Australian Government
Australian Maritime Safety Authority

National Law—
Marine Surveyors Accreditation Guidance Manual 2014

as amended in June 2018

Part 2—Survey of vessels

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This June 2018 version is Edition 2 of the Marine Surveyors Accreditation Guidance Manual.
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Chapter 1 Preliminary

1.1 Overview

(1) The Australian Maritime Safety Authority (AMSA) as the National Regulator relies on the recommendations of marine surveyors to determine whether 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 are required to hold a Certificate of Survey or a Load Line Certificate, which operate under Exemption 40 (Class C restricted operations) or which 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 Exemption 40, 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 *Marine Safety (Domestic Commercial Vessel) National Law Regulation 2013* (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

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 that a vessel satisfies the applicable requirements of the National Law; and
(d) outline the ways to demonstrate that 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

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 http://www.abycinc.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 502 (Unique 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 safety (Certificates of survey) Exemption 2018* (Exemption 02)	AMSA website at https://www.amsa.gov.au

Publisher	Document	Available
	Marine Safety (Periodic survey, equipment certification and compass adjustment) Exemption 2018 (Exemption 06) *Marine Safety (Temporary operations) Exemption 2018* (Exemption 07) *Marine Safety (Emergency services vessels) Exemption 2018* (Exemption 24) *Marine Safety (Class C restricted operations) Exemption 2018* (Exemption 40) *Marine Safety (Unpowered barges) Exemption 2018* (Exemption 41) *Navigation Act 2012* (Navigation Act)	
Australian Maritime Safety Authority	*National Standard for Commercial Vessels* (NSCV) Part B – *General requirements* (NSCV Part B) Part C1 – *Arrangement, accommodation and personal safety* (NSCV Part C1) Part C3 – *Construction* (NSCV Part C3) Part C4 – *Fire safety* (NSCV Part C4) Part C5 – *Engineering* (NSCV Part C5) Part C5A – *Machinery* (NSCV Part C5A) Part C5B – *Electrical* (NSCV Part C5B) Part C6 – *Stability* (NSCV Part C6) Part C7 – *Equipment* (NSCV Part C7) Part F2 – *Leisure craft* (NSCV Part F2)	AMSA website at https://www.amsa.gov.au
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 http://www.imo.org
National Marine Safety Committee	*Uniform Shipping Law Code*	AMSA website at https://www.amsa.gov.au
Australian and New Zealand Standards	AS 1799.1-2009/Amdt 3-2014 *Small craft-General requirements for power boats* (AS 1799.1) AS/NZS 3000:2007/Amdts 1 & 2 *Electrical installations (known as the Australian/New Zealand Wiring Rules)* (AS/NZS 3000) AS/NZS 3004.2:2014 *Electrical installations - Marinas and boats - Boat installations* (AS/NZS 3004.2)	SAI Global website at http://www.saiglobal.org
International Standards Organisation	ISO 6185-1:2001 *Inflatable boats, Part 1: Boats with a maximum motor rating of 4,5 kW* (ISO 6185-1) ISO 6185-2:2001 *Inflatable boats, Part 2: Boats with a maximum motor rating of 4,5 kW to 15 kW inclusive* (ISO 6185-2)	ISO website at http://www.iso.org

Publisher	Document	Available
International Standards Organisation	ISO 6185-3:2014 *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 6185-4:2011 *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 9001:2015 *Quality management systems — requirements* (ISO 9001) ISO 12215-1:2000 *Small craft - Hull construction and scantlings - Part 1: Materials: Thermosetting resins, glass-fibre reinforcement, reference laminate* (ISO 12215-1) ISO 12215-2:2002 *Small craft - Hull construction and scantlings - Part 2: Materials: Core materials for sandwich construction, embedded materials* (ISO 12215-2) ISO 12215-3:2002 *Small craft - Hull construction and scantlings - Part 3: Materials: Steel, aluminium alloys, wood, other materials* (ISO 12215-3) ISO 12215-4:2002 *Small craft - Hull construction and scantlings - Part 4: Workshop and manufacturing* (ISO 12215-4) ISO 12215-5:2008/*incl Amdt 1:2014 Small craft - Hull construction and scantlings - Part 5: Design pressures for monohulls, design stresses, scantlings determination - Amendment 1* (ISO 12215-5) ISO 12215-6:2008 *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 12215-8:2009/ *incl Cor 1:2010 Small craft - Hull construction and scantlings - Part 8: Rudders - Technical Corrigendum 1* (ISO 12215-8) ISO 12215-9:2012 *Small craft - Hull construction and scantlings - Part 9: Sailing craft appendages* (ISO 12215-9)	ISO website at http://www.iso.org
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 http://eur-lex.europa.eu/legal-content/ EN/ TXT/?qid=14289 28761545&uri= CELEX: 32013L0053

1.7 Definitions

(1) In this Part of the manual:

ABYC means American Boat and Yacht Council.

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

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 standard means a standard that is either expressly called up in applicable legislation or an applicable exemption.

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.

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 the process by which a vessel is surveyed against the requirements of the applicable legislation, exemptions and standards for the first time.

Load Line Certificate means a certificate issued in accordance with Marine Order 507.

Load Lines Convention means the International Convention on Load Lines, done at 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 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.

periodic survey means a recurring survey by which an existing surveyed domestic commercial vessel is surveyed to determine if the vessel continues to meet the requirements of the applicable legislation, exemptions and standards.

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 surveys undertaken at the end of a survey cycle, while the vessel is out of the water, and while afloat, to determine if the safety systems and safety characteristics of a vessel at that point in time comply with the applicable legislation, exemptions and standards.

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.

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.

Survey Mobility Rules means the Survey Mobility Rules, published by AMSA.

Note At the date of publication of this Part 2 of the manual, the Survey Mobility Rules were under development. They will be published once completed.

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

Examples of persons authorised to conduct surveys include Accredited Marine Surveyors, Recognised Organisations 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 *Lm*)	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 – qualified electricians, 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 including initial, periodic, renewal, load line, Exemption 40, and surveys of 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) confirm that the vessel and its equipment comply with, or continue to comply with, the requirements of the applicable legislation, exemptions and standards; and

(b) identify deterioration, wear or damage to the vessel that may interfere with the ability of the vessel and its equipment to comply with (a).

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 – qualified electricians, 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.

(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 this Part of the 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 – qualified electricians, 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 an applicable standard.

(2) If, during the conduct of a survey, a surveyor becomes aware of a defect, non-conformity 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.

(3) Details of the deficencies or novel matters are to be:

(a) notified in writing to the owner of the vessel;

(b) provided to the National Regulator; and

(c) retained by the surveyor.

(4) In addition, where, during the course of an initial, periodic or renewal survey, a surveyor identifies aspects of a vessel's arrangement, construction, machinery or equipment 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 practicable.

Note The National Regulator provides specific contact numbers and emails for these circumstances – see the AMSA website at www.amsa.gov.au.

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) The forms which apply to vessel surveys are specified in Annex 1.

(4) The forms specified in Annex 1 must be used by a surveyor where the surveyor does not have a Quality Management System (QMS) that is compliant with ISO 9001:2008 (or an equivalent standard) and they are making a recommendation in paper or scanned format.

(5) Where a surveyor has a QMS that is compliant with ISO 9001:2008 (or equivalent), it is recommended that the forms specified in Annex 1 are used where recommendations are made in paper or scanned format.

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

(6) A surveyor who submits survey reports and recommendations using MARS is not required to use the forms identified in Annex 1.

Note Electronic recommendations made directly into AMSA's online surveyor portal (MARS), with appropriate supporting documentation attached (as specified in clause 2.9.2 below), satisfy the requirement to make a recommendation in writing and in the specified form.

2.9.2 Documentation supporting recommendations

(1) 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.

(2) 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).

(3) All supporting documentation must be provided to the National Regulator with the recommendation.

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

(4) 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.

(b) All Annex 1 documentation requirements must be complied with where a surveyor does not have a QMS that is compliant with ISO 9001:2008 (or an equivalent standard).

(c) Where a surveyor has a QMS that is compliant with ISO 9001:2008 (or equivalent), compliance with Annex 1 (other than the Annex 1 'mandatory' requirements) is recommended. Non-compliance may result in unnecessary delays in the National Regulator considering the surveyor's recommendation(s).

Note The mandatory aspects of Annex 1 are compulsory for all surveyors, including those with a compliant QMS – see clause (4)(a) above.

(5) 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.

2.9.3 Recommendation: 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 not have any outstanding deficiencies; 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.

2.9.4 Recommendation: with dispute

Where a surveyor recommends that a vessel has a deficiency and this recommendation is disputed by the owner:

(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:

(i) 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;

(ii) photographic evidence, where applicable; and

(iii) specific details of the standard to which the deficiency relates.

2.9.5 Recommendation: not recommended

Where a surveyor recommends that a vessel does not meet the applicable standards, the surveyor must provide sufficient detail of the deficiency(ies) including:

(a) photographic evidence, where applicable;

(b) specific details of the standard to which the deficiency relates; 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 9001:2008 (or an equivalent standard) – see Part 1 of the manual.

(3) Where a surveyor has a QMS that is compliant with ISO 9001:2008 (or equivalent), compliance with the instructions to surveyors is recommended. Non-compliance may result in unnecessary delays in the National Regulator considering the surveyor's recommendation(s).

Note The instructions to surveyors are available on the AMSA website.

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 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 ≥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 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 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 section 9 of 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 following vessels require a full initial survey in accordance with this Chapter 3. This requirement is contained in section 9 of Marine Order 503, but is expanded here for clarity:

(a) vessels which have not been previously been issued a Certificate of Survey;

(b) vessels which have not had a Certificate of Survey in force for at least two years;

Note A vessel whose Certificate of Survey has lapsed for two or more years is required to undergo an initial survey in order to be issued a new Certificate of Survey.

(c) vessels where there is an upgrade in the service category of the vessel, including the assignment of any additional service category;

(d) vessels where the vessel's operations are relocated to outside the geographical location restrictions that apply to the vessel's Certificate of Survey or Certificate of Operation;

(e) vessels which are subject to a change where there is an increase in propulsion power that invalidates the assumptions and calculations used for structural or stability design approval; and

(f) vessels which are subject to a change to the vessel's structure or watertight integrity including any of the following:

(i) change to vessel dimensions;

(ii) alteration of the passageways or means of access to the vessel or its spaces;

(iii) fitting of, or alteration to, a deck or watertight bulkhead.

(3) The following vessel changes require an initial survey to be conducted in accordance with this Chapter 3 for those aspects of the vessel that have changed. A renewal survey is required for the remainder of the vessel. This requirement is contained in section 9 of Marine Order 503 but is expanded here for clarity:

(a) the vessel commences the carriage of dangerous goods;

(b) the vessel commences overnight operations with overnight accommodation provided;

(c) there is an increase in either:

(i) the number of persons on the vessel, or any part of the vessel, that exceed the maximum number permitted; or

(ii) the number of passengers permitted on the vessel;

(d) the installation of berths or extra berths on the vessel;

(e) increase in the windage profile of the vessel;

(f) removing, repositioning, installing or modifying of any of the following on the vessel:

(i) any portion of fixed ballast;

(ii) lifting equipment;

(iii) net reels;

(iv) cranes;

(v) trawl apparatus;

(vi) refrigeration equipment;

(vii) any kind of tank including for fish, fuel or water;

(viii) towing points.

3.3 Compliance to be verified

A vessel that is required to undergo initial survey must be 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.

3.4 Applicable standards

(1) The standards which apply to a vessel are contained in sections 7 and 8 of Marine Order 503. They are summarised here for information only.

(2) Current applicable standards apply to newly constructed vessels and vessels which enter into commercial service for the first time.

(3) A vessel which changes its operations, is modified or altered or moves its geographic area of operation, and is required to undergo an initial survey, is subject to current applicable standards for some aspects of the vessel.

Note An existing vessel which undergoes a change identified in Schedule 1 of Marine Order 503, or which has had a Certificate of Survey that ceased to be in force for a period of at least two years, is a 'transitional vessel'. See Schedules 1 and 2 Marine Order 503 for the standards that apply to transitional vessels.

(4) A vessel which has not had a Certificate of Survey in force for 2 or more years:

(a) will be subject to current applicable standards; or

(b) if the vessel was an 'existing vessel' when its Certificate of Survey was last in force, is subject to current applicable standards for some aspects of the vessel.

Note 1 See Sections 7 and 22 of Marine Order 503.

Note 2 A vessel described in clause (4)(b) is a transitional vessel – see section 22 of Marine Order 503.

3.5 Notification of intent to build a DCV

(1) The National Regulator provides a process through which a person can notify the National Regulator that they intend to build a domestic commercial vessel.

Note 1 See the AMSA website for the 'notification of intent to build a domestic commercial vessel' process.

Note 2 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 DCV.

(2) When the National Regulator receives notification of an intent to build a domestic commercial vessel, the National Regulator will:

(a) issue the vessel a unique identifier, under Marine Order 502;

(b) provide the person notifying with a list of surveys required for the vessel as well as other information to support compliance and ensure that a Certificate of Survey and/or Load Line Certificate can be issued once the vessel is constructed; and

Note Surveyors can identify additional surveys required, or mark surveys as 'not required' for a specific vessel. The list of surveys provided is indicative only and should be reviewed by the nominated surveyor.

(c) authorise the nominated surveyor to conduct plan approval surveys.

(3) Surveyors should ensure that the owner, operator or builder has notified the National Regulator of the intention to build the vessel, or has made an application for a Certificate of Survey and/or Load Line Certificate, before commencing construction.

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 AMSA website for more information on unique identifier display requirements.

(5) If a notification of an intent to build form is lodged with the National Regulator, the unique identifier will be issued as part of the notification process and a separate application for a unique identifier is not required.

(6) 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.

(7) An application may also be made for a unique identifier for a vessel.

Note See Marine Order 502 for details about unique identifiers.

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 must 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 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 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(ies);

(d) the standards used for assessment;

(e) a list of any Generic Equivalent Solutions (GES) that have been used;

(f) details of any exemptions that have been issued by the National Regulator which apply;

(g) details of any Equivalent Means of Compliance (EMOCs) that have been approved by the National Regulator which apply;

(h) a list of plans and documents that have been assessed;

(i) any conditions or comments made; and

(j) the outcome of the plans and document assessment.

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.

(7) Table 2 provides a guide as to the list of plans that may be used for assessment during plan approval.

Table 2 – Content of information and plans

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

Plan name	Typical application	Description of content
Construction plans and / or specifications	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
Lines plan	Vessels with comprehensive stability or subdivision	(a) Half breadths plan (b) Body plan (c) Sheer plan (d) Location of watertight bulkheads
Draft marks plan	Vessels with comprehensive stability or subdivision	Location of draft marks, baseline and reference points
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) Essential and high-risk systems (b) Bilge (c) Fuel (d) Sanitary (e) Engine exhaust (f) Refrigeration and steam (g) Showing valves (h) Vents (i) Overflows (j) Filling stations (k) Pipe materials (l) Diameters (m) Wall thicknesses
Fire protection	Vessels ≥12.5m long	(a) Type and disposition of fire divisions (b) Fire-extinguishing appliances (c) Location of escapes (d) Fire dampers
Rudder and steering gear plan	All vessels	(a) Rudder (b) Rudder stock (c) Bearings (d) Coupling (e) Steering gear and alternative method of steering
Shafting plan	All vessels	(a) Propeller shaft (b) Bearings and couplings (c) Stern tube (d) Propeller brackets (e) Engine and thrust seatings

Plan name	Typical application	Description of content
Construction schedule	All vessels	(a) Time schedule for building (b) 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) Electrical equipment and wiring (b) Protection devices (overload, low voltage) (c) Emergency power arrangements
Sail plan	Sailing vessels	(a) Location and size of sails (b) Underwater profile of vessel
Machinery arrangement	All vessels	Arrangement and function of main and auxiliary machinery (may be incorporated on general arrangement plan)
Freestanding fuel tanks	Vessels with freestanding fuel tanks	(a) Construction (b) Material details (c) Scantlings (d) Baffles (e) Support
Damage control plan	(a) Vessels ≥35m long (b) Class 1 vessels that are ≥25m long ***Note*** The damage control, fire and emergency plans may be combined in a single drawing on vessels <50m long.	(a) Boundaries of watertight compartments (b) Openings and means for closure (c) Arrangements for correcting list
Fire control plan	(a) Vessels ≥35m long (b) Class 1 vessels that are ≥25m long ***Note*** The damage control, fire and emergency plans may be combined in a single drawing on vessels <50m long.	(a) Location and type of active and passive fire safety systems on board the vessel (b) Control stations (c) Location of divisions (d) Fire alarms (e) 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 (l) Fire dampers
Emergency plan	(a) Vessels ≥35m long (b) Class 1 vessels that are ≥25m long ***Note*** The damage control, fire and emergency plans may be combined in a single drawing on vessels <50m long.	(a) Assembly stations (b) Signals (c) Escape routes (d) Evacuation routes (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;

(iii) electrical systems; and

(iv) buoyancy, stability, loading and flotation.

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.

Table 3 - CE Modules required

Service Category	Measured Length	RCD design category	Accepted CE modules							
			A1	B+C	B+C1	B+D	B+E	B+F	G	H
1E, 1D,	*Lm* < 7.5m	C		✓		✓	✓	✓	✓	✓
2C, 3C	*Lm* < 7.5m	B		✓	✓	✓	✓	✓	✓	✓
1E, 1D	*Lm* ≥ 7.5m to 13 m	C				✓	✓	✓	✓	✓
2C, 3C	*Lm* ≥ 7.5m to 13 m	B				✓	✓	✓	✓	✓
2E, 2D, 3E and 3D	*Lm* ≤ 13m	C		✓	✓	✓	✓	✓	✓	✓
2C and 3C	*Lm* < 7.5m	B		✓	✓	✓	✓	✓	✓	✓
4E inland waters	*Lm* ≤12	D	✓	✓	✓	✓	✓	✓	✓	✓
4E	*Lm* ≤24	C	✓	✓	✓	✓	✓	✓	✓	✓
4D	*Lm* ≤24	C		✓	✓	✓	✓	✓	✓	✓
4C	*Lm* ≤24	B		✓	✓	✓	✓	✓	✓	✓

(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 (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.
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.
B	B	B	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	C	C	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 *Quality management systems – requirements* 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.
H	H	H	Conformity based on full quality assurance	Equivalent to the quality management approach of ISO 9001:2015 *Quality management systems – requirements*. 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 that 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 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) For a sister vessel for structure only, the surveyor's recommendation may be supported by the following documents in lieu of full plan approval:

(a) a copy of the basis vessel's approved construction plans;

(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) For a sister vessel for structure and engineering, the surveyor's recommendation may 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;

(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) For a sister vessel for structure, machinery and stability, the surveyor's recommendation may be supported by:

(a) a copy of the basis vessel's approved construction and engineering plans;

(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.

Note A load cell or weighbridge certificate may be used to verify lightship on small boats.

(9) 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 machinery	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	- 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

Type of sister vessel	Requirements	Acceptable supporting documentation
	e. propulsion f. piping - steering systems	
Sister vessel for structure, machinery 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) - engineering arrangements, including for: a. machinery b. tanks c. fire systems d. electrical e. propulsion f. piping - 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 NSCV Part C6C, clause 3.3.5	- 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 vessel

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 may conduct construction phase surveys other than electrical surveys.

(3) A person who holds an unrestricted electrical licence may conduct a construction phase electrical survey.

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 The National Regulator provides instructions to surveyors on verifying the construction of a vessel that has already been built – see the AMSA website.

(2) 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.

Note The AMSA website 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.

Table 6 – Construction and alteration surveys

Survey Type	Required for	Description of Survey
Hull structure – composite	Vessels built from composite materials	(a) Material certification (b) Daily laminating record (c) Ultrasonic record / Thickness testing (d) Resin / glass content (e) Verification the vessel is built in accordance with the approved plans
Hull structure - welded construction	Vessels built from steel or aluminium	(a) Material certification (including consumables) (b) Welding procedure qualification (WPQR and WPS) (c) Welder qualification(s) (d) Presentation and fit-up of plate in accordance with WPS (e) Welding inspection records and compartment sign off sheets (f) Member alignment (g) Distortion and repairs (h) Verification that the vessel is built in accordance with the approved plans
Hull structure – other type of construction other than composite or welded	Vessels not built from composite materials or steel or aluminium	(a) Adequate inspections to ensure vessel complies with the applicable standards. (b) Verification that the vessel is built in accordance with the approved plans
Engineering	All vessels – as applicable	(a) Bilge systems (pipe materials, flex lengths, manifold and pump arrangements, etc.) (b) Hydraulic systems (c) Steering systems (tiller arm and cross link arrangement, emergency steering) (d) Fuel systems (shutoff valving, piping, transfer pump arrangement including remote stops and pressure bypass, etc.)

Survey Type	Required for	Description of Survey
		(e) Valves (screw down valve seating, ball valve operation, valve materials, etc.) (f) Discharges (height and material); (g) Exhaust system (height above *dwl*, valving, lagging, riser, water injection, etc.) (h) Verification that the vessel is built in accordance with the approved plans
Fuel tank	For each vessel fuel tank	(a) Internal inspection (material of tank, required thickness, baffle spacing, check drain, check filler location, check inspection opening, check sounding arrangement (b) Pressure test (confirm testing pressure, confirm no leaks) (c) Verification that the vessel is built in accordance with the approved plans
Shaft	For each vessel shaft	(a) Verification of shaft material (b) Inspection of propeller taper, coupling taper, gland packing area, key and keyway (c) Measurement of shaft and verification of straightness (d) Inspection of propeller (e) Witness of bluing (f) Verification that the vessel is built in accordance with the approved plans
Fire systems and fit-out material	All vessels – as applicable	(a) Galley fire systems (b) Structural fire protection arrangement and installation (c) Bulkhead penetrations (d) Fire detection system (specification and installation) (e) Fixed fire extinguishing system (specification and installation) (f) Stairways and doorways arrangement and operation (g) Verification of sound insulation, thermal insulation, linings and ceilings, furniture, draperies and curtains, bedding and deck finish materials (h) Verification that the vessel is built in accordance with the approved plans
Draft marks	Vessels with draft marks	(a) Determination of a baseline (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 that the vessel is built in accordance with the approved plans (e) Longitudinal location with respect to known structure e.g. bulkhead

Survey Type	Required for	Description of Survey
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 hatches / coverings (e) Check / test of doors (f) Verification of freeing port area (g) Verification that the vessel is built in accordance with the approved plans
LPG	All vessels – as applicable	(a) Certificate of compliance for gas installation (b) Verification that the vessel is built in accordance with the approved plans
Electrical	All vessels – as applicable	(a) Generator tests (governor operation, parallel operations, load sharing, voltage regulation) (b) Load testing of motors (c) Testing of overload alarm circuits (d) Testing of main engine safety alarms and trips (e) Testing of remote controls, stops and limit switches (f) Testing of emergency stop circuits (g) Testing of vessels alarm systems (h) Testing of any other systems and equipment installed on vessel (i) Verification of electrical installation in accordance with AS/NZS 3000 and/or AS/NZS 3004.2 as applicable (j) Verification that the vessel is built in accordance with the approved plans

3.11 Phase 3 - Commissioning phase

3.11.1 Surveyors authorised to conduct commissioning phase surveys including stability

(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 including stability

(1) The commissioning phase is a series of tests and trials that are intended to:

(a) verify a vessel's systems as operational and functional;

(b) establish any operational limits required;

(c) provide safety information to the owner, operator, master and crew as applicable; and

(d) verify any assumptions made during the design and construction phases of survey (e.g. displacement, operational speed etc).

(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 AMSA website.

(3) During the commissioning phase, the vessel's stability must be verified:

(a) for vessels subject to comprehensive stability criteria:

(i) 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 AMSA website.

(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) A copy of the commissioning report and stability documentation for the vessel must be:

(a) provided for 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 to the International Convention for the Prevention of Pollution on Ships (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 ≥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 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 l – 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(ies) – 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. Table 7 replicates Table 2 of Schedule 3 of Marine Order 503 and is provided for information purposes only.

Table 7 – Survey Frequency Categories (extract from Marine Order 503)

Item	Service category	Survey Frequency Category
1.	Class 1	High
2.	Class 2A with passengers	High
3.	Class 2B extended with passengers	High
4.	Class 2B with passengers	High
5.	Class 2A no passengers	Medium
6.	Class 2B extended no passengers	Medium
7.	Class 2B no passengers	Medium
8.	Class 2C ≥12m	Medium
9.	Class 2C with modifier	Medium
10.	Class 2D ≥12m with passengers	Medium
11.	Class 2E ≥12m with passengers	Medium
12.	Class 2D with modifier	Medium
13.	Class 2E with modifier	Medium
14.	Class 2C <12m no modifier	Low
15.	Class 2D no passengers, no modifier	Low
16.	Class 2D <12m with passengers, no modifier	Low
17.	Class 2E no passengers, no modifier	Low
18.	Class 2E <12m with passengers, no modifier	Low
19.	Class 2 ferry in chains*	Low
20.	Class 2 permanently moored vessel*	Low
21.	Class 2 unpowered barge*	Low
22.	Class 3A	Medium
23.	Class 3B extended	Medium
24.	Class 3B	Medium

Item	Service category	Survey Frequency Category
25.	Class 3C ≥12m	Medium
26.	Class 3C with modifier	Medium
27.	Class 3D with modifier	Medium
28.	Class 3E with modifier	Medium
29.	Class 3C <12m no modifier	Low
30.	Class 3D no modifier	Low
31.	Class 3E no modifier	Low
32.	Class 3 permanently moored vessel*	Low
33.	Class 3 unpowered barge*	Low
34.	Class 4C ≥12m	Medium
35.	Class 4D ≥12m	Medium
36.	Class 4E ≥12m	Medium
37.	Class 4C with modifier	Medium
38.	Class 4D with modifier	Medium
39.	Class 4E with modifier	Medium
40.	Class 4C <12m no modifier	Low
41.	Class 4D <12m no modifier	Low
42.	Class 4E <12m no modifier	Low
43.	Vessel with steam propulsion*	High
44.	Submersible or wing-in-ground effect craft*	High
45.	Novel vessel*	High
46.	A high speed thrill ride vessel*	High

Note 1 The survey frequency category for a kind of vessel indicated with an asterisk (*) is the survey frequency category mentioned in that item, whether or not the table provides that another survey frequency category applies according to vessel service category.

Note 2 A vessel that has a restricted operational area category has the same survey frequency category as a vessel that does not.

4.3.2 Survey category modifiers

For Table 7, the modifiers for a vessel are any of the following characteristics. These are specified in Marine Order 503 and are provided here for information purposes only:

(a) carriage of dangerous goods including petroleum or gas products (other than petroleum or gas products intended for use on the vessel or fireworks carried on the vessel only for use on the vessel for a fireworks display);

(b) the vessel has an inboard engine that operates on fuel that has a flashpoint less than 60°C;

(c) the vessel is operated primarily for towage;

(d) the vessel is a support vessel in the offshore oil or gas industry;

(e) the vessel is a Class 4 vessel operated overnight;

(f) the vessel:

(i) is a Category F1 fast craft or Category F2 fast craft;

(ii) is a landing barge that is of a design or for a use that the National Regulator has determined is likely to adversely affect its stability;

(g) the vessel is a vessel (other than a vessel with a hull made from aluminium or steel) that is at least 15 years old.

Note The modifiers are contained in section 21 of Marine Order 503.

4.3.3 Restricted vessels and vessels not specified in the table

(1) The National Regulator will determine the survey frequency category for vessels not within a category specified in Table 7.

(2) Restricted vessels will be in the survey frequency category of the relevant unrestricted class unless otherwise determined by the National Regulator.

4.3.4 Poor performing vessels: movement into higher survey frequency

(1) The National Regulator may determine that a vessel which performs poorly during a survey or other compliance activity is subject to a higher survey frequency level in accordance with the Survey Mobility Rules.

Note 'Performing poorly' means that a vessel has a large number of deficiencies, or one or more significant deficiencies. More detail on this will be provided in the Survey Mobility Rules.

(2) The National Regulator may determine that a high survey frequency vessel which performs poorly during a survey or other compliance activity is subject to an annual survey schedule.

(3) If a vessel which has been moved into a higher survey frequency level, or into annual survey, meets the required standard over a period of time, it will be eligible to move back to its original survey frequency level through a determination of the National Regulator.

4.3.5 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 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 (Emergency services vessels – National Law), 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 a full 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.

4.3.6 High performing vessels: the survey mobility rules

(1) The National Regulator may determine that a vessel which performs well during periodic surveys, audits and other compliance activities, can move to a lower survey frequency level in accordance with the Survey Mobility Rules.

(2) Applications for movement into lower survey frequency levels will be able to be made when the vessel's Certificate of Survey is renewed, from 2023.

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. They are provided here for information purposes only.

(2) This Part 2 of the manual specifies the type and depth of periodic survey required, and how the survey is to be conducted.

(3) 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 (4) below.

(4) 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 if the owner/operator applies to have their survey date fall in a specific month.

Table 8 – Frequency of survey

Survey frequency category	Year 1	Year 2	Year 3	Year 4	Year 5
High	In water periodic survey	In water periodic survey	Out of water periodic survey		Renewal survey (in and out of water)
Medium			In 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 two 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 to undergo a renewal survey in order to renew or be issued a new 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 or is no longer valid because a change has been made to the vessel or its operation – within the 6 month period before an application is made to renew a Certificate of Survey.

(2) However, in accordance with section 9 of 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.

(3) The following vessels require a full initial survey in accordance with Chapter 3, and the renewal survey provisions of Chapter 4 do not apply. This requirement is contained in section 9 of Marine Order 503, but is expanded here for clarity:

(a) vessels which have not been previously been issued a Certificate of Survey;

(b) vessels which have not had a Certificate of Survey in force for at least two years;

Note A vessel whose Certificate of Survey has lapsed for two or more years is required to undergo an initial survey in order to be issued a new Certificate of Survey.

(c) vessels where there is an upgrade in the service category of the vessel, including the assignment of any additional service category;

(d) vessels where the vessel's operations are relocated to outside the geographical location restrictions that apply to the vessel's Certificate of Survey or Certificate of Operation;

(e) vessels which are subject to a change where there is an increase in propulsion power that invalidates the assumptions and calculations used for structural or stability design approval; and

(f) vessels which are subject to a change to the vessel's structure or watertight integrity including any of the following:

(i) change to vessel dimensions;

(ii) alteration of the passageways or means of access to the vessel or its spaces;

(iii) fitting of, or alteration to, a deck or watertight bulkhead.

(4) The following vessel changes require an initial survey to be conducted in accordance with Chapter 3 for those aspects of the vessel that have changed. A renewal survey is required for the remainder of the vessel. This requirement is contained in section 9 of Marine Order 503 but is expanded here for clarity:

(a) the vessel commences the carriage of dangerous goods;

(b) the vessel commences overnight operations with overnight accommodation provided;

(c) there is an increase in either:

(i) the number of persons on the vessel, or any part of the vessel, that exceed the maximum number permitted; or

(ii) the number of passengers permitted on the vessel;

(d) the installation of berths or extra berths on the vessel;

(e) increase in the windage profile of the vessel;

(f) removing, repositioning, installing or modifying of any of the following on the vessel:

(i) any portion of fixed ballast;

(ii) lifting equipment;

(iii) net reels;

(iv) cranes;

(v) trawl apparatus;

(vi) refrigeration equipment;

(vii) any kind of tank including for fish, fuel or water;

(viii) towing points.

(5) The following vessel changes require a renewal survey only. This requirement is contained in section 9 of Marine Order 503 and is expanded here for clarity:

(a) variation to the vessel's lightship displacement of at least 4%;

(b) variation to the vessel's lightship LCG by at least 2%;

(c) other than a like for like replacement of equipment or fitting, a change to any of the following for the vessel:

(i) fixed fire system;

(ii) stern gear;

(iii) gas system;

(iv) electrical power and generators.

4.7 Compliance to be verified

A periodic or renewal survey must:

(a) where alterations have not been made – confirm that the vessel continues to satisfy conditions of the current, or recently lapsed, Certificate of Survey; and

(b) include the checks, calculations, inspections, tests and trials required to verify that the vessel complies with the applicable legislation, exemptions and standards.

Note 1 Vessels that have been altered and require a renewal survey (with or without initial survey for some matters) are specified in clause 4.6. The vessels must be surveyed against the new or transitional standards that apply in accordance with Marine Order 503. Some vessels that have been altered must undergo an initial survey for the whole vessel – see clauses 3.2 and 4.6.

Note 2 Clause 4.11 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 reasonable 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 the outcomes of the survey including any repair and/or rectification work required.

4.9 Lightship verification

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

(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 AMSA website.

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:

(a) the owner must demonstrate that the vessel stability remains adequate to perform its intended operation; and

(b) where required in order to demonstrate adequate stability, re-assess the vessel 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, would cause the vessel to be a transitional vessel and trigger the application of the standards specified in Schedule 2 of Marine Order 503. See Marine Order 503, or contact the National Regulator for more information, where this occurs.

(5) However, instead of a lightship verification, adequate stability for the vessel's intended service may be demonstrated through a practical stability assessment of the vessel.

(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) a declaration signed by the owner or the master of the vessel which includes:

(i) 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;

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.

(ii) a description of each change including weight and centre of gravity information; and

(iii) any available relevant information such as photographs or sketches;

(b) an examination of the vessel for lightship modifications or additions by the surveyor; and

(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. This may require the vessel's 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, would cause the vessel to be a transitional vessel and trigger the application of the standards specified in Schedule 2 of Marine Order 503. 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 1 MARS is AMSA's online surveyor portal.

Note 2 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 of:

(a) the items specified in Table 9 relevant to the survey type unless otherwise approved in writing by the National Regulator; and

(b) as reasonably required by the surveyor in order to be satisfied 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	✓	✓	✓
Equipment marked	✓	✓	✓
LPG system alarm/sensors	✓	✓	✓
Toilets	✓	✓	✓
Sewage system/holding tanks (external)	✓	✓	✓
Modifications/additions	✓	✓	✓
Lightship verification	In accordance with clause 4.9	–	In accordance with clause 4.9
Permanent ballast	✓	✓	✓
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	✓	✓	✓
Life raft certificate(s)	✓	✓	✓
Compass adjusters certificate as required	✓	✓	✓
Radio Survey certificate as required	✓	✓	✓
Fire detection & fixed fire extinguishing system test certificates	✓	✓	✓
LPG compliance certificate/plate	✓	✓	✓
Electrical certificate of compliance for LV & HV	✓	✓	✓
Logbooks as required	✓	✓	✓
Maintenance records	✓	✓	✓
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	✓	✓	✓

Items requiring survey	Survey type		
	In Water periodic survey	Out of water periodic survey	Renewal survey
Line throwing appliances	✓	✓	✓
Medical supplies	✓	✓	✓
Torch(es)	✓	✓	✓
Daylight signalling lamp (as required)	✓	✓	✓
Lifejackets, stowage & signage	✓	✓	✓
Lifejackets lights & whistles	✓	✓	✓
Sound signals	✓	✓	✓
Magnetic compass	✓	✓	✓
Navigation aids – radar, GPS, AIS etc.	✓	✓	✓
Depth sounder / lead line	✓	✓	✓
Clock	✓	✓	✓
Barometer	✓	✓	✓
Engine instruments (control station)	✓	✓	✓
Radio equipment	✓	✓ (to the extent possible with the vessel out of the water)	✓
Intercom / public address system	✓	✓	✓
Charts and publications	✓	✓	✓
Navigation lights	✓	✓	✓
Day Shapes	✓	✓	✓
Code flags	✓	✓	✓
EPIRB	✓	✓	✓
Lifebuoys	✓	✓	✓
Lifebuoys light and line	✓	✓	✓
Buoyant appliances	✓	✓	✓
Life raft installation and hydrostatic release	✓	✓	✓
Rescue boat & launching arrangements	✓	✓	✓
Anti-exposure suits	✓	✓	✓
Dinghy (if counted for lifesaving purposes)	✓	✓	✓
Portable fire extinguishers	✓	✓	✓
Fire blanket (galley)	✓	✓	✓
Fire bucket	✓	✓	✓
Fire and safety plan	✓	✓	✓
Fireman’s outfit	✓	✓	✓

Items requiring survey	Survey type		
	In Water periodic survey	Out of water periodic survey	Renewal survey
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	✓	✓	✓
Anchor chain, shackles & anchor rope	✓	✓	✓
Anchor windlass	✓	✓	✓
Sea anchor	✓	✓	✓
Bulwarks, guardrails, stairs and grab rails	✓	✓	✓
Escapes	✓	✓	✓
Freeing ports/scuppers	✓	✓	✓
Wheelhouse & deckhouse windows/side scuttles & deadlights	✓	✓	✓
Weathertight doors & hatches	✓	✓	✓
Passenger boarding access including gangways	✓	✓	✓
Seating/berths	✓	✓	✓
Bollards/cleats	✓	✓	✓
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	✓	✓	✓
Machinery guarding	✓	✓	✓
Raw Water Piping	✓	✓	✓
Exhaust System/Lagging	✓	✓	✓
Valves and skin fittings	✓	✓	✓ disassembled
Bilge pumps / piping / valves / manifold	✓	✓ (to the extent possible with the vessel out of the water)	✓
Refrigeration equipment	✓	✓	✓
Compressors / air receivers / safety relief valves	✓	✓	✓
Instruments (within the machinery space)	✓	✓	✓

Items requiring survey	Survey type		
	In Water periodic survey	Out of water periodic survey	Renewal survey
Engine room cleanliness	✓	✓	✓
Steering gear	✓	✓	✓
Rudder stops	✓	✓	✓
Emergency steering arrangements	✓	✓	✓
Fuel tank fill/vents	✓	✓	✓
Fuel lines hose clips	✓	✓	✓
Self-closing gauge glasses	✓	✓	✓
Fuel tank electrical bonding	✓	✓	✓
Electrical *– including but not limited to 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	✓	✓	✓
Switchgear	✓	✓	✓
Distribution boards	✓	✓	✓
Batteries	✓	✓	✓
Battery installation (boxed & vented)	✓	✓	✓
Shore supply	✓	✓	✓
Residual Current Devices	✓	✓	✓
Earth leakage monitoring	✓	✓	✓
Electrical installation test results including insulation test certificates	✓	✓	✓
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	✓	✓	✓
Emergency power	✓	✓	✓
Emergency lighting	✓	✓	✓
Remote fuel shutoffs	✓	✓	✓
Remote stops	✓	✓	✓
Closing devices	✓	✓	✓
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)	✓	✓	✓
Fixed firefighting system	✓	✓	✓
Fire detectors and fire alarms	✓	✓	✓
Accommodation smoke alarm	✓	✓	✓
Fire dampers	✓	✓	✓

Items requiring survey	Survey type		
	In Water periodic survey	Out of water periodic survey	Renewal survey
Fire pump/piping	✓	✓ (to the extent possible with the vessel out of the water)	✓
Hydrants/hoses/nozzles	✓	✓ (to the extent possible with the vessel out of the water)	✓
Emergency fire pump	✓	✓ (to the extent possible with the vessel out of the water)	✓
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	–	✓	✓
Hull & deck internal	–	✓	✓
Internal buoyancy	–	–	✓
Sea water tanks	–	–	✓
Voids / peaks internally	–	✓	✓
Anchoring (out of vessel)	–	–	✓
Internal examination of chain locker	–	✓	✓
Shaft coupling	–	✓	✓
Stern gland	–	✓	✓
Shaft bracket	–	✓	✓
Appendages	–	✓	✓
Stern bearing clearance	–	✓	✓
Propeller shaft bearing clearance	–	✓	✓
Propeller shaft	–	✓	✓ (fully withdrawn from vessel)
Propellers	–	✓	✓
Rudders	–	✓	✓
Rudder stock & bearing	–	–	✓ (fully withdrawn from vessel)
Keel cooling	–	✓	✓

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:

(a) ultrasonic thickness for vessels having metallic hull;

(b) withdrawal of sample fastening for vessels having wooden hull;

(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) internal hull inspection if not fully inspected during the five yearly in and out of water survey because of inaccessibility;

(f) pressure test all sea water pipes;

(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 sludge, sewage, drain tanks

4.12 Applicable standards

4.12.1 Applicable standards – other than safety equipment

(1) The standards which apply to the vessel are contained in sections 7 and 8 of Marine Order 503. The Marine Order 503 requirements are summarised here for information only.

(2) The standards, other than for safety equipment, which apply to the vessel are generally those which applied when the vessel was first issued a Certificate of Survey, including for vessels first issued a survey certificate prior to the commencement of the National Law.

Note Marine Order 503 recognises the design and construction standards that applied to an existing vessel (one in commercial operation prior to 1 July 2013) when it was last surveyed before 1 July 2013 – see section 7 of Marine Order 503.

(3) A vessel which changes its operations, is modified or altered or moves its geographic area of operation may be subject to current applicable standards.

Note See Marine Order 503 Schedules 1 and 2 for the kinds of changes that trigger a vessel to become a transitional vessel, and for the standards that apply to transitional vessels.

(4) A vessel which does not have a Certificate of Survey in force for two or more years:

(a) will be subject to current applicable standards; or

(b) if the vessel was an 'existing vessel' when its Certificate of Survey was last in force, is subject to transitional standards.

Note 1 See Marine Order 503 Sections 7 and 22.

Note 2 A vessel described in clause (4)(b) is a transitional vessel – see Marine Order 503. Transitional vessel standards are contained in Schedule 2 of Marine Order 503.

4.12.2 Applicable standards – safety equipment

(1) Since 1 January 2018, Marine Order 503 has required all vessels in survey, including existing vessels, 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.

Note See section 7 of Marine Order 503.

(3) NSCV Parts C7A, F1 and F2 contain transitional provisions which provide a timeframe for compliance for existing vessels.

Note See Annex I of NSCV Part C7A, section 1.6 of NSCV Part F1 and chapter 3 of NSCV Part F2.

4.12.3 Vessel changes

(1) 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) It is also the owner's responsibility to inform the National Regulator if they intend to make changes to their vessel, where the vessel operates or the type of operation the vessel is used for, to ensure that the Certificates of Survey and Operation for the vessel permit the new operation.

(3) 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 See Schedule 1 of Marine Order 503 for the types of changes that trigger the vessel becoming a transitional vessel.

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

4.14 MARPOL requirements

Recognised Organisations and the National Regulator may conduct periodic and renewal surveys to determine a vessel's compliance to 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

(1) 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 to 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 all vessels which elect to meet class rules for construction, machinery, anchoring equipment and electrical installations.

(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

(1) 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) 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.

(3) 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.

(2) The initial survey process for the aspects of the vessel identified in (1) must include documented design, construction and commissioning phase surveys.

(3) 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) stability booklets;

(d) survey and inspection reports (including plan approval, construction stages and commissioning/trials);

(e) where issued, the certificate of classification including any appendices;

(f) conditions of class, recommendations or memoranda relating to the vessel;

(g) details of the survey frequency of the items covered by the certificate of classification;

(h) any conditions or comments made;

(i) details of any equivalent means of compliance (EMOCs) or exemptions that have been approved by the National Regulator which apply; and

(j) a recommendation in accordance with clause 2.9.

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

The vessel must be surveyed 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

(1) The following aspects of the vessel must be surveyed in accordance with the applicable rules of the Recognised Organisation:

(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) recommendations 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 Chapter 4 for periodic and renewal 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.

5.8 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.

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 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 ≥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 aa 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)(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 Part 4 of Section 7 of the USL Code, or Article 14 of the Load Lines Convention, as applicable to the vessel; 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 (b) Tests of closing devices (c) Verification of sill heights (d) Checks of hatches / coverings (e) Check / test of doors (f) Verification of freeing port area (g) Verification of load line placement (h) 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

(1) 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 same time a periodic or renewal survey is required for the vessel under Chapter 4 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 Chapter 4 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 reasonable 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

(1) The standards which apply to the vessel are contained in Marine Order 507. The Marine Order 507 requirements are summarised here for information only.

(2) In accordance with Marine Order 507, vessels must comply with either:

(a) section 7 of the USL Code; or

(b) the Load Lines Convention.

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

(1) Exemption 40 relies on the professional judgement of the attending surveyor.

(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 specified in the exemption.

7.3 Surveyors qualified to conduct Exemption 40 surveys

(1) The following Accredited Marine Surveyors may conduct Exemption 40 surveys:

(a) where a vessel's design, stability, flotation and load capacity must be verified by calculations by the surveyor:

(i) a surveyor with accreditation in categories a, b, g, h, j and k; or

(ii) a surveyor with accreditation in categories a, b and l;

(b) where a vessel's stability, flotation or load capacity must be verified by calculations by the surveyor, but design compliance can be verified with third party documentation:

(i) a person mentioned in (a); or

(ii) a surveyor with accreditation in categories b, g, h, j and k; or

(iii) a surveyor with accreditation in categories b and l;

(c) where a vessel's design must be verified by calculations by the surveyor, but stability, flotation and load capacity can be verified using third party documentation:

(i) a person mentioned in (a) or (b); or

(ii) a surveyor with accreditation in categories a, g, h, j and k; or

(iii) a surveyor with accreditation in categories a and l; and

(d) where third party documentation is available to verify the vessels compliance with a suitable standard for design and stability:

(i) a person mentioned in (a), (b), or (c); or

(ii) a surveyor with accreditation in categories g, h, j and k; or

(iii) a surveyor with accreditation in category l.

(2) Recognised Organisations may conduct Exemption 40 surveys.

7.4 Reliance on third party documentation for Exemption 40 surveys

(1) 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 design standard applied and the surveyor must consider if the design standard applied is suitable for the vessel's intended use.

(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 CE certification, certificates of conformity, type approvals.

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

7.5 Survey of an Exemption 40 vessel

7.5.1 Survey form

A vessel undergoing surveys to operate as an Exemption 40 vessel for the first time should be surveyed using the applicable Exemption 40 form.

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) The surveyor may choose to verify vessel compliance in accordance with a standard such as AS1799.1, ISO 12215 Parts 1 to 9 (as applicable), ISO 6185 Parts 1 to 4 (as applicable), ABYC, USCG or RCD, and the surveyor may accept third party documentation to do so.

(3) An existing vessel may be considered to be of acceptable strength if it is in a good state of repair and is:

(a) built to one of the standards mentioned in paragraph (2); or

(b) of a design with a record of at least five years' history of safe operation in an area where the sea and weather conditions and manner of use are no less severe than those likely to be encountered in the area of operation that the vessel will be operating in as an Exemption 40 vessel.

(4) Alternately, vessel compliance may be demonstrated by direct calculation, testing or other suitable means.

(5) For vessels considered on the basis of safe history of vessel or of design, the surveyor must be satisfied that the history is adequately documented and supported by an appropriate structural survey and technical specification for the vessel.

(6) 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, including;

(i) static loading;

(ii) dynamic loading;

(iii) impact loading; and

(iv) fatigue loadings;

(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.

(7) The surveyor must retain records of the documentation 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 or basic flotation 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.

(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 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.

(2) 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.

(3) 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.

(4) In all cases when undertaking stability analysis, the assessment must 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 operation and form and:

(i) the nature and likelihood of potential hazards; and

(ii) the likely consequences of inadequate stability.

(5) If a net reel, deck load, crane or lifting device is fitted to the vessel, its effect must be taken into account in the vessel's stability assessment, and:

(a) a net reel, crane or lifting device must not be fitted to a vessel if it is capable of:

(i) generating a heeling moment that may endanger or capsize the vessel; or

(ii) creating a loading condition that exceeds the maximum loading for the vessel; and

(b) a heeling moment may be taken as the lesser of:

(i) the moment generated by the device;

(ii) the breaking strain of a net; or

(iii) 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

(1) In accordance with the requirements of Schedule 1, Division 2, clause 2.6 of Exemption 40, the surveyor must verify that the vessels 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 vessels 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.

(3) In accordance with Schedule 1, Division 2, clause 2.11 of Exemption 40, for vessels ≥7.5m long, the surveyor must verify that the vessel has an emergency means of steering.

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 survey must be conducted in accordance with the requirements in Chapter 4 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 Chapter 4 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 the all the surrendered 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 surrender 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 surrendered to AMSA.

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 surrendered exemptions. The specific exemption application form is available on the AMSA website. 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 a foreign flagged 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;

(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 all 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 AMSA website. The specific exemption application form is AMSA form 547.

AMSA Form Number		AMSA 901	AMSA 586	ITS-011		AMSA 555	AMSA 706 or 673	AMSA 509	AMSA 639	AMSA 638	AMSA 575	AMSA 670		AMSA 139	AMSA 563 & 564	AMSA 653, 652 or 569	AMSA 653	AMSA 650	AMSA 631		
Survey activity description / Form description	Surveyors recommendation (in prescribed form)	Periodic survey recommendation	Survey activity report	Plans	Plan approval letter	Load line conditions of assigment 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, lightship, level flotation and/ or practical stability survey report	Vessel lightship survey report	EX40 Vessel survey report	Temp ops permit issued (renewal survey) if applicable	Approved stability book or stability notice	OTHER (Photo, Evidence, Compliance Documentation)
Plan Approval Survey (PLAN)	M		A	M	M																A
Loadline Assignment Survey (ILAS)	M		A			E															A
Initial Hull Structure Survey (IHST)	M		A				E														A
Initial Engineering Survey (IENG)	M		A					E													A
Initial Fuel Tank Survey (IFTA)	M		A						E												A
Initial Shaft Survey (ISHA)	M		A							E											A
Initial Fire Systems and Fitout Materials Survey (IFIR)	M		A								E										A
Watertight and Weathertight Integrity Survey (IWII)	M		A									E									A
Draft Mark Survey (IMAR)	M		A										A								A
Initial Loadline Survey (ILOA)	M		A											E							A
Initial Electrical Survey (IELE)	M		A												E						A
Initial Lightship Check or Incline Survey (ILIG)	M		A													E					A
Stability Assessment (STAB)	M		A													A				E	A
Commissioning Survey (COMM)	M	E*	A																		A
EX40 Survey (X 40S)			A															M			A
Periodic Survey (PRDC)	M	E*	A																A		A
Out of Water Survey (OWAT)	M	E*	A						A										A		A
Shaft Survey (SHAFT)			A							E											A
Periodic Loadline Survey (LOAD)			A											E							A
Commissioning Survey (COMM)			A														E				A

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 will result in unnecessary delays when a delegate is considering a recommendation. (Note that the documents labelled 'E' must be submitted where a surveyor does not survey in accordance with a ISO 9001 compliant Quality Management System or an equivalent management system – see clause 2.9)

M means **Mandatory** to be submitted

* Form 901 is mandatory if you are not using a form 606 to make the recommendation. Where form 606 is used, the supporting document must contain at least the same information as form 901.

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: [Vessel Name], [Unique Vessel Identifier], [Service Category(ies)]

Thank you for your submission, see below the status of each document submitted. Please address any issues raised.

Document Received and Status

Drawing Number	**Sheet**	**Title**	**Approval Standard**	**Status**	**Comments**
DWG XXX-XXX	*2/7*	*Drawing name*	*Standard Name, GES number, specific or EMOC ref number*	*Document status*	*Comments on the drawing*
Example 1: DWG A123-001	1/1	General arrangement		For information	Nil
Example 2: DWG A123-002	1/10	Structural Arrangement – Bottom Plan		Not approved	Bottom stiffness from frame 13-22 must be increased in section. 40x40x4/4 T/bar stiffeners.
Example 3: DWG 123-003		Fire and Safety Plan		Approved	Door from lower accommodation to main.

Exemptions / GES Applicable to the vessel
[List applicable exemption and GES reference numbers]

Items Not Yet Received
[Drawing No.]
[Drawing No.]

Note - more information may be required as the approval & build process continues.

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]