of equipment and safety information.

(2) All three phases mentioned in (1) must be conducted to complete the initial survey process, unless the National Regulator approves otherwise in writing. *Note 1* An application for an alternate form of initial survey may be made on <u>AMSA form 1854</u> *Note 2* Initial survey requirements for Load Line Certificates are in Chapter 6.

3.9 Phase 1 - Design phase and plan approval

3.9.1 Surveyors authorised to conduct plan approval

- (1) Accredited Marine Surveyors with the accreditation *category a plan approval* may conduct plan approval.
- (2) However, Accredited Marine Surveyors may only conduct electrical plan approval if they are specifically approved to do so.
- (3) Recognised Organisations may conduct plan approval.

3.9.2 Assessing and approving plans and other vessel design documentation

- (1) Plans, documents and calculations are to be assessed using an auditable methodology with the assessment status indicated on the plan, document or calculation.
- (2) Surveyors must retain plans, documents, calculations and any correspondence from the design phase as a record of compliance and for future reference.
- (3) The surveyor must indicate the outcome of an assessment of plans and supporting documentation by affixing one of the stamps mentioned in Table 1 to each plan or document.
- (4) After assessment, the surveyor must provide a letter to the owner which includes:
 - (a) the vessel particulars;
 - (b) the vessel's unique identifier;
 - (c) the vessel's service category, including complement;
 - (d) a list of any Generic Equivalent Solutions (GES) that have been used;
 - (e) details of any exemptions that have been issued by the National Regulator which apply;
 - (f) details of any Equivalent Means of Compliance (EMOCs) that have been approved by the National Regulator which apply;
 - (g) a list of plans and documents that have been assessed;
 - (h) the specific standard and part each drawing has been assessed against;
 - (i) any conditions or comments made;
 - (j) the outcome of the plans and document assessment;
 - (k) outstanding plans or other documents that must be assessed before the plan approval of the vessel is complete; and
 - plan approval comments to be verified by the surveyor undertaking the construction survey to ensure that construction aligns with the approved plans.

Note See Annex 2 for an example letter.

- (5) The plan approval recommendation submitted to the National Regulator must include copies of:
 - (a) the letter mentioned in paragraph (4);
 - (b) the vessel's stamped approved plans; and
 - (c) any relevant documents, calculations or correspondence from the design phase.

Table 1 - Assessment Stamps

Type of Stamp	Use of Stamp
Approved	The Approved stamp may only be used on documentation where the surveyor has examined and found that the vessel or its equipment meets the requirements of the National Law.
	Any conditions or comments on the approval must be included on the corresponding letter of approval.
Not Approved	The Not Approved stamp may only be used on documentation where the surveyor has examined and found the vessel or its equipment does not meet the requirements of the National Law
	A list of non-compliances must be made on the document and on the accompanying letter.
For Information	For Information stamps are to be used on documentation which has not been subjected to an assessment against the National Law but has been perused to obtain information relating to the vessel or related plans.
Not Assessed	The Not Assessed stamp is used on documentation which has not been subject to an assessment against the National Law and does not provide information relating to the vessel or associated plans.

(6) The extent and content of the plans and documentation needed to verify compliance with the applicable legislation, exemptions and standards will be dependent on the categorisation, size and type of vessel. Table 2 specifies plans that should be assessed during plan approval.

Plan name	Typical application	Description of content	
General Arrangement plan	All vessels	 (a) Tanks (b) Deck openings (c) Seating (d) Berths (e) Bulkheads (f) Access ways (g) Bulwarks and railings (h) Navigation lights (i) Ventilation openings (j) Ballast (k) Buoyancy material (l) Use of each space (m) Watertight closing appliances (n) Life-saving appliances (o) Lighting for embarkation stations (p) Helm visibility (q) Deck areas (r) WCs, Basins, showers (s) Accessibility <i>Note</i> some content may be provided on separate plans. 	
Construction plans and / or specifications Lines plan	All vessels	 (a) Transverse and longitudinal sections (b) Bulkheads (c) Decks (d) Superstructure (e) Deckhouses (f) Engine girders (g) Scantlings (h) Material details (i) Fastening / welding / layup details (j) Windows and window frames (a) Half breadths plan (b) Body plan 	
	STADINTY OF SUDUIVISION	 (c) Sheer plan (d) Location of watertight bulkhead 	
Draft marks plan	Vessels with comprehensive stability or subdivision	Location of draft marks, baseline and reference points	

Table 2 – Content of information and plans

Plan name	Typical application	Description of content	
Plans or specifications for closing devices	All vessels	Construction and means for securing watertight or weathertight openings liable to down flooding	
Piping schematics	All vessels	 (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) 	Essential and high-risk systems Bilge Fuel Sanitary Engine exhaust Refrigeration and steam Showing valves Vents Overflows Filling stations Pipe materials Diameters Wall thicknesses
Fire protection	Vessels ≥12.5m long	 (a) (b) (c) (d) 	Type and disposition of fire divisions Fire-extinguishing appliances Location of escapes Fire dampers
Rudder and steering gear plan	Vessels with rudders	 (a) (b) (c) (d) (e) 	Rudder Rudder stock Bearings Coupling Steering gear and alternative method of steering
Shafting plan	Vessels with shafts	 (a) (b) (c) (d) (e) 	Propeller shaft Bearings and couplings Stern tube Propeller brackets Engine and thrust seatings
Construction schedule	All vessels	(a) (b)	Time schedule for building Laminating and welding to determine key milestones for inspections
Electrical schematic	 (a) Vessels with ≥ 32V installations (b) Vessels with complex extra low voltage (ELV) electrical systems 	(a) (b) (c)	Electrical equipment and wiring Protection devices (overload, low voltage) Emergency power arrangements

Plan name	Typical application	Des	cription of content
Sail plan	Sailing vessels	(a)	Location and size of sails
		(b)	Underwater profile of vessel
Machinery arrangement	All vessels	Arra and inco plan	ngement and function of main auxiliary machinery (may be rporated on general arrangement)
Freestanding	Vessels with freestanding fuel	(a)	Construction
fuel tanks	tanks	(b)	Material details
		(c)	Scantlings
		(d)	Baffles
		(e)	Support
		(f)	Vent pipes
		(g)	Drains
		(h)	Filling lines
		(i)	Inspection openings
Damage control plan	(a) Vessels ≥35m long(b) Class 1 vessels that are	(a)	Boundaries of watertight compartments
	≥25m long Note The damage control, fire and	(b)	Openings and means for closure
	emergency plans may be combined in a single drawing on vessels <50m long.		Arrangements for correcting list
Fire control plan	 (a) Vessels ≥35m long (b) Class 1 vessels that are 	(a)	Location and type of active and passive fire safety systems on board the vessel
	<i>Note</i> The damage control, fire and emergency plans may be combined in a single drawing on vessels <50m	(b)	Control stations
		(c)	Location of divisions
		(d)	Fire alarms
	iong.		Fire detection and extinguishing systems
		(f)	Fire-extinguishing appliances
		(g)	Access to compartments and decks
		(h)	Ventilating systems
		(i)	Location of international shore connection if fitted
		(j)	Fire suits
		(k)	Breathing apparatus
		(1)	Fire dampers
Emergency	(a) Vessels ≥35m long	(a)	Assembly stations
plan	(b) Class 1 vessels that are	(b)	Signals
	≥25m long		Escape routes
	<i>Note</i> The damage control, fire and emergency plans may be combined	(d)	Evacuation routes

i.

Plan name	Typical application	Des	cription of content
	in a single drawing on vessels <50m long.	(e)	Location of life saving equipment
		(f)	Flares
		(g)	EPIRB
		(h)	Lifebuoys
		(i)	Immersion suits

3.9.3 Vessels with CE certification

- (1) For a vessel with a service category mentioned in Table 3, a surveyor may accept CE certification as evidence of compliance with the following requirements of Phase 1 (Design phase and plan approval) and Phase 2 (Construction) of initial survey:
 - (a) for a Class 1, Class 2 or Class 3 vessel to establish that the vessel's hull, superstructure and appendages have been designed and constructed in accordance with the relevant part(s) of ISO 12215; and
 Note A Class 1, Class 2 or Class 3 vessel's compliance against the requirements of NSCV parts C1, C2, C4, C5, C6 and C7 is not covered by CE certification.
 - (b) for a Class 4 vessel for all of the surveys mentioned in Phase 1 and Phase 2, except for surveys relating to:
 - (i) propeller shafting;
 - (ii) inboard petrol engines; and
 - (iii) electrical systems.

Note See Chapter 11 of NSCV Part F2 for the requirements that apply to a vessel with CE certification.

- (2) Where a surveyor relies on CE certification, the surveyor must:
 - (a) ensure that a CE Declaration of Conformity has been issued for the vessel, in accordance with the requirements of Directive 2013/53/EU, as amended from time to time;
 - (b) verify that the modules used for construction assessment, as declared on the CE Declaration of Conformity, are specified as accepted CE modules in Table 3 for the vessel;
 - (c) verify that the maximum design category, as declared on the Declaration of Conformity, is an acceptable design criteria specified in Table 3 for the vessel's intended operational area; and
 - (d) for a Class 1, Class 2 or Class 3 vessel confirm that the standards mentioned on the CE Declaration of Conformity – Essential Requirements page establish that the vessel's hull, superstructure and appendages have been designed and constructed in accordance with the relevant part(s) of ISO 12215 as permitted by NSCV Part C3.

Note The CE modules are described in Table 4.

(3) All vessels with CE certification are subject to the Phase 3 (Commissioning phase) surveys of the initial survey process.

Service	Maggurad	RCD		Accepted CE modules							
Category	Length	category		A1	B+C	B+C1	B+D	B+E	B+F	G	Н
1D and 1E	<i>Lm</i> < 7.5m	С			\checkmark						
2C, 3C	<i>Lm</i> < 7.5m	В			\checkmark	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
1D and 1E	<i>Lm</i> ≥ 7.5m to 13 m	С					~	\checkmark	~	✓	√
2C	<i>Lm</i> ≥ 7.5m to 13 m	В			L	L	~	~	~	✓	√
3C	<i>Lm</i> ≥ 7.5m to 13 m	В					~	~	~	✓	√
2E	<i>Lm</i> ≤ 13m	С		L	\checkmark	~	\checkmark	\checkmark	\checkmark	<	\checkmark
2D	<i>Lm</i> ≤ 13m	С			\checkmark	~	\checkmark	\checkmark	\checkmark	<	\checkmark
3D and 3E	<i>Lm</i> ≤ 13m	С			\checkmark	~	\checkmark	\checkmark	\checkmark	<	\checkmark
2C	<i>Lm</i> < 7.5m	В			\checkmark	~	\checkmark	\checkmark	\checkmark	<	\checkmark
3C	<i>Lm</i> < 7.5m	В			\checkmark	~	\checkmark	\checkmark	\checkmark	<	\checkmark
4E inland waters	<i>Lm</i> ≤12	D		\checkmark	\checkmark	~	~	\checkmark	~	<	\checkmark
4E	<i>Lm</i> <u></u> ∠24	С		\checkmark	\checkmark	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
4D	<i>Lm</i> <u>≤</u> 24	С			\checkmark	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
4C	<i>Lm</i> <u><</u> 24	В			\checkmark						

Table 3 - CE Modules required

Key – L means that certification may be accepted provided the vessel is used wholly for leisure type activities.

Note Operations that are not wholly leisure type activities include: carriage of cargo; the ferrying / taxiing of passengers or special personnel; sightseeing tours; recreational dive charter or commercial diving; waterways patrol; search and rescue; towing; or other kinds of operations commonly undertaken by workboats.

- (4) Where a surveyor relies on CE certification, the following documentation must be provided to the surveyor and must form part of the surveyor's recommendation to the National Regulator:
 - (a) a copy of the certificate of conformity or declaration from the builder; and
 - (b) a copy of the type approval certificate from the notified body (where applicable); and
 - (c) a copy of the notified body certificates or technical file (where applicable).

Table 4 – Description of CE Modules

1994 module	2003 module	2013 module	Title	Description of module
A	A	A	Internal production control	A self-assessment module with no involvement with a notified body or any other third party.

1994	2003	2013	Title	Description of module			
module	module	module					
Aa	Aa	A1	Internal production control plus supervised product testing	Stability and buoyancy data tests to be verified by a notified body but all other criteria are self-assessed.			
В	В	В	EC type examination	A type approval procedure under which the responsible person submits a completed vessel and its technical documentation for assessment by a notified body.			
C	С	С	Conformity to type based on internal production control	A vessel that is of the same production run as a vessel that was type approved under Module B may use Module C to submit a self-declaration of conformity by the builder based on internal production control.			
-	-	C1	Conformity to type based on internal production control plus supervised product testing	A vessel that is of the same production run as a vessel that was type approved under Module B may use Module C1 if it undergoes stability and buoyancy tests supervised by a notified body.			
D	D	D	Conformity to type based on quality assurance of the production process	A vessel is designed and constructed based on quality assurance of the production process. Compliance with ISO 9001:2015 <i>Quality management systems –</i> <i>requirements</i> is not required but the chosen quality assurance procedure must be approved by a notified body.			
E	E	E	Conformity to type based on product quality assurance	Approved quality assurance procedure and final product inspection and testing under the oversight of a notified body.			
F	F	F	Conformity to type based on product verification	Inspection and testing under the oversight of a notified body of each vessel.			
G	G	G	Conformity based on unit verification	Notified body examines each vessel (normally custom built) to assess conformity.			

1994 module	2003 module	2013 module	Title	Description of module
Н	Т	Т	Conformity based on full quality assurance	Equivalent to the quality management approach of ISO 9001:2015 <i>Quality management</i> <i>systems – requirements</i> . Approach similar to Module D but with the addition of quality management of the design process using a procedure that must be approved by a notified body.

3.9.4 Alterations of vessels using CE compliance

Where CE certification has been or is accepted as evidence of compliance under clause 3.9.3, and the vessel has been significantly altered after its initial construction, a copy of the following documents must also be provided to the surveyor and National Regulator:

- (a) vessel drawings that show the alterations;
- (b) written evidence that confirms that further assessment of the vessel has been undertaken to re-verify that the vessel and its stability comply with the applicable ISO standard for the type of vessel; and
- (c) where the vessel's lines have been altered line plans.

3.9.5 Sister vessels

(1) A vessel with the same structural arrangement and scantlings as a vessel previously surveyed in accordance with the National Law (the 'basis' vessel) may be designated a sister vessel provided the first construction phase survey for the sister vessel occurs within three years of the date of any changes to applicable legislation, exemptions or standards that affect the basis vessel's approved plans, unless otherwise specified by the National Regulator.
Note: Sister vessels may be constructed to the basis vessel's approved plans for so long as

Note Sister vessels may be constructed to the basis vessel's approved plans for so long as the plan remains in compliance with the legislation and standards, and for a further three years – see section 7 of Marine Order 503.

- (2) Sister vessels are categorised as follows:
 - (a) sister vessel for structure only;
 - (b) sister vessel for structure and engineering; and
 - (c) sister vessel for structure, engineering and stability.
- (3) A sister vessel for structure only is a vessel that:
 - (a) has identical length, lines, structural arrangement and scantlings as the basis vessel;
 - (b) is intended to operate in the same service category as the basis vessel; and
 - (c) has the same (or lesser) design displacement and speed as the basis vessel.

- (4) If choosing to recommend a vessel based on a sister vessel for structure only, the surveyor's recommendation must be supported by the following documents in lieu of full plan approval:
 - (a) a copy of the basis vessel's approved construction plans and approval letters;
 - (b) a statement confirming the basis and sister vessels' service categories and maximum speeds; and
 - (c) a lightship comparison report of the basis and sister vessel.
- (5) A sister vessel for structure and engineering is a vessel that:
 - (a) meets the requirements to be a sister vessel for structure; and
 - (b) has identical engineering arrangements as the basis vessel, including for:
 - (i) machinery;
 - (ii) tanks;
 - (iii) fire systems;
 - (iv) electrical;
 - (v) propulsion;
 - (vi) piping; and
 - (vii) steering systems.
- (6) If choosing to recommend a vessel based on a sister vessel for structure and engineering, the surveyor's recommendation must be supported by the following documents in lieu of full plan approval:
 - (a) a copy of the basis vessel's approved construction and engineering plans and approval letters;
 - (b) a statement confirming the basis and sister vessels' service categories and maximum speeds;
 - (c) a lightship comparison report of the basis and sister vessel.
- (7) A sister vessel for structure, engineering and stability is a vessel that:
 - (a) has identical survey class(es), including crew, special personnel and passenger numbers as the basis vessel;
 - (b) meets the requirements to be a sister vessel for structure and engineering; and
 - (c) is shown to be within the specified limits of lightship displacement for sister or near sister vessels as stated in clause 3.3.5 of NSCV Part C6C.
- (8) If choosing to recommend a vessel based on a sister vessel for structure, engineering and stability, the surveyor's recommendation must be supported by:
 - (a) a copy of the basis vessel's approved construction and engineering plans and approval letters;
 - (b) a statement confirming the basis and sister vessels' service categories, crew, special personnel and passenger numbers, and maximum speeds; and
 - (c) a lightship comparison report of the basis and sister vessel; and
 - (d) a copy of the basis vessel's stability book.
 Note A load cell or weighbridge certificate may be used to verify lightship on small boats.

- (9) In other cases, or where this documentation is not available the vessel must be subject to surveys as specified in the preceding sections.
- (10) The sister vessel requirements outlined above are summarised in Table 5.

Table 5 – Sister vessels

Type of sister vessel	Requirements	Acceptable supporting documentation
Sister vessel for structure	 All of the following are identical to the basis vessel: length, lines, structural arrangement and scantlings service category design displacement and speed (may be identical or lesser than basis vessel) 	 Copy of the basis vessel's approved construction plans; Statement confirming the basis and sister vessels' service categories and maximum speeds Lightship comparison report of the basis and sister vessel
Sister vessel for structure and engineering	 All of the following are identical to the basis vessel: length, lines, structural arrangement and scantlings service category design displacement and speed (may be identical or lesser than basis vessel) engineering arrangements, including for: a. machinery b. tanks c. fire systems d. electrical e. propulsion f. piping g. steering systems 	 Copy of the basis vessel's approved construction and engineering plans Statement confirming the basis and sister vessels' service categories and maximum speeds Lightship comparison report of the basis and sister vessel
Sister vessel for structure, engineering and stability	 All of the following are identical to the basis vessel: survey class(es), including crew, special personnel and passenger numbers length, lines, structural arrangement and scantlings service category design displacement and speed (may be identical or lesser than basis vessel) 	 Copy of the basis vessel's approved construction and engineering plans Statement confirming the basis and sister vessels' service categories, crew, special personnel and passenger numbers, and maximum speeds Lightship comparison report of the basis and sister

Type of sister vessel	Requirements	Acceptable supporting documentation
	 engineering arrangements, including for: a. machinery b. tanks c. fire systems d. electrical e. propulsion f. piping g. steering systems The vessel must also be shown to be within the specified limits of lightship displacement for sister or near sister vessels as stated in 	vessel - Copy of the basis vessel's stability book
	NSCV Part Coc, clause 3.3.5	

3.10 Phase 2 - Construction phase

3.10.1 Surveyors authorised to conduct construction phase surveys

- (1) Accredited Marine Surveyors with accreditation in the following categories may conduct construction phase surveys in accordance with the accreditation category and any conditions of accreditation:
 - (a) category d electrical extra low voltage;
 - (b) category e electrical low voltage;
 - (c) category f electrical high voltage;
 - (d) category g construction or alteration hull, deck, superstructure;
 - (e) category h construction or alteration machinery; and
 - (f) category j construction or alteration equipment.
- (2) Recognised Organisations are permitted to conduct construction phase surveys, including electrical surveys. However, when an electrical survey is conducted by a Recognised Organisation, it must be accompanied by a statement of compliance from a person who holds an unrestricted electrical licence.
- (3) A person who holds an unrestricted electrical licence may conduct a construction phase electrical survey and issue a statement of compliance.

3.10.2 Construction phase surveys

(1) At a minimum, the surveys specified in Table 6 must be conducted, where applicable to the kind of vessel or type of alteration, during the construction (or alteration) of a vessel.

Note Applicable surveys listed in Table 6 are mandatory, regardless of whether they are included in the survey requirements letter produced by the MARS system. AMSA employs a risk-based strategy to lessen the administrative workload for AMS. For example, AMSA does not require submission of fire safety reports through MARS for smaller vessels. However, it is still a legal requirement for these vessels to undergo a survey and demonstrate compliance with the relevant fire safety standards. A surveyor may be asked to provide their survey record for this activity at a later date.

- (2) The surveyor must retain a record of each survey undertaken during the construction phase, for a period of at least 7 years, including the date of each survey and any observations and conclusions. Note 1 The <u>AMSA website</u> provides forms and checklists that may be used by the builder and surveyor to document each type of construction and alteration phase survey.
- (3) Where any deficiencies or deviations from a vessel's original approved plans are identified, they must be referred back to the surveyor who approved the plans. The surveyor who approved the plans is required to review the deficiencies and deviations that have been identified and determine if any changes to either the plans or the vessel are required in order for the vessel to meet the applicable legislation, exemptions and standards.

Survey Task	Required for	Description of Survey
Hull structure – composite	Vessels built from composite materials	 (a) Construction facility surveys including; Yard Quality Management System (QMS) Mould survey Material storage and handling Environmental monitoring and control Availability of approved design documentation (b) Certification for materials used in construction, including; fibre, resin, catalyst, retardants, additives, cores (c) Laminating records used in the construction of vessels (d) Laminate thickness testing record(s) (e) Records of resin glass content and ratio achieved (f) Verification the vessel is constructed in accordance with the approved plans and design documentation
Hull structure - welded construction	Vessels built from steel or aluminium	 (a) Construction facility surveys, including; Yard Quality Management System (QMS) material storage and handling segregation of steel and aluminium works availability of approved design documentation (b) Certification for materials used in construction, including; consumables, plate, bar, extrusions. (c) Weld Procedure Specification(s) (WPS) (d) Welding procedure qualification record(s) (WPQR) (e) Presentation and fit-up of plate in accordance with (WPS) (f) Survey of workmanship throughout the vessel.

Table 6 – Construction and alteration surveys
		 including; welding dimensional checks member alignment distortion sections (g) Verification the vessel is constructed in accordance with the approved plans and design documentation
Hull structure – other type of construction other than composite or welded	Vessels not built from composite materials or steel or aluminium	 (a) Construction facility surveys as required, including; Yard Quality Management System (QMS) material storage and handling availability of approved design documentation (b) Certification for materials used in construction. (c) Survey of workmanship throughout the vessel to ensure compliance with the applicable standards. (d) Verification the vessel is constructed in accordance with the approved plans and design documentation
Engineering	All vessels – as applicable	 (a) Marking of machinery controls, piping systems and equipment (b) Guarding of machinery (c) Suitability of main engines for marine use (d) Low flash point fuel system compliance (e) Essential alarm and monitoring systems (f) Machinery space ventilation systems and closing devices (g) Bilge systems (pipe materials, flex lengths, manifold and pump arrangements, etc.) (h) Hydraulic power systems compliance (i) Unfired pressure vessel compliance (j) Steering systems (tiller arm and cross link arrangement, emergency steering) (k) Fuel systems (shutoff valving, piping, transfer pump arrangement including remote stops and pressure bypass, etc.) (l) Valves (screw down valve seating, ball valve operation, valve materials, etc.) (m)Inlets discharges and bulkhead penetrations; (n) Exhaust system (height above dwl, valving, lagging, riser, water injection, etc.) (o) Refrigeration system compliance

		(p) Verification the vessel is constructed in accordance with the approved plans and design documentation.
Fuel tank(s)	For each vessel fuel tank (integral or free- standing / non- portable)	 (a) Internal survey (material specification), thickness, baffle spacing, drain, filler configuration, inspection opening (b) Sounding and venting arrangements (c) Pressure test (confirm testing pressure, confirm no leaks) (d) Verification that the tank is constructed in accordance with the approved plans and design documentation
Shafting systems	For each vessel shaft	 (a) Survey of shafting system components including; brackets, bosses, liners, bearings, couplings, nuts, bolts, stern tubes, glands, nozzles (b) Verification of materials used in shafting systems (c) Survey of propeller taper, coupling taper, gland packing area, key and keyway (d) Measurement of shaft and verification of straightness (e) Witness of bluing (f) Verification the shaft system is constructed in accordance with the approved plans and design documentation
Accommodation and arrangement	All vessels	 (a) Verification of bulkwark/guardrails stairways geometry escape and evacuation arrangements bridge visibility navigation lights and position accommodation arrangements (b) survey of special arrangements for special working decks, special purpose decks or pilot vessels (c) Verification that the accommodation and arrangement is constructed in accordance with the approved plans and design documentation

Fire systems and fit-out	All vessels – as	(a) Verification of space categorisation			
material	applicable	(b) Survey of ventilation systems, ducts, dampers and remote stops			
		(c) Survey of containment boundaries between spaces including;			
		 Fire-resistant division (structural fire protection) certification, arrangement and installation 			
		 Pipe fire endurance and bulkhead penetrations 			
		Electrical penetrations			
		 Stairways and doorways 			
		(d) Survey of galley fire systems and arrangements			
		(e) Stairways and doorways arrangement and operation			
		(f) Verification of materials used in fit out, including:			
		sound insulation			
		thermal insulation			
		 linings and ceilings 			
		furniture			
		 draperies and curtains 			
		 bedding, and, 			
		 deck finish materials 			
		(g) Verification of fire detection and alarm system suitability, installation and certification. Fixed fire-extinguishing system suitability, installation and certification			
		 (h) Verification of fire safety requirements for the carriage of dangerous goods (as applicable) 			
		 (i) Verification that the fire systems and fit-out is constructed in accordance with the approved plans and design documentation 			
Draft marks	Vessels with draft	(a) Determination of a baseline			
	marks	(b) Recording of the height of marks above and below baseline			
		(c) Calculation of draft mark height (vessel relative) and computation of error (if any)			
		(d) Verification of freeboard marking			
		(e) Longitudinal location with respect to known structure e.g. bulkhead			
		(f) Verification that the vessel is built in accordance with the approved plans			

Watertight integrity	All vessels	 (a) Verification of vent and air pipe heights (b) Tests of closing devices (c) Verification of sill heights (d) Checks of glazing (e) Checks of hatches / coverings (f) Check / test of doors (g) Verification of freeing port area (h) Verification that the vessel is constructed in accordance with the approved plans and design documentation
LPG	All vessels – as applicable	 (a) Certificate of compliance for gas installation (b) Verification that the vessel is constructed in accordance with the approved plans and design documentation
Electrical	All vessels – as applicable	 (a) Certificate of compliance for electrical installation (b) Generator tests (governor operation, parallel operations, load sharing, voltage regulation) (c) Load testing of motors (d) Testing of overload alarm circuits (e) Testing of main engine safety alarms and trips (f) Testing of remote controls, stops and limit switches (g) Testing of emergency stop circuits (h) Verification of battery location and venting arrangements as appropriate to the battery type/chemistry (i) Testing of any other systems and equipment installed on vessel (k) Verification of electrical installation in accordance with AS/NZS 3000 and/or AS/NZS 3004.2 as applicable (l) Verification that the vessel is constructed in accordance with the approved plans and design documentation

3.11 Phase 3 - Commissioning phase

3.11.1 Surveyors authorised to conduct commissioning phase surveys

- (1) Accredited Marine Surveyors with accreditation in the following categories may conduct commissioning phase surveys in accordance with the accreditation category and any conditions of accreditation:
 - (a) category b stability approval; and
 - (b) category k construction or alteration commissioning.
- (2) Recognised Organisations may conduct commissioning phase surveys.

3.11.2 Commissioning phase surveys

- (1) The commissioning phase is a series of tests and trials that are intended to:
 - (a) verify the plan and construction phases of survey have been completed;
 - (b) verify a vessel's systems as operational and functional;
 - (c) establish any operational limits required;
 - (d) provide safety information to the owner, operator, master and crew as applicable; and
 - (e) verify any assumptions made during the design and construction phases of survey (e.g. displacement, operational speed etc).
 Note The commissioning phase includes lightship measurement, stability assessment and a commissioning activity.
- (2) Commissioning surveys may include, but are not limited to:
 - (a) sea trials;
 - (b) machinery trials;
 - (c) equipment checks and tests;
 - (d) stability tests;
 - (e) essential systems trials;
 - (f) safety information checks; and
 - (g) failure mode effect analysis. Note AMSA publishes an instruction for surveyors on conducting commissioning trials – refer to the <u>AMSA website</u>.
- (3) During the commissioning phase, the vessel's stability must be verified:
 - (a) for vessels subject to comprehensive stability criteria:
 - the lightship particulars established in accordance with NSCV Part C6C must be recorded and approved by the surveyor;
 - (ii) a vessel stability book showing compliance with the relevant criteria, including all relevant assumptions or conditions, must be approved; and
 - (iii) stability books must be stamped as approved. Only the front page is required to be stamped provided that the accompanying letter specifies the total number of pages in the assessed stability documentation; and
 - Note for (i) An inclining experiment report template is available on the <u>AMSA website</u>.
 - (b) for vessels subject to simplified stability criteria:
 - (i) a stability compliance report containing the results of the test and analysis required to show compliance with the relevant criteria must be stamped approved by the surveyor; and
 - (ii) an operator's stability notice must be stamped approved by the surveyor for display in the vessel's operating compartment.
 Note Additional documentation such as weighbridge certificates and/or freeboard measurements may be obtained as a record of lightship particulars.
- (4) During the commissioning phase, the surveyor must confirm that any conditions of approval contained in the plan approval for the vessel have been satisfied.
- (5) A copy of the commissioning report and stability documentation must be:

- (a) provided to the owner of the vessel;
- (b) retained by the surveyor for a period of at least seven years; and
- (c) provided to the National Regulator in support of the surveyor's recommendation.

Note Refer to Annex 1 for list of supporting documentation expected for these survey activities.

3.12 MARPOL requirements

Recognised Organisations and the National Regulator may conduct initial surveys to determine a vessel's compliance with MARPOL in accordance with applicable legislation, exemptions and standards.

Note Marine Order 503 requires some vessels to meet the standards for construction and equipment as required by Annex I of MARPOL as a criteria for the issue of a certificate of survey. State and Territory, and Commonwealth, legislation may also require MARPOL compliance.

Chapter 4 Periodic and renewal surveys for vessels not constructed to class rules

4.1 Application

- (1) This chapter applies to all vessels subject to Marine Order 503 unless:
 - (a) the vessel is ≥35m; or
 - (b) the vessel elects to meet class rules for construction, machinery, anchoring equipment and electrical installations.
 Note Initial survey requirements for Load Line Certificates are in Chapter 6.
- (2) Despite (1)(a), a vessel that is ≥35m which meets both of the following criteria may comply with this chapter:
 - (a) the vessel is an existing vessel or a transitional vessel; and
 - (b) the survey process that applied to the vessel when it was last surveyed before 1 July 2013 permitted the vessel to be surveyed by a person other than a Recognised Organisation.

Note 1 The definitions of 'existing vessel' and 'transitional vessel' are contained in Marine Order 503.

Note 2 Marine Order 503 requires vessels \geq 35m to be surveyed by a Recognised Organisation unless the vessel is an existing or transitional vessel that has not previously been required to be surveyed by a Recognised Organisation – see section 6 of Marine Order 503. Vessels \geq 35m which must be surveyed by a Recognised Organisation are subject to Chapter 5 – those vessels must comply with class rules for the construction, machinery, anchoring equipment and electrical installation aspects of the vessel in accordance with section 8 of Marine Order 503.

(3) This chapter also applies to surveyors undertaking periodic and renewal surveys of domestic commercial vessels in accordance with this chapter.

Note Recognised Organisations may undertake surveys of vessels in accordance with this Chapter. Where the vessel complies with class rules for the construction, machinery, anchoring equipment and electrical installation aspects of the vessel, Chapter 5 applies.

4.2 Surveyors authorised to conduct periodic and renewal surveys

- (1) Accredited Marine Surveyors with accreditation in the following categories may conduct periodic and renewal surveys in accordance with the accreditation category and any conditions of accreditation:
 - (a) category I Periodic survey;
 - (b) category o Survey of safety equipment; and
 - (c) category p Survey of communications equipment.

Note Surveyors with accreditation in categories o and p can only undertake some aspects of a periodic survey, in accordance with the allowances of their accreditation category – see Part 1 of the manual.

(2) Recognised Organisations may conduct periodic and renewal surveys.

4.3 Survey frequency category

4.3.1 General allocation to categories

Vessels subject to this chapter are assigned a survey frequency category in accordance with Schedule 3 of Marine Order 503. This survey frequency will be specified on the vessel's certificate of survey at the time of its issue.

 Table 7 – Survey Frequency Categories (see Marine Order 503)

Table 7 has been removed. Please refer to Marine Order 503 Schedule 3 to determine the survey frequency category of a vessel.

4.3.2 Vessels operating under survey exemptions

(1) A vessel operating under Exemption 02, an Exemption 40 vessel or a vessel operating under another exemption from the Certificate of Survey, which performs poorly during an inspection, audit, or other compliance activity, may be required to obtain a Certificate of Survey under Marine Order 503. *Note* A vessel operating under an exemption that 'performs poorly' during an inspection or

Note A vessel operating under an exemption that 'performs poorly' during an inspection or audit is one which is found not to be meeting the conditions of the exemption. The exemption no longer applies if the conditions are not being met – see, for example, clause 5(5) of Exemption 02.

- (2) Where a vessel is moved into survey under (1), the vessel will be in medium survey frequency category.
- (3) A vessel operating under an exemption from some of the periodic survey requirements of Marine Order 503, such as under Exemption 24, which performs poorly during a survey, audit or other compliance activity, may be required to comply with Marine Order 503 in full.
- (4) If a vessel which has been moved into survey under (1), or into survey regime under (3), meets the required standard over a period of time, it will be eligible to move back to operating under the relevant exemption.

4.4 Type and frequency of periodic survey

- (1) Periodic survey frequency requirements (the year that a periodic survey is to be conducted) are contained in Schedule 3 of Marine Order 503. This Part 2 of the manual specifies the type and depth of periodic survey required, and how the survey is to be conducted.
- (2) Vessels must undergo the type of periodic survey mentioned in Table **8** for the survey frequency category for the vessel, unless a different type of survey is approved in writing by the National Regulator.

Note The National Regulator can only approve changes to the type and depth of survey conducted in the year required under Table 8. For an extension of time to complete the survey, approval must be obtained under Exemption 06 – see the notes under (3) below.

(3) Marine Order 503 requires a periodic survey, other than a renewal survey, to take place within the 3 months before, or 3 months after, the date that corresponds to the expiry date of the certificate of survey in the year when survey is required under Table 8.

Note 1 The National Regulator may approve an extension of the period during which a periodic survey is due under Exemption 06.

Note 2 Certificates of Survey are usually issued for a period of five years. The duration of the certificate may be reduced in certain circumstances for example, if the owner/operator applies to have their survey date fall in a specific month.

Survey frequency category	Year 1	Year 2	Year 3	Year 4	Year 5
High (Option A - Default)	In water periodic survey	In water periodic survey	Out of water periodic survey		Renewal survey (in and out of water)
High (Option B)	In water periodic survey	Out of water periodic survey	In water periodic survey		Renewal survey (in and out of water)
Medium (Option A – Default)			In water periodic survey		Renewal survey (in and out of water)
Medium (Option B)			Out of water periodic survey		Renewal survey (in and out of water)
Low					Renewal survey (in and out of water)

4.5 Suspension of a Certificate of Survey – periodic survey requirements

- (1) Where a Certificate of Survey is suspended, on application by the owner or on the initiative of the National Regulator, the Certificate of Survey is no longer in force and the periodic survey requirements for the vessel do not apply during the suspension period.
- (2) Once the suspension ceases, any periodic surveys that would have been required to be completed during the suspension period had the Certificate of Survey not been suspended must be completed before the vessel recommences operations.
- (3) However, if more than one periodic surveys of the same type would have been required to be completed had the Certificate of Survey not been suspended, only one of the surveys needs to be completed before the vessel recommences operations.

4.6 Renewal surveys

- (1) Marine Order 503 requires vessels undergo a renewal survey in order to renew a Certificate of Survey:
 - (a) for a vessel with a Certificate of Survey within the 6 month period before the current Certificate of Survey expires; or
 - (b) for a vessel whose Certificate of Survey has expired within the 6 month period before an application is made to renew a Certificate of Survey.
- (2) However, a vessel that has been subject to a change mentioned within Schedule 1 of Marine Order 503 must not be operated until the prescribed surveys are completed and a new certificate of survey is issued by the National Regulator.
 - (a) For issue of a new certificate an application must be made on form AMSA 521.
 - (b) For vessels where Marine Order 503 specifies initial survey, or initial survey to the extent of the change, the survey process described with Chapter 3 must be applied.
- (3) For vessels where Marine Order 503 specifies renewal survey only, the process set out within this chapter must be applied to verify the vessel meets the transitional standards that apply to the vessel, including but not limited to stability, fixed fire systems, Residual Current Devices and equipment.

4.7 Compliance to be verified

A periodic or renewal survey must:

- (a) verify alterations have not been made;
- (b) confirm that the vessel continues to satisfy conditions of the current, or recently lapsed, Certificate of Survey;
- (c) include the checks, calculations, inspections, tests and trials required to show that the vessel complies with the applicable legislation, exemptions and standards.

Note Clause 4.10 contains the minimum checks, calculations, inspections, tests and trials required to be undertaken as part of a periodic or renewal survey.

4.8 Conducting a periodic or renewal survey

When conducting a periodic or renewal survey, the surveyor must, as far as reasonably practicable:

- (a) detect and assess defects, wear, damage or variations to the vessel that may affect its ability to comply with the applicable legislation, exemptions and standards;
- (b) discuss what, if any, repair and rectification work is required in order for these items to comply; and
- (c) communicate to the person(s) responsible for the maintenance and operation of the vessel, and to AMSA, the outcomes of the survey including any repair and/or rectification work required. *Note* AMSA <u>form 586</u> is used to communicate non-conformances to the owner and AMSA.

4.9 Lightship verification

(1) A vessel is required to undergo a periodic lightship verification at a period not exceeding five years.

Note A lightship survey does not have to be conducted at year 5 (renewal) provided it is conducted at a frequency not exceeding 5 years. Evidence of the most recent lightship survey must be uploaded to the renewal activity.

(2) Where a vessel is required to undergo a periodic lightship verification, the survey should be conducted using the lightship report that is available on the <u>AMSA website</u>.

Note The applicable lightship form is AMSA form 653.

- (3) Accredited Marine Surveyors and recognised organisations may accept a lightship report from a competent person, such as a naval architect or an Accredited Marine Surveyor.
- (4) If a variation in lightship displacement of 4% or more, or longitudinal centre of gravity (LCG) of 2% of more is identified, the vessel's stability must be reassessed against the applicable stability criteria.
- (5) However, a practical stability assessment of the vessel stability may be conducted instead of a lightship measurement, if the criteria is applicable.
- (6) In addition, for Class 1 vessels <12m long and Class 2, Class 3 and Class 4 vessels, the lightship verification may be in the form of:
 - (a) an examination of the vessel for lightship modifications or additions by the surveyor; and
 - (b) a declaration signed by the owner or the master of the vessel which includes:
 - (iii) in table format, all the changes made to the vessel since the last inclining or practical stability test, or since the last Certificate of Survey was issued;
 - (iv) Note Section 11 of Marine Order 503 requires the owner to notify the National Regulator of all changes to the vessel's structure, arrangements, material or scantlings, including changes that are not mentioned in Schedule 1 of Marine Order 503.
 - (v) a description of each change including weight and centre of gravity information; and
 - (vi) any available relevant information such as photographs or sketches.
 - (c) if the anticipated variation in lightship displacement is 4% or more, or in longitudinal centre of gravity (LCG) is 2% or more, the owner must demonstrate that the vessel's stability remains adequate to perform its intended operations through re-assessment against the relevant stability criteria.

Note In accordance with Schedule 1 of Marine Order 503, a variation to lightship displacement of 4% or more, or a variation to lightship LCG of 2% or more, is considered a significant change and triggers the application of the standards specified in Schedule 2 of Marine Order 503 for existing vessels or re-verification of stability characteristics for new vessels. See Marine Order 503, or contact the National Regulator for more information, where this occurs.

(7) MARS will automatically generate a lightship survey activity for a vessel as part of the vessel's year 5 (renewal) survey. The surveyor undertaking the renewal survey must:

- (a) undertake the lightship verification; or
- (b) verify that a lightship verification has been conducted within the last five years.

Note Where the lightship verification is conducted earlier than the renewal survey, the surveyor should contact AMSA to request the lightship survey activity to be generated in MARS or may submit the lightship verification paperwork manually.

4.10 Safety Management Systems (SMS)

- (1) The content of the SMS is not a surveyable item.
- (2) The surveyor forms for periodic and renewal surveys detail the extent of the SMS observations that may be recorded during a periodic or renewal survey. The SMS observations are not part of the survey and the outcome of the SMS observations must not affect the surveyor's recommendation to the National Regulator.

Note SMS observations may include recording whether the following are sighted by the surveyor:

- a documented SMS;
- risk controls / risk assessment;
- crew training and induction procedures;
- emergency plans; and
- emergency drills (register/procedure).

4.11 Scope and depth of a periodic or renewal survey

- (1) A periodic or renewal survey must include the examinations, verifications, tests and trials by the surveyor:
 - (a) of the items specified in Table 9 relevant to the survey type unless otherwise approved in writing by the National Regulator; and
 - (b) in order to be satisfied the condition of the vessel and its equipment correspond with the particulars of the applicable service categories and the vessel is fit to operate without danger to the vessel, or persons on board and that the vessel complies with the applicable legislation, exemptions and standards.

Table 9 – Scope and depth of periodic or renewal surveys

Items requiring survey	Survey type		
	In Water periodic survey	Out of water periodic survey	Renewal survey

General items – including but not limited to conducting lightship verifications, confirming hull markings and signage, checking marking and appropriate stowage of equipment, and identifying modifications, additions or repairs.

Hull markings and signage	\checkmark	✓	\checkmark
Equipment marked	\checkmark	\checkmark	~
LPG system alarm/sensors	\checkmark	\checkmark	\checkmark
Toilets	✓	✓	\checkmark

Items requiring survey	Survey type			
	In Water periodic survey	Out of water periodic survey	Renewal survey	
Sewage system/holding tanks and venting arrangements (external)	✓	✓	\checkmark	
Modifications/additions	✓	✓	\checkmark	
Lightship verification	In accordance with clause 4.9	-	In accordance with clause 4.9	
Permanent ballast	\checkmark	\checkmark	\checkmark	

Documentation – including but not limited to verification that documentation is on-board, current, in order, such as current radio licence, equipment certificates and approved stability is available and valid.

Class certification	✓	✓	✓
Stability documentation	\checkmark	\checkmark	✓
Life raft certificate(s)	\checkmark	\checkmark	\checkmark
Compass adjusters certificate as required	~	\checkmark	✓
Radio Survey certificate as required	~	\checkmark	✓
Fire detection & fixed fire extinguishing system test certificates	✓	~	\checkmark
LPG compliance certificate/plate	\checkmark	\checkmark	✓
Electrical certificate of compliance for LV & HV	~	\checkmark	✓
Logbooks as required	\checkmark	\checkmark	✓
Maintenance records	\checkmark	✓	✓

Equipment – including but not limited to checks of expiry dates, signage, quantity, condition, that any special purpose requirements are satisfied, and that the equipment is operational and of the correct type.

Pyrotechnics and container	\checkmark	\checkmark	\checkmark
Line throwing appliances	\checkmark	\checkmark	\checkmark
Medical supplies	\checkmark	\checkmark	~
Torch(es)	\checkmark	✓	\checkmark

Items requiring survey	Survey type			
	In Water periodic survey	Out of water periodic survey	Renewal survey	
Daylight signalling lamp (as required)	✓	~	\checkmark	
Lifejackets, stowage & signage	\checkmark	✓	\checkmark	
Lifejackets lights & whistles	\checkmark	✓	\checkmark	
Sound signals	\checkmark	✓	\checkmark	
Magnetic compass	\checkmark	✓	\checkmark	
Navigation aids – radar, GPS, AIS etc.	✓	×	√	
Depth sounder / lead line	\checkmark	~	\checkmark	
Clock	\checkmark	✓	\checkmark	
Barometer	\checkmark	✓	\checkmark	
Engine instruments (control station)	\checkmark	~	✓	
Radio equipment	√	 ✓ (to the extent possible with the vessel out of the water) 	√	
Intercom / public address system	\checkmark	✓	\checkmark	
Charts and publications	\checkmark	✓	\checkmark	
Navigation lights	\checkmark	✓	\checkmark	
Day Shapes	\checkmark	✓	\checkmark	
Code flags	\checkmark	✓	\checkmark	
EPIRB	\checkmark	✓	\checkmark	
Lifebuoys	\checkmark	✓	\checkmark	
Lifebuoys light and line	\checkmark	✓	\checkmark	
Buoyant appliances	\checkmark	✓	\checkmark	
Life raft installation and hydrostatic release	✓	~	\checkmark	
Rescue boat & launching arrangements	\checkmark	~	\checkmark	

Items requiring survey		Survey type	
	In Water periodic survey	Out of water periodic survey	Renewal survey
Anti-exposure suits	~	~	\checkmark
Dinghy (if counted for lifesaving purposes)	~	×	\checkmark
Portable fire extinguishers	~	~	\checkmark
Fire blanket (galley)	~	~	\checkmark
Fire bucket	~	~	\checkmark
Fire and safety plan	~	~	\checkmark
Fireman's outfit	✓	✓	\checkmark

Deck survey – including but not limited to inspection of access ways and escape paths, checking of guardrails, stairs and hatchways, checking of weathertight and watertight boundaries and inspection and testing of anchors and winches.

Anchor	\checkmark	\checkmark	\checkmark
Anchor chain, shackles & anchor rope	~	~	✓ (range and measure)
Anchor windlass	✓	✓	✓
Sea anchor	✓	✓	✓
Bulwarks, guardrails, stairs and grab rails	~	~	✓
Escapes	✓	✓	✓
Freeing ports/scuppers	✓	✓	✓
Vent pipes, air pipes & closing devices	✓	~	~
Wheelhouse & deckhouse windows/side scuttles & deadlights	✓	~	✓
Weathertight doors & hatches	✓	✓	✓
Passenger boarding access including gangways	~	~	✓
Seating/berths	✓	✓	✓
Bollards/cleats	\checkmark	✓	✓

Items requiring survey		Survey type	
	In Water periodic survey	Out of water periodic survey	Renewal survey

Machinery – including but not limited to verification of installed machinery, checking piping condition and standard (including for deterioration or corrosion), checking connections and skin fittings, testing bilge pumps, checking exhaust system for thermal insulation and provision against back-flooding and checking of instruments, gauges and guards.

Main Engine, gearbox & linkages	✓	 ✓ (to the extent possible with the vessel out of the water) 	✓
Essential auxiliary machinery	\checkmark	\checkmark	\checkmark
Machinery guarding	\checkmark	\checkmark	\checkmark
Raw Water Piping	\checkmark	\checkmark	\checkmark
Exhaust System/Lagging	\checkmark	\checkmark	\checkmark
Valves and skin fittings	\checkmark	\checkmark	~
Bilge pumps / piping / valves / manifold	~	 ✓ (to the extent possible with the vessel out of the water) 	~
Refrigeration equipment	\checkmark	\checkmark	\checkmark
Compressors / air receivers / safety relief valves	~	~	~
Instruments (within the machinery space)	~	~	~
Engine room cleanliness	\checkmark	~	\checkmark
Steering gear	\checkmark	~	\checkmark
Rudder stops	\checkmark	\checkmark	~
Emergency steering arrangements	~	~	~
Fuel tank fill/vents	\checkmark	~	\checkmark
Fuel lines hose clips	\checkmark	\checkmark	✓
Self-closing gauge glasses	~	~	~
Fuel tank electrical bonding	\checkmark	\checkmark	~

Items requiring survey		Survey type	
	In Water periodic survey	Out of water periodic survey	Renewal survey

Electrical –verification of location of batteries, inspection of the condition and securing of wiring, checking venting arrangements, checking labelling and isolation of fuses and reviewing testing and installation reports.

Wiring	\checkmark	\checkmark	\checkmark
Switchgear	\checkmark	\checkmark	\checkmark
Distribution boards	\checkmark	\checkmark	\checkmark
Batteries	\checkmark	\checkmark	\checkmark
Battery installation (boxed & vented)	~	√	~
Shore supply	\checkmark	\checkmark	\checkmark
Verify Residual Current Device testing (operating time) conducted annually	✓	~	~
Earth leakage monitoring	\checkmark	\checkmark	\checkmark
Verify insulation testing (megger testing) conducted within last 5 years	✓	~	~

Emergency alarms and stops – *including but not limited to inspection and testing of fuel shut-offs, remote shutdowns, fire flaps, and emergency lighting.*

Bilge alarms	\checkmark	\checkmark	\checkmark
Emergency power	\checkmark	\checkmark	\checkmark
Emergency lighting	\checkmark	\checkmark	\checkmark
Remote fuel shutoffs	\checkmark	\checkmark	\checkmark
Remote stops	\checkmark	\checkmark	\checkmark
Closing devices	\checkmark	~	\checkmark

Fire protection system – *including but not limited to testing of hydrants and hoses, inspection of SFP for damage and/or missing tape or pins, testing of fire detection system and reviewing servicing reports.*

Structural fire protection (SFP)	\checkmark	\checkmark	\checkmark
Fixed firefighting system	\checkmark	\checkmark	\checkmark
Fire detectors and fire alarms	\checkmark	\checkmark	\checkmark

Items requiring survey		Survey type		
	In Water periodic survey	Out of water periodic survey	Renewal survey	
Accommodation smoke alarm	✓	~	\checkmark	
Fire dampers	✓	~	\checkmark	
Fire pump/piping	✓	 ✓ (to the extent possible with the vessel out of the water) 	\checkmark	
Hydrants/hoses/nozzles	~	 ✓ (to the extent possible with the vessel out of the water) 	✓	
Emergency fire pump	✓	~	\checkmark	

Out of water survey items – including but not limited to removal of shipside valves, inspection of shafts and propellers, checking window mullions for cracks and leaks, inspection of anchor cable (removed from vessel) and checking of vessel structure for signs of corrosion, osmosis and/or de-lamination.

Hull & deck external	_	\checkmark	\checkmark
Hull & deck internal	-	\checkmark	\checkmark
Internal buoyancy	_	_	\checkmark
Sea water tanks	_	_	\checkmark
Voids / peaks internally	_	\checkmark	\checkmark
Anchoring (out of vessel)	-	_	\checkmark
Internal examination of chain locker	_	√	✓
Shaft coupling	-	\checkmark	\checkmark
Stern gland	_	\checkmark	\checkmark
Shaft bracket	_	\checkmark	\checkmark
Appendages	_	\checkmark	\checkmark
Stern bearing clearance	_	\checkmark	\checkmark
Propeller shaft bearing clearance	_	\checkmark	\checkmark
Propeller shaft	_	\checkmark	✓
			(fully withdrawn from vessel)
Propellers	_	\checkmark	\checkmark

Items requiring survey		Survey type	
	In Water periodic survey	Out of water periodic survey	Renewal survey
Rudders	_	\checkmark	\checkmark
Rudder stock & bearing (including clearance)	_	_	✓ (fully withdrawn from vessel)
Keel cooling	_	✓	\checkmark

Key:

Survey not required

✓ Survey required

- (2) In addition to the items specified in Table 9, the following inspections must be carried out on a vessel at every second renewal survey for the vessel, which should occur at intervals not exceeding 10 years and six months, unless otherwise approved in writing by the National Regulator:
 - (a) ultrasonic thickness testing:
 - (i) for vessels having steel hull;
 - (ii) for vessels with aluminium hulls, ultrasonic thickness testing may be at the discretion of the accredited marine surveyor;
 - (b) withdrawal of sample fastening for vessels having wooden hull; *Note* The types of wooden vessel that are required withdraw fasting include vessels constructed in traditional methods such as carvel and clinker.
 - (c) hull in way of removable ballast;
 - (d) verify internal foam buoyancy if not fully inspected during the five yearly in and out of water survey because of inaccessibility;
 - (e) conduct an internal hull inspection for any spaces not over 90% filled with internal foam buoyancy, where these spaces were not fully inspected during the five-yearly in and out of water survey due to inaccessibility.
 - (f) pressure test all sea water pipes to at least working pressure;
 - (g) internal fuel tank inspection of at least half the number of the tanks on board; and
 - (h) internal inspections of all other tanks not mentioned in Table 9. Example of other tanks include sludge, sewage, and drain tanks.

4.12 Applicable standards

4.12.1 Applicable standards – other than safety equipment

The standards which apply to existing, transitional and new vessels are specified in Marine Order 503. It is important that the attending surveyor correctly identifies whether a vessel is existing, transitional or new and whether any changes mentioned within Schedule 1 of Marine Order 503 have occurred. This results in changes to the standards that apply and the scope of survey. Any vessel that undergoes a change mentioned in Schedule 1 is required to apply for a new certificate of survey (not a renewal).

Note where the only schedule 1 change is lightship, AMSA delegates may process a renewal application, without requiring an application for a new certificate.

4.12.2 Applicable standards – safety equipment and EPIRBs

- (1) All vessels in survey, including existing vessels, are required to comply with the NSCV safety equipment standard that applies to the vessel.
- (2) This means that:
 - (a) NSCV Part C7A applies to all Class 1, Class 2 and Class 3 vessels in survey;
 - (b) the safety equipment requirements of NSCV Part F1 apply to all fast craft in survey; and
 - (c) the equipment requirements of NSCV Part F2 apply to all Class 4 vessels in survey; and
 - (d) Marine Order 503 requires all vessels in survey to comply with the EPIRB requirements specified in the NSCV.

4.12.3 Vessel changes

- Marine Order 503 requires the owner of the vessel to notify the National Regulator if any changes are made to the vessel's structure, arrangements, material or scantlings.
- (2) The vessel must not be operated if a change mentioned in Schedule 1 of Marine Order 503 has occurred, see Marine Order 503 section 11(1)(h).
- (3) An owner is responsible for ensuring their vessel continues to meet the standards that apply to the vessel, see Marine Order 503 section 11(1)(f), including after changes not mentioned within Schedule 1 have occurred. Changes, including those not mentioned in Schedule 1, may require the owner to have an additional survey of their vessel conducted.
- (4) If the surveyor has reason to believe that the vessel has been modified or altered, changed operations or moved operational areas in a way that may require the vessel to meet current or transitional standards, the surveyor must:
 - (a) inform the owner accordingly so they can take the matter to the National Regulator for review and consideration; and
 - (b) directly inform the National Regulator.
 Note 1 See Schedule 1 of Marine Order 503 for the types of changes requiring a new certificate.
 Note 2 For MARS survey codes to upload your additional survey reports please email

Note 2 For MARS survey codes to upload your additional survey reports please email <u>dcvapplications@amsa.gov.au</u> including the type of code you would like generated.

4.13 Accessing previous survey records

- (1) Surveyors may need copies of previous surveys to assist with conducting a vessel survey.
- (2) The surveyor or the owner of the vessel may lodge an Information Release Authorisation Form with the National Regulator or the marine safety agency where the vessel's most recent survey records are maintained in order to obtain the survey records for the vessel. The form must be signed by the owner.

Note 1 Some documentation may be subject to copyright and may be unable to be reproduced without the copyright holder's permission.

Note 2 Records may be released after authorisation from an owner using AMSA form 664. Contact <u>dcvrecords@amsa.gov.au</u>.

4.14 MARPOL requirements

Recognised Organisations and the National Regulator may conduct periodic and renewal surveys to determine a vessel's compliance with MARPOL in accordance with applicable legislation, exemptions and standards.

Note Marine Order 503 requires some vessels to meet the standards for construction and equipment as required by Annex I of MARPOL as a criteria for the issue of a certificate of survey. State and Territory, and Commonwealth, legislation may also require MARPOL compliance

Chapter 5 Initial, periodic and renewal surveys where vessel complies with class rules

5.1 Application

- This chapter applies to all vessels ≥35m subject to Marine Order 503 unless the vessel is:
 - (a) an existing vessel or a transitional vessel; and
 - (b) the survey process that applied to the vessel when it was last surveyed before 1 July 2013 permitted the vessel to be surveyed by a person other than a recognised organisation.

Note 1 The definitions of 'existing vessel' and 'transitional vessel' are contained in Marine Order 503.

Note 2 Marine Order 503 requires vessels ≥35m to be surveyed by a Recognised Organisation, unless the vessel is an existing or transitional vessel that has not previously been required to be surveyed by a Recognised Organisation – see section 6 of Marine Order 503. Vessels ≥35m which must be surveyed by a Recognised Organisation must comply with class rules for the construction, machinery, anchoring equipment and electrical installation aspects of the vessel.

Note 3 This Chapter 5 requires those aspects of the vessel not related to construction, machinery, anchoring equipment and electrical installation to be surveyed in accordance with Chapter 3 and Chapter 4.

Note 4 Initial survey requirements for Load Line Certificates are in Chapter 6.

- (2) This chapter also applies to vessels < 35m long that elect to meet the construction, machinery, electrical and anchoring equipment requirements of a Recognised Organisation.
- (3) This chapter also applies to Recognised Organisations undertaking initial, periodic and renewal surveys of domestic commercial vessels in accordance with this Chapter.

Note Recognised Organisations may also undertake surveys of vessels in accordance with Chapter 3 and Chapter 4. Where the vessel complies with class rules for the construction, machinery, anchoring equipment, and electrical installation aspects of the vessel, this Chapter 5 applies.

5.2 General

- A Recognised Organisation conducting surveys in accordance with this chapter must be engaged to undertake the class surveys required to issue a certificate of classification.
- (2) The initial survey process for the aspects of the vessel identified in 5.4(1) must include documented design, construction and commissioning phase surveys.
- (3) Where the vessel is ≥35m, a certificate of classification must be issued for the vessel.

Note Vessels <35m which elect to comply with class rules and be surveyed in accordance with this chapter are not required to obtain a certificate of classification.

(4) The Recognised Organisation or an Accredited Marine Surveyor may be engaged to undertake any of the other surveys required for the issue, and to meet the conditions of, a Certificate of Survey.

5.3 Vessel identification

Clause 3.6 applies to vessels surveyed in accordance with this Chapter 5.

5.4 Initial survey – aspects covered by the certificate of classification

- (1) Where issued, the certificate of classification will be accepted by the National Regulator, as evidence of compliance with the applicable standards for design, construction and commissioning of:
 - (a) hull structure;
 - (b) machinery;
 - (c) electrical; and
 - (d) anchoring equipment.
- (2) For a vessel ≤ 35m long, a statement of compliance may be provided, in lieu of a certificate of classification, specifying the elements mentioned within (1) that the Recognised Organisation has assessed against their rules.
- (3) In addition to the certificate of classification or statement of compliance, the Recognised Organisation must submit the following approved documentation for the aspects of the vessel identified in (1) to the National Regulator:
 - (a) plans;
 - (b) approval letters;
 - (c) any appendices to the certificate of classification;
 - (d) conditions of class, recommendations or memoranda relating to the vessel;
 - (e) details of the survey frequency of the items covered by the certificate of classification;
 - (f) any conditions or comments made; and
 - (g) details of any equivalent means of compliance (EMOCs) or exemptions that have been approved by the National Regulator which apply.

5.5 Initial survey – aspects not covered by the certificate of classification

- (1) The vessel must be surveyed and recommended by a Recognised Organisation or Accredited Marine Surveyor in accordance with the requirements of Chapter 3 for design, construction and commissioning surveys for:
 - (a) arrangement, accommodation and personal safety;
 - (b) watertight and weathertight integrity;
 - (c) fire safety;
 - (d) stability; and
 - (e) safety, navigation and communication equipment.

5.6 Periodic and renewal surveys – aspects covered by the certificate of classification or statement of compliance

- (1) Aspects of a vessel covered by a certificate of classification or statement of compliance must be surveyed in accordance with the applicable rules of the Recognised Organisation for:
 - (a) hull structure;
 - (b) machinery;
 - (c) electrical; and
 - (d) anchoring.

- (2) The Recognised Organisation must submit the following documentation for the periodic and renewal surveys of the aspects of the vessel identified in (1) to the National Regulator:
 - (a) applicable periodic and renewal survey and inspection reports; and
 - (b) a statement of compliance or recommendation in accordance with clause 2.9.

5.7 Periodic and renewal surveys – aspects not covered by the certificate of classification

The vessel must be surveyed in accordance with the requirements of 0 for periodic and renewal surveys for:

- (a) arrangement, accommodation and personal safety;
- (b) watertight and weathertight integrity;
- (c) fire safety;
- (d) stability;
- (e) safety, navigation and communication equipment; and
- (f) for a vessel <35m, any other aspects of the vessel not subject to class rules.

Note A vessel <35m may elect to comply with class rules for hull structure, anchoring or engineering aspects of the vessel. For any of these aspects of the vessel which do not comply with class rules, Chapters 3 and 4 apply.

5.8 Validity of the certificate of classification

Where a vessel's certificate of classification is suspended or revoked, the Recognised Organisation must advise the National Regulator within seven days.

5.9 MARPOL requirements

Recognised Organisations may conduct surveys to determine a vessel's compliance to MARPOL in accordance with applicable legislation, exemptions and standards.

Chapter 6 Load line surveys

6.1 Application

This chapter applies to:

- (a) vessels surveyed for compliance to load line certification requirements under Marine Order 507; and
- (b) surveyors undertaking load line surveys of domestic commercial vessels in accordance with this chapter.

Note Vessels \geq 24 m load line length that are not:

- a fishing vessel;
- a Class 1D or Class 1E vessel that is operated to carry passengers only; or
- a Class 2D or Class 2E vessel that is operated to carry passengers only,

must have a Load Line Certificate, or the National Regulator must be satisfied that the vessel will obtain a Load Line Certificate, in order to be issued or renew a Certificate of Survey — see paragraph 9(2)(d) of Marine Order 503.

Where a vessel of the type outlined above is exempt from the Certificate of Survey under Schedule 1, Division 5 of Exemption 02, the vessel must hold a Load line Certificate in order to meet the conditions of the exemption from a Certificate of Survey – see Schedule 1, Division 5 of Exemption 02.

6.2 Initial load line surveys

6.2.1 Surveyors authorised to conduct initial load line surveys

- (1) Accredited Marine Surveyors with accreditation in the following categories may conduct load line surveys in accordance with the accreditation category and any conditions of accreditation:
 - (a) initial survey c load line assignment; and
 - (b) initial survey i construction or alteration load line conditions and markings.
- (2) Recognised Organisations may conduct load line surveys.

6.2.2 The initial load line survey

- (1) An initial load line survey must be conducted as part of the initial survey of the vessel under Chapter 3 or Chapter 5, as applicable to the vessel.
- (2) The initial load line survey must include:
 - (a) approval of the calculated freeboard and conditions of assignment, by an Accredited Marine Surveyor with category c accreditation or by a Recognised Organisation; and
 - (b) the surveys required for assignment of freeboard as specified in the applicable standards, by an Accredited Marine Surveyor with category i accreditation or by a Recognised Organisation. Note The National Regulator provides instructions to surveyors on verifying the construction of a vessel that has already been built – refer to the AMSA website.
- (3) For the surveys conducted under (2)(2)(b):
 - (a) all of the surveys mentioned in Table 10 must be conducted during the construction (or alteration) of the vessel;
 - (b) the surveyor must, as far as reasonably practicable, examine, measure, verify, test and trial (as applicable) the items specified in Article 14 of the Load Lines Convention; and

(c) the surveyor must retain a record of each survey and inspection undertaken during the construction phase, including the date of each survey or inspection and any observations and conclusions.

Table 10 – Construction and alteration surveys

Survey Type	Description of Survey
Load line	 (a) Verification of vent and air pipe heights (a) Tests of closing devices (b) Verification of sill heights (c) Checks of hatches / coamings / coverings (d) Check / test of doors (e) Verification of freeing port area (f) Verification of load line placement (g) Verification the vessel is built in accordance with the approved plans

6.3 Periodic and renewal load line surveys

6.3.1 Surveyors authorised to conduct periodic and renewal load line surveys

- Accredited Marine Surveyors with accreditation in category *periodic survey n* — *load line* may conduct periodic and renewal load line surveys in accordance with the accreditation category and any conditions of accreditation.
- (2) Recognised Organisations may conduct periodic and renewal load line surveys.

6.3.2 Frequency and depth of periodic and renewal load line surveys

- (1) Periodic survey frequency requirements (the year that a periodic survey is to be conducted) are contained in Marine Order 507.
- (2) This Manual specifies the type of periodic survey required, and how the survey is to be conducted.
- (3) In accordance with Marine Order 507, vessels which hold a Certificate of Survey must undergo load line surveys at the same time a periodic or renewal survey is required for the vessel under 0 or Chapter 5, as applicable to the vessel.
- (4) In accordance with Marine Order 507, where a vessel has a Load Line Certificate but is not required to have a Certificate of Survey because the vessel is exempt under Schedule 1, Division 5 of Exemption 02, periodic load line surveys must take place:
 - (a) at the time a periodic survey would be required for the vessel under 0 if the vessel had a Certificate of Survey; and
 - (b) within the 3 months before, or 3 months after, the date that corresponds to the expiry date of the Load Line Certificate in the year when survey is required.

Note 1 The National Regulator may approve an extension of the period during which a periodic load line survey is due under Exemption 06

Note 2 Load Line Certificates are usually issued for a period of five years. The duration of the certificate may be reduced if the owner/operator applies to have their survey date fall in a specific month.

(5) When conducting a load line survey, the surveyor must, as far as reasonably practicable, examine, measure, verify, test and trial (as applicable) the items specified in Part 7 of Section 7 of the USL Code or Article 14 of the Load Lines Convention, as applicable to the vessel.

6.4 Applicable standards

The standards which apply to the vessel are contained in Marine Order 507.

Chapter 7 Exemption 40 vessel surveys

7.1 Application

This chapter applies to:

- (a) vessels operating under Exemption 40; and
- (b) surveyors undertaking Exemption 40 surveys. *Note* Clause 7.3 identifies those surveyors who can conduct Exemption 40 surveys.

7.2 General

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- Exemption 40 relies on the attending surveyor exercising professional judgment to choose an appropriate survey methodology and document survey outcomes.
- (2) Schedule 1, Division 2, clause 2.1 of Exemption 40 requires the surveyor to be satisfied that the vessel is designed and constructed so that it is fit for the purpose for which the vessel is intended by the owner.
- (3) The surveyor must also be satisfied that the vessel meets the standards for flotation and load capacity prescribed in the exemption.

7.3 Surveyors qualified to conduct Exemption 40 surveys

(1) An accredited surveyor conducting survey of an Exemption 40 Vessel must have the accreditation mentioned Table 11.

Initial EX40 Survey												
Third-party	Accreditation categories required											
Documentation Availability	B+G+H+K	B+L	G+H+K	L								
Third-party documentation is available for stability, flotation and load capacity.	✓	~	✓	✓								
No third-party documentation for stability, flotation and load capacity	✓	~										
Periodic EX40 Survey		·										
Third-party	Accreditation c	ategories re	quired									
Availability	G+H+	K	L									
N/A	\checkmark		√									

Table 11 – Accreditation(s) required vs level of third-party documentation

(2) Recognised Organisations may conduct initial or periodic Exemption 40 surveys.

7.4 Reliance on third-party documentation for Exemption 40 surveys

- Third party documentation may be used by a surveyor to determine a vessel's compliance to the requirements of Exemption 40.
 Note When relying on third party documentation, surveyors must consider the competence of the issuing entity and authenticity of documentation, see clause 2.7.
- (2) The third party documentation must clearly state the standard applied and the surveyor must ensure the standard is suitable for the vessel's intended use and area of operation.
- (3) Third party documentation relied upon by a surveyor in making a recommendation to the National Regulator must be retained by the surveyor for a period of not less than seven years from the date of the recommendation.
- (4) In circumstances where a surveyor is not satisfied with the information provided in third party documentation they should seek additional information from the builder, and, if the information required is not available, ask for calculations to be carried out and checked by a suitably qualified surveyor.

Examples of third party documentation calculations from a Naval Architect, documented service history of the vessel or model of vessel, CE certification, certificates of conformity, type approvals, stability reports etc.

Example of unsuitable design standard third-party documentation referencing AS 1799.1 sheltered waters stability criteria is generally not considered suitable for commercial offshore operations.

7.5 Survey of an Exemption 40 vessel

7.5.1 Survey form

- (1) A vessel undergoing surveys to operate as an Exemption 40 vessel for the first time should be surveyed using AMSA form 650.
- (2) A periodic Exemption 40 survey should be conducted using AMSA form 650, excluding initial design components, and include a lightship declaration (AMSA form 752) from the owner.

Note See Annex 1 for list of supporting documentation expected for Exemption 40 surveys.

7.5.2 Surveys for construction and strength

- (1) Schedule 1, Division 2, clause 2.1 of Exemption 40 requires the surveyor to be satisfied that the vessel is designed and constructed so that it is fit for the purpose for which the vessel is intended by the owner.
- (2) A vessel may be considered suitably designed if it:
 - (a) has been built in accordance with a recognised standard such as NSCV, ISO 12215 Parts 1 to 9 (as applicable), ISO 6185 Parts 1 to 4 (as applicable), ABYC, USCG or RCD; or
 - (b) is in a good state of repair and is:
 - (i) built to the standards mentioned in paragraph (2)(a); or
 - (ii) built to another nationally or internationally recognised standard; or
 - (iii) of a design with at least five years of safe operation in conditions no less severe than those expected in the area where the vessel will be operating under Exemption 40.
- (3) The surveyor of an EX40 vessel must submit:

- (a) an appropriate structural survey setting out the current condition of the vessel and its suitability for the intended use and area of operation; and
- (b) for a vessel referenced in clauses 2(b)(i) or (ii):
 - (i) a technical specification that includes the vessel's design standard and operational area category; or
 - (ii) a declaration from the builder confirming that the vessel's structural design is suitable for the intended area of operation; and
- (c) for a vessel mentioned in 2(b)(iii):
 - a document from the person conducting the survey stating they are satisfied the vessel is designed and constructed so that it is fit for the purpose for which it is intended by the owner, taking into consideration the vessel's design, condition, intended purpose, likely weather conditions and usage patterns.
- (4) Alternately, compliance with this section may be demonstrated by plan approval, construction and commissioning surveys.
- (5) In all cases, factors to be taken into consideration include:
 - (a) any loads that may arise in the course of the vessel's intended operations;
 - (b) sufficient strength to avoid deformations that could compromise safety of the vessel;
 - (c) redundancy to ensure the vessel is operable even if expected structural degradation occurs over time in normal operations; and
 - (d) the general condition of the vessel.
- (6) The surveyor must retain records and any calculations they have relied upon to verify the vessel's structural adequacy.

7.5.3 Verification of vessel flotation and load capacity

- (1) The surveyor must verify that the vessel has level flotation, basic flotation, or is fully decked in accordance with an acceptable standard as specified in Exemption 40. Schedule 1, Division 2, clause 2.2 of Exemption 40 requires the vessel to comply with section 10.3 of NSCV Part F2.
- (2) Where the owner wishes to use a flotation option that requires a risk assessment, the surveyor must verify that a documented risk assessment has been conducted which confirms it is likely to be safe for a person to be in the water in the intended area of operation.
- (3) The surveyor must verify that the vessel has a load capacity as determined in accordance with one of the standards specified in Exemption 40. *Note* Sheltered waters loading capacities are not appropriate for vessels outside of D waters.
- (4) The surveyor must retain records of the documentation and or calculations they have relied upon to verify the vessel's load capacity and flotation.

7.5.4 Verification of stability characteristics

(1) Schedule 1, Division 1, Clause (3) requires a marine surveyor accredited in stability approval or a Recognised Organisation to verify the calculation of heeling moment or maximum loading for an EX40 vessel as a part of initial survey.

- (2) Schedule 1, Division 2, clause 2.3 of Exemption 40 requires the surveyor to be satisfied that the vessel's stability characteristics are fit for the purpose for which the vessel is intended.
- (3) The surveyor may verify stability compliance in accordance with a standard such as the NSCV, ISO, AS/NZS, ABYC, USCG or similar, and may also accept third party documentation of compliance. In this case, the surveyor must consider if the applied standard is appropriate for the intended operations of the vessel.
- (4) Stability compliance may also be demonstrated by direct calculations, testing or other suitable means, by an Accredited Marine Surveyor with category b accreditation, or by a Recognised Organisation.
- (5) The stability assessment must be documented and demonstrate that:
 - (a) the stability characteristics over the range of foreseeable loading conditions and when exposed to the effects of one or more heeling moments:
 - (i) minimise the risk of the vessel capsizing;
 - (ii) avoid excessive angles of heel that could threaten the safety of people on board the vessel; and
 - (iii) return the vessel to an upright position; and
 - (b) the analysis is appropriate to the vessel's operational area, operation and form and:
 - (i) the nature and likelihood of potential hazards; and
 - (ii) the likely consequences of inadequate stability.

Note A sheltered waters stability assessment is not fit for purpose for vessels operating outside of D waters.

- (6) A net reel, deck load, crane or lifting device may only be fitted to the vessel, if its effect has been included in the vessel's stability assessment, and:
 - (a) the item cannot create a heeling moment that endangers or capsizes the vessel; and
 - (b) cannot create a loading condition that exceeds the maximum loading for the vessel.
- (7) For (5) the heeling moment may be taken as the lesser of:
 - (a) the moment generated by the device;
 - (b) the breaking strain of a net; or
 - (c) the breaking strain of salvagers etc.

7.5.5 Survey of bilge systems

- (1) Schedule 1, Division 2, clause 2.5 of Exemption 40 requires the vessel to be:
 - (a) fitted with a bilge pump which is protected and able to operate when the vessel is swamped; or
 - (b) for a vessel <5m, either a bilge pump under (a) or a bailer.
- (2) Schedule 1, Division 2, clause 2.5 of Exemption 40 requires the bilge pump to be able to drain all bilges or closed under floor compartments other than airtight void spaces or spaces filled to more than 90% of their volume with low density flotation material.

(3) The surveyor must verify that these requirements are met and that the capacity of the bilge pumps are appropriate to the risk.

7.5.6 Survey of machinery components

- In accordance with the requirements of Schedule 1, Division 2, clause 2.6 of Exemption 40, the surveyor must verify that the vessel's fuel tanks are either:
 - (a) above deck; or
 - (b) installed in accordance with NSCV Part C5A.
- (2) Fuel piping must be confirmed as being made of the materials specified in Schedule 1, Division 2, clause 2.6 of Exemption 40, fitted with the required valves or cocks and correctly installed.
- (3) In accordance with the requirements of Schedule 1, Division 2, clause 2.6 of Exemption 40, the surveyor must verify that any installed shaft complies with either ABYC P-6 or NSCV Part C5A.

7.5.7 Verification of electrical installations

- (1) In accordance with the requirements of Schedule 1, Division 2, clause 2.8 of Exemption 40, the surveyor must verify that the vessel's electrical installation complies with NSCV Part C5B.
- (2) If a vessel has a low voltage electrical installation, a copy of the electrical certificate of compliance is to be obtained from the unrestricted licenced electrician who conducted the electrical work and retained by the surveyor.

7.5.8 Verification of steering system

- (1) Schedule 1, Division 2, clause 2.11 of Exemption 40 requires the surveyor to be satisfied that the vessel's steering equipment is fit for the purpose for which the vessel is intended.
- (2) In verifying that the steering equipment is fit for purpose, the surveyor must consider the following factors:
 - (a) directional control the steering system must be capable of reliably altering the vessel's heading at a rate appropriate for the navigational hazards that might be expected in normal and abnormal conditions. The steering system must also be capable of reliably holding or returning the vessel's head to a given course to counteract the effects of wind, current and waves;
 - (b) strength the rudder, steering nozzle or other directional control device must have sufficient strength to meet the demands of service in both ahead and astern operation, and in normal and emergency situations. Consideration must be given to peak, fatigue and shock loading; and
 - (c) *corrosion and erosion* the rudder, steering nozzle or other directional control device must be designed and constructed to avoid or reduce the effects of corrosion and erosion.

7.6 Periodic survey of an Exemption 40 vessel

- (1) In accordance with Schedule 1, Division 4 of Exemption 40:
 - (a) an Exemption 40 vessel must undergo an in and out of water periodic survey every five years; and

- (b) the survey must occur within the 3 months before, or 3 months after, each fifth anniversary of the vessel's approval.
- (2) The in and out of water periodic surveys must be conducted in accordance with the requirements in 0 for a renewal survey.

Note See clause 4.11(1) for the renewal survey requirements.

- (3) The surveyor carrying out the periodic survey must verify that the vessel complies with the conditions of Exemption 40 and of the vessel's Exemption 40 approval.
- (4) Where a vessel or its operations have changed such that it no longer complies with the conditions of its Exemption 40 approval, the vessel must undergo an initial Exemption 40 survey and apply for a new Exemption 40 approval. *Note* Exemption 40 requires the owner to notify the National Regulator of any alterations to the vessel, or changes to the vessel's operation, that may invalidate the vessel's approval or ability to operate under Exemption 40, including:
 - vessel alterations that require the vessel to be reassessed as complying to Exemption 40; and
 - adding a service category to the vessel's operations.

See section 6 of Exemption 40.

(5) Where a vessel no longer complies with the design and construction or equipment conditions of Exemption 40, it cannot operate under Exemption 40.

Chapter 8 Survey of a Regulated Australian Vessel or foreign flag vessel applying for DCV status for the first time

8.1 Application

(1) This chapter applies to vessels that have previously been a foreign vessel or a Regulated Australian Vessel (RAV) and which surrender their foreign flag or RAV status to become a domestic commercial vessel.

Note The terms 'foreign vessel' and 'regulated Australian vessel' are defined in section 6 of the National Law.

- (2) This chapter:
 - (a) only applies to the first issue of a Certificate of Survey and/or Load Line Certificate for a vessel identified in (1); and
 - (b) replaces the initial survey requirements of Chapter 3 and Chapter 5, as applicable to the vessel.
- (3) Periodic and renewal surveys must be conducted in accordance with 0 and Chapter 5, as applicable to the vessel.

8.2 Requirements for vessels previously issued a Certificate of Survey or Load Line Certificate under the Navigation Act

An application for a National Law Certificate of Survey and/or a Load Line Certificate for a vessel that has previously been issued Navigation Act certificates must be accompanied by the following documentation:

- (a) copies of the vessel's stamped approved plans (Table 2 provides guidance regarding the kinds of plans that are expected to be submitted) and a statement that the vessel complies with the approved plans;
- (b) a copy of the vessel's approved stability booklet and a statement that the lightship particulars are current;
- (c) a copy of the vessel's load line conditions of assignment (where applicable);
- (d) copies of all revoked Navigation Act certificates and exemptions;
- (e) copies of the vessel's tonnage and MARPOL certificates (where applicable);
- (f) a declaration that the vessel complies with the applicable legislation, exemptions and standards as specified in Marine Order 503 and Marine Order 507 and supported by survey reports as necessary; and
- (g) a recommendation in accordance with clause 2.9.

Note for (d) and (e) To remove a vessel's RAV status under the Navigation Act, all Navigation Act certificates (with the exception of the vessel's tonnage and MARPOL certificates or any documents of compliance) must be revoked.

Note Any exemption previously issued under the Navigation Act or an international convention do not apply under the National Law and require a new exemption application to be made. Any exemption applications should include copies of the revoked exemptions. The specific exemption application form is available on the <u>AMSA website</u>. The applicable specific exemption application form is AMSA form 547.

8.3 Requirements for vessels previously foreign flagged

An application for a National Law Certificate of Survey and/or Load Line Certificate for a vessel that has previously been foreign flagged, and held a certificate of classification for commercial use, must be accompanied by the following documentation:

- (a) evidence of Australian nationality;
- (b) copies of the vessel's stamped approved plans (Table 2 provides guidance regarding the kinds of plans that are expected to be submitted) and a statement that the vessel complies with the approved plans;

Note Statutory plans including accommodation & arrangement, watertight and watertight integrity, fire safety, stability, safety, navigation and communication equipment must comply with the applicable Australian Legislation see (g).

- (c) a copy of the vessel's approved stability booklet and a statement that the lightship particulars are current;
- (d) a copy of the vessel's load line conditions of assignment (where applicable);
- (e) copies of the surrendered foreign flag certificates and exemptions;
- (f) copies of the vessel's tonnage and MARPOL certificates (where applicable);
- (g) a declaration that the vessel complies with the applicable legislation, exemptions and standards as specified in Marine Order 503 and Marine Order 507 and supported by survey reports as necessary;
- (h) a recommendation in accordance with clause 2.9.

Note A separate National Law exemption application may need to be made where the vessel does not meet the one or more of the requirements under the National Law. The specific exemption application form is available on the <u>AMSA website</u>. The specific exemption application form is AMSA form 547.

Annex 1 F	Recommendation and	supporting	documentation (expectation matrix
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Survey activity description / Form description	Surveyors recommen- dation (in prescribed form)	Periodic survey recommen- dation	Survey activity report	Plans	Plan approval letter	Vessel particulars	Load line conditions of assignment report	Initial Hull Construction survey report (for applicable material type)	Initial machinery and engineering survey report	Fuel tank inspection report	Shaft survey report	Initial Fire systems & Fitout materials survey report	Initial watertight integrity survey report	Initial draft mark survey report	Load Line Survey report	Initial electrical survey report	Initial stability – inclining and lightship measurement	Vessel lightship survey report / declaration form	EX40 Vessel survey report	Temp ops permit issued (renewal survey) if applicable	Approved stability book or notice	Seatrial document	OTHER (Photo, Evidence, Compliance Documentation, Calculations)
Corresponding AMSA form number	606	901	586	П	ITS-011 & Annex 2		555	706 or 673	509	639	638	575	670		139	563 & 564	652, 653 or 569	653	650	631		592	
Plan Approval Survey (PLAN)	M *			м	м	м																	E
Loadline Assignment Survey (ILAS)	M *		Α				м																E
Initial Hull Structure Survey (IHST)	M *		Α					м															E
Initial Engineering Survey (IENG)	M *		Α						М														E
Initial Fuel Tank Survey (IFTA)	M *		Α							Μ													E
Initial Shaft Survey (ISHA)	M *		Α								м												E
Initial Fire Systems and Fitout Materials Survey (IFIR)	M *		A									м											E
Watertight and Weathertight Integrity Survey (IWWI)	M *		A										м										E
Draft Mark Survey (IMAR)	M *		Α											Α									E
Initial Loadline Survey (ILOA)	M *		Α												м								E
Initial Electrical Survey (IELE)	M *		Α													м							E
Initial Lightship Check or Incline Survey (ILIG)	M *		Α														Μ						E
Stability Assessment (STAB)	M *		Α														А				Μ		E
Commissioning Survey (COMM)	M *	м	Α																			Α	E
EX40 Survey (X 40S)	M *		А																м				E
Periodic Survey (PRDC)	M *	М	Α																	А			E
Out of Water Survey (OWAT)	M *	М	Α							Α										А			E
Shaft Survey (SHAFT)	M *		Α								м												E
Periodic Loadline Survey (LOAD)	M *		Α												м								E
Periodic Lightship Check (LITE)	M *		A															М					E

Key:

A means to be submitted As Required

E means that a report of this kind is Expected to be submitted - failure to submit the listed AMSA form, or a document with similar information may result in unnecessary delays when a delegate is considering a recommendation.

M* means that a report of this kind is Mandatory if another person is uploading reports on behalf of an AMS.

M means Mandatory to be submitted noting a surveyor may use their own forms provide they contain the required level of detail as set out within 2.9.1(3)

AMSA survey forms are available on the AMSA website at <u>https://www.amsa.gov.au/vessels-operators/domestic-commercial-vessels/forms-conducting-survey</u>
Annex 2 Sample plan approval letter

Note This sample plan approval letter is provided as a guide to assist surveyors in preparing their assessment letter.

Your ref # Vessel Name Our ref # Number

[Date] [Address] [Suburb] [State] [P/code]

To: [Name]

RE: Plan approval for [Vessel Name], [Unique Vessel Identifier]

The documents listed in this letter have been examined for compliance with the applicable standards listed in Marine Order 503 and Marine Order 507 (as applicable), or those standards required as a condition of an equivalent means of compliance, specific exemption or Generic Equivalent Solution listed in this letter.

Narrative

Plan approval of arrangement and engineering of a proposed new build of a16m GRP catamaran for 2C: 2+12 and 1D: 2+20 operations.

Vessel particulars

The following vessel particulars have been used in the design approval.

NSCV Class(es)	2C, 1D	
Passengers	12, 20	
Crew / Special Personnel	2/0, 2/0	
Crew Berths	0, 0	
Passenger Berths	0, 0	
Accommodation Level (AL)	<12	h
Material	GRP	
Construction standard / Service area	ISO 12215 - B	
Loa	16m	m
Lm	15.36	m
Lwl	14.8	m
Loadline length	N/A	m
Beam	3.2	m
Max Draft	0.5	m
Depth	1.1	m
Lightship	20	tonnes
Maximum Displacement	27	tonnes
No. Engines x Brake Power	2 x 650	kW
Max Speed	18	knots

Extent of plan approval

	Whole vessel	Part of vessel (see items outstanding)
Arrangement & accommodation	\square	
Watertight & weathertight integ		\boxtimes
Construction		
Fire Safety	\square	
Engineering		
Electrical		
LPG Systems	\boxtimes	
Safety and evacuation plans		\boxtimes
Anchoring		\boxtimes
Loadline		

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Items Received

Arrangement	Plan ref / comment	No. Sheet s	Applicable Standards	Status	Conditions (See App A)
General Arrangement plan	DWG A123-001	1	NSCV C1, USL Code 5C, NSCV C7A, NSCV C7D	Approved	Y
Machinery arrangement plan	DWG A123-001	1	NSCV C1, USL Code 5C, NSCV C7A, NSCV C7D	Approved	Y
Navigation lights and shapes plan	DWG A123-001	1	NSCV C1, USL Code 5C, NSCV C7A, NSCV C7D	Approved	Y
Sail plan	Not applicable				
Watertight / Weathertight integrity					
Freeing ports, scuppers, hatches, sills, coamings, vents	DWG A123-001	1	NSCV C1, USL Code 5C, NSCV C7A, NSCV C7D	Approved	Y
Structure					
Hull / Deck structure Superstructure	DWG A123-002	10	SPEX-XXX (ISO12215)	Approved	Y
Other structure (specify)	Not applicable				
Engineering					
Propeller shaft, coupling and bracket design	DWG 123-006	1	NSCV C5A	Approved	Ν
Gearbox, prop and shaft installation	DWG 123-006	1	NSCV C5A	Approved	Ν
Rudder and steering system	DWG 123-005	1	NSCV C5A	Approved	Ν
Fuel system schematic	DWG 123-007	1	NSCV C5A	Approved	N
Hydraulic system schematic	DWG 123-005	1	NSCV C5A	Approved	Ν
LPG system schematic	Not applicable				
Stability					

Lines Plan	DWG 123-004	1	N/A	For Informatio n	Ν
Fire & Safety					
Fire control plan	DWG 123-003	1	NSCV C4	Approved	Y
Escape and evacuation plan	DWG 123-003	1	NSCV C4, NSCV C1	Approved	Y
Fire resisting divisions / Galley plan / Fit-out	DWG 123-003	1	NSCV C4	Approved	Y

Items Outstanding

The items listed below have not been covered in this approval, are required to be assessed for plan approval to be completed. The assessment must be addressed prior to construction of the vessel.

Engineering
Main engine exhaust / ventilation / dampers
Free standing tank construction and installation
Bilge system schematic
Watertight / Weathertight integrity
Window schedule
Stability
Draft mark plan
Electrical
LV and above schematic
Safety and Evacuation plans
Mimic plan
Anchoring
Windage area and anchoring calculation

Applicable standards

NSCV C1, NSCV C2, NSCV C4, NSCV C5A, NSCV C7A, NSCV C7D, USL Code Sections XYZ/ILLC

Exemptions / GES / Equivalent Means of Compliance

The following permissions have been used in this approval:

SPEX-XXX Exemption to use ISO12215 standards in lieu of Lloyds SSC.



Operational Envelope (for Lloyds SSC approvals)

Approval Conditions

Any approval is conditional upon the requirements listed in Appendix A – Conditions of approval.

If you have any queries, please don't hesitate to contact me directly on [phone number/email address].

Yours sincerely,

[Surveyor name] [Surveyor contact details]

Appendix A – Conditions of approval

The builder and construction surveyor must ensure that the following conditions of approval are met.

DWG A123-001 Sheet 1 of 1 General Arrangement

- The height from the deck of the guard rails around the cockpit perimeter must be at least 1000mm.
- The illumination requirements for the stowage and launching of liferafts as indicated in NSCV C7A 4.5.3 must be met.

DWG A123-002 Sheet 7 of 10 Structural Arrangement – Bottom Plan

• Attending surveyor to verify fiber and resins have the mechanical properties described in DWG A123-002.

DWG A123-003

Sheet 1 of 1 Fire and Safety Plan

• Fit out materials must be verified as compliant with the requirements of NSCV C4 4.7

DWG A123-006

Sheet 1 of 1 Propeller shaft

• The UTS of the propeller shaft must be at least 630Mpa with a minimum elongation of at least 17%. Material certificates to be provided.

DWG A123-006

Sheet 1 of 1 Fuel system schematic

- The remote fuel shut-off valve including the associated cabling / conduits must be capable of operating when exposed to flame and heat from a fire within the engine space for at least 30 minutes.
- The height of the fuel tank air vents must be at least 760mm off the freeboard deck.

Annex 3 RO recommendation

Particulars of vessel

Name of vessel	IMO Number	AMSA UVI	
Type of vessel	Gross Tonnage	Measured length	

Class and number of persons the vessel is certified to carry

Class	Crew	Unberthed passengers	Berthed Passengers	Special Persons

Survey conducted, extent and supporting documentation

Type of survey	Extent of survey conducted		Documentation checklist
Plan / design	Full classification		□ Plans
approval surveys	Partial extent of classification as indicated:		□ Plan approval letters
	Hull		□ Vessel particulars report (AMSA 751)
	Engineering		
	Electrical		
	Anchoring		
	Arrangement & accommodation (NSCV C1)		
	Watertight & weathertight integ (NSCV C2)		
	Fire Safety (NSCV C4)		
	Safety and evacuation plans (NSCV C7)		
	Loadline		
Construction phase	Full classification		□ Record of the surveys and inspections
surveys	Partial extent of classification as indicated:		carried out at the yard – e.g. inspection and
	Hull		testing plan for the construction phase
	Engineering		
	Electrical Anchoring		
	Arrangement & accommodation (NSCV C1)		□ Record of the surveys and inspections
	Watertight & weathertight integ (NSCV C2)		carried out at the yard – e.g. inspection and testing plan for the construction phase
	Fire Safety (NSCV C4)		
	Safety and evacuation plans (NSCV C7)		<i>Note:</i> an RO can use AMSA survey forms to
	Loadline		support a submission if they wish to do so
Commissioning	Initial lightship check and/or inclining		□ Lightship and/or inclining reports
phase surveys	Stability book approval (NSCV C6)		□ Approved stability book
	Commissioning survey		Commissioning reports

[RO NAME] has conducted survey(s) as indicated, of the above-mentioned vessel, in accordance with the applicable criteria as set out in Marine Order 503 Certificates of Survey, and that to the extent evident from the inspection/s carried out is am satisfied that the vessel meets the standards.

[RO NAME] consents to the Australian Maritime Safety Authority using and disclosing the information provided in this form for purposes associated with the administration of the Marine Safety (Domestic Commercial Vessel) National Law Act 2012.

[RO NAME] understands and acknowledges that the Australian Maritime Safety Authority, as the National Regulator, may ask that them to provide any information or document that the National Regulator reasonably considers necessary in relation to this recommendation.

Signature section