Proposed Maritime Rules

Proposed Part 404: Design, Construction, and Equipment – New Zealand Cape Town Vessels and Foreign Cape Town Vessels and Consequential Rule Amendments

Invitation to Comment

28 August 2020
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Invitation to Comment

1. You are invited to comment on the draft Maritime Rules Part 404\(^1\): Design, Construction, and Equipment – New Zealand Cape Town Vessels and Foreign Cape Town Vessels.

2. The text of the proposed rules is set out in the appendix to this document together with explanatory material on the policy, application, and impact of the amendments. This invitation is issued to fulfil formal consultation requirements under the Maritime Transport Act 1994 (MTA).

Purpose of introducing the proposed Rule

3. Following public consultation in 2015, the Government decided to accede to the Cape Town Agreement of 2012. The Agreement sets internationally agreed minimum standards relating to the safety of sea-going fishing vessels 24 metres in length and over, thereby providing an international regulatory framework for fishing vessel safety.

4. The Agreement will enter into force 12 months after at least 22 States, with an aggregate 3,600 fishing vessels of 24 metres in length and over operating on the high seas have acceded (expressed their consent to be bound by the Agreement).

5. In October 2019, New Zealand was among a number of States that formally indicated their determination to ensure that the Agreement reaches the entry into force criteria by October 2022, and enters into force from October 2023. If New Zealand accedes to the Convention, it could contribute 40 vessels to the entry into force requirements.

Which fishing vessels are affected by the proposed rule?

6. Three types of fishing vessels are affected by the proposed Rule:
   a. New domestic fishing vessels – called ‘New Zealand Cape Town vessels’,
   b. New foreign fishing vessels – called ‘Foreign Cape Town vessels’, and
   c. Existing Part 40D vessels\(^2\), which are only partially affected.

New Domestic Fishing Vessels (Subpart A and Schedule)

7. The Cape Town Agreement contains standards for the design, construction, and equipment of fishing vessels. Some of these standards are higher than the standards that currently apply to fishing vessels under Maritime Rules Part 40D. The standards in the proposed Part 404 align with the standards in the Agreement and enable New Zealand to bring the Agreement into force.

8. A ship to which Part 404 applies will not have to comply with Part 40D.

9. When it comes into force, the Cape Town Agreement will apply in full to a New Zealand vessel that is:
   a. 24 metres and over, and
   b. used in commercial fishing operations, and

\(^1\) We are using the Part number “Part 404” to distance it from the 40 Series rules as the latter are currently under review and may change significantly in the near future.

\(^2\) A reference to a Part 40D vessel or Part 40D fishing vessel in this introductory section is a reference to a ship to which Part 40D is applicable.
c. a new vessel (or a vessel which has undergone a major conversion) from the date the Agreement enters into force, and
d. certificated to operate, or operates, in the unlimited area (i.e. high seas).

10. A vessel meeting all the above-described criteria will be a vessel that Part 404 will apply to. These ships are referred to in Part 404 as New Zealand Cape Town vessels, and the applicable requirements are set out in Subpart A.

11. Some requirements from the Cape Town Agreement for New Zealand Cape Town Vessels are however more appropriately placed in other Parts of the Maritime Rules rather than in the proposed Part 404. For example, the navigational requirements contained in the Agreement are more appropriately placed in Part 45, which deals specifically with navigational equipment.

12. Here is a summary of those new standards (set out in other rules) applicable to New Zealand Cape Town vessels:

- Part 23: Operating Procedures and Training
  - rules 23.29(3A)(a) and (3B)
  - rules 23.29(4A)(a) and (4B)
  - rules 23.29(7A)(a), (7B), and (7C)
  - rule 23.48A
  - Appendix 1A
- Part 42B: Safety Equipment – Fire Appliances Performance Standards
  - rule 42B.10A
  - rules 42B.64(3A) and (3B)
- Part 45: Navigational Equipment
  - rules 45.24(5A)(a), (5B), (5C), and (5D)
  - rules 45.24A(1)(a) and (2)
  - rules 45.28A(1)(a) and (2)
  - rules 45.32A(1)(a) and (2)

13. Fishing vessels that would be categorised as New Zealand Cape Town vessels have rarely been constructed or converted in New Zealand. As such, the majority of the provisions of the Agreement will not affect the New Zealand boat building or fishing industry.

Foreign Cape Town vessels (Subpart B only)

14. Part 404 also prescribes the requirements for foreign fishing vessels within the applicability and scope of the Agreement (refer the criteria in para 9) that visit New Zealand ports. These vessels are referred to as Foreign Cape Town vessels, and the applicable requirements are set out in Subpart B.

Existing 40D NZ fishing vessels which operate in the unlimited area (Schedule)

15. Part 404 does not apply to current Part 40D fishing vessels because they are neither new vessels nor foreign vessels. Part 40D fishing vessels will continue to be required to meet any current standards applicable to fishing vessels (including those in Part 40D) but those which operate in the unlimited area will be partially affected by some parts of the Cape Town Agreement.

16. Most parts of the Agreement relate to fishing vessels 24 metres in length and over, but a small number apply to fishing vessels under 24 metres.

17. Such vessels will have a 5 or 10 year transition period to meet any requirement under the Agreement.
18. Here is a summary of those new standards applicable to Part 40D fishing vessels (the details of which can be found in the schedule of the proposed rules attached):

- Part 23: Operating Procedures and Training
  - rules 23.29(3A)(b) and (3B)
  - rules 23.29(4A)(b) and (4B)
  - rules 23.29(7A)(b), (7B), and (7C)
  - rule 23.48A
  - Appendix 1A

- Part 40D: Design, Construction and Equipment – Fishing Ships
  - Appendix 1.1 Two-way VHF
  - Appendix 3.3 NAVTEX
  - Appendix 3.3 Radar transponder or AIS SART

- Part 45: Navigational Equipment
  - rules 45.24(5A)(b), (5B), (5C), and (5D)
  - rules 45.24A(1)(b) and (2)
  - rules 45.28A(1)(b) and (2)
  - rules 45.32A(1)(a) and (2)

19. While these Part 40D vessels will be partially affected, we expect that the impact will be minimal because:

- there are only around 40 existing domestic fishing vessels that are 24 metres and more, that operate in the unlimited area,
- few domestic vessels under 24 metres operate in the unlimited area,
- these vessels should already comply with maritime rules regarding design, construction, and equipment of fishing vessels, as these rules were largely developed to align with the conventions on which the Agreement is based,
- many Cape Town Agreement-related obligations not currently required by maritime rules are nonetheless common industry practice, and
- operators will have either 5 or 10 years, depending on the requirement, in which to comply with any additional Cape Town Agreement-related obligations.

20. Existing Maritime New Zealand inspection, surveying, monitoring, and control mechanisms are to be extended as necessary to ensure New Zealand vessels comply with the Agreement. Compliance with the Agreement will be acknowledged through the issue of an International Fishing Vessel Safety Certificate (IFVSC). In addition, Maritime New Zealand’s existing Port State Control inspection regime and processes will be extended to foreign vessels visiting New Zealand ports.

Relationship to 40 Series reform work

21. The Rules have been structured as a new Part 404 solely applying to ‘Cape Town vessels’ rather than incorporating the changes into the current 40 Series of Rules. This is because the latter are the subject of major reform. Changes may be required to the proposed ‘Cape Town’ Rules at some stage in the future depending on the outcome of the 40 Series reform work.

Structure of Part 404

22. The new Part 404 contains the following:
a) Subpart A - The rules applicable to New Zealand Cape Town vessels
b) Subpart B - The rules applicable to foreign Cape Town vessels
c) Two Appendices relating to Fire Fighting Appliances and Radiocommunication Equipment (which are based on Part 40D Appendices 2 and 3 but include additional prescribed standards applicable to New Zealand Cape Town vessels)
d) Schedule 1 – consequential amendments (including amendments to Part 40D to exclude Cape Town vessels from Part 40 and to include new standards for Part 40 vessels)
e) Schedule 2: Acceptable Means of Compliance – additional prescribed standards applicable to New Zealand Cape Town vessels (acceptable means of compliance)

23. Subpart A is, in turn, divided into 11 chapters in line with the Cape Town Agreement. Within those chapters are many of the same rules found in Part 40D, where those rules align or do not conflict with those in the Agreement.

24. However, in some instances, Part 404 does impose different standards to those in Part 40D.

25. Note that Schedule 1 also contains consequential amendments to other Parts that introduce new requirements as a consequence of implementing the Agreement. Many of these affect existing vessels under Part 40D as well as new vessels under Part 404.
Flow diagram to assess impact of the Cape Town Agreement (CTA)

Is ship used for commercial fishing?

NO → CTA has no affect

YES →

Does it operate in, or does its CoS scope of operation include, the unlimited area?

NO → CTA has no affect

YES →

Is it ≥24m?

NO →

YES →

Is it a new ship? (includes major conversion)

NO → Part 404 does not apply to these ships.

YES → Part 404 applies to these ships.

Part 404 Schedule also contains amendments to other rule Parts affecting these Part 404 ships – refer paragraph 12 above for a summary

Part 404 Schedule contains amendments to other rule Parts affecting these non-Part-404 ships (each requirement has a 5 or 10 year transition) – refer paragraph 18 above for a summary
Legal authority for Part 404


27. Maritime rules are disallowable instruments under the Legislation Act 2012. Under that Act, the rules are required to be tabled in the House of Representatives. The House of Representatives may, by resolution, disallow any rules. The Regulations Review Committee is the select committee responsible for considering rules under that Act.

When will Part 404 come into force?

28. Part 404 comes into force as follows:
   (a) subparts A and B and the Appendix are proposed to come into force on the 11th October 2023:
   (b) consequential amendments to other Maritime Rule Parts, as set out in Schedule 1, are proposed to come into force as described in the relevant amendment.

Related Offences

Maritime (Offences) Regulations 1998

29. Any offences related to these rule amendments that require an amendment to the Maritime (Offences) Regulations 1998 will be introduced through a separate process.

What are the likely benefits for New Zealand arising from part 404?

30. The proposed Part 404 will:
   • allow Maritime New Zealand to enforce internationally agreed safety standards on foreign vessels using New Zealand as a supply port, thereby helping to ensure safer fishing operations internationally,
   • align New Zealand’s maritime law with internationally agreed minimum standards and ensure domestic vessels are compliant with these standards,
   • send a strong signal to international fishing operators that fishing vessel safety is a high priority for New Zealand in that a ship that enters a New Zealand port becomes subject to Port State Control under any relevant international convention to which New Zealand is a party, and
   • ensure a level playing field by ensuring foreign-registered vessels competing with New Zealand vessels are not unfairly advantaged by operating with lower safety standards and lower costs.

Making submissions

31. If you wish to comment on these proposed rule changes, please make a submission by
   • e-mail to rules.coordinator@maritimenz.govt.nz
   • post to PO Box 25620, Wellington 6146 (Please address postal submissions to the Rules Coordinator.)
   • physical delivery to Maritime New Zealand, level 11, 1 Grey Street, Wellington (Calling ahead is recommended, as office access may be affected by COVID-19.)

32. The deadline for submissions is 5.00pm Friday 30 October 2020.
Submissions are public information

33. Please indicate clearly if your comments are commercially sensitive, or if, for some other reason, you consider they should not be disclosed. If your submission is subject to an Official Information Act (OIA) request, MNZ will consider your confidentiality request in accordance with the grounds for withholding information set out in the OIA. In addition, if you are an individual (i.e. your comments are made personally and not on behalf of a company or an organisation) please indicate if you consider for some reason that your identity should not be disclosed.

34. We will acknowledge all submissions that we receive and once the rule is finalised you will receive a summary of the full consultation. Subject to the provisions of the Privacy Act and the OIA, you may view the submissions made by other people at the Wellington office of Maritime New Zealand between 8.30 am and 4.30 pm on weekdays (except statutory holidays). Please arrange this beforehand by calling 0508 22 55 22 and asking for the Manager, Regulatory Policy.
APPENDIX

INVITATION TO COMMENT
(ITC)

Proposed Maritime Rules
Part 404: Design, Construction, and Equipment – New Zealand Cape Town Vessels and Foreign Cape Town Vessels

REFER TO THE SCHEDULE 1 FOR THE CONSEQUENTIAL AMENDMENTS TO PARTS 19, 21, 23, 25, 40D, 42B, 43, 45, AND 46
Status of the Cape Town Agreement

The Cape Town Agreement is currently not in force internationally. The Agreement comes into force internationally 12 months after the date on which not less than 22 States, the aggregate number of whose fishing vessels of 24 metres or more in length operating on the high seas is not less than 3600, have expressed their consent to be bound by it.

As of 17 August 2020, fourteen (14) States, contributing a little under 1,500 vessels, have ratified the Agreement.

On 21 October 2019 New Zealand became one of 48 States to formally declare their determination that the criteria for entry-into-force of the Agreement are met by 11 October 2022. If so the Agreement would come into full effect one year later, 11 October 2023.

If New Zealand accedes to the Agreement, it could contribute up to 28 vessels to the entry into force requirements.
Material to be incorporated by reference under these proposed rules:

The following external material is referred to:

1. The Cape Town Agreement
2. IMO resolution MSC.149(77) Revised performance standards for survival craft portable two-way VHF radiotelephone apparatus [Schedule 1 Part 40D amendment to Appendix 1.1]
3. IMO resolution A.424(XI) [Schedule 1 rule 45.24(5A)]
4. IMO resolution A.472(XII) Improved Recommendation on Test Method for Qualifying Marine Construction Materials as Non-Combustible [rule 404.143(6) and AMOC404.130 and AMOC404.131]
5. IMO resolution A.706(17) [rule 404.02 definition of NAVAREA]
6. IMO resolution A.802(19) Recommendation on Performance standards for survival craft radar transponders for use in search and rescue operations [Schedule 1 Part 40D amendment to Appendix 3.3]
7. IMO resolution A.809(19) Recommendation on Performance standards for survival craft portable two-way VHF radiotelephone apparatus [Schedule 1 Part 40D amendment to Appendix 1.1]
8. IMO resolution A.917(22), as amended by A.956(23) [AMOC 404.210]
9. IEC 60092 series of standards – Electrical installations in vessels [rule 404.93]
10. Australian Standard 1530 Part 3 Methods for fire tests on building materials, components and structures - Simultaneous determination of ignitability, flame propagation, heat release and smoke release [rule 404.143(5) and AMOC404.130 and AMOC404.131]
   
   **AS 1530:3 will be notified by Gazette and apply the 1999 edition**

11. NZS 5807:1980 Code of Practice for Industrial Identification by Colour, Wording or other Coding [rule 404.148 and AMOC404.130 and AMOC404.131]
12. GMDSS Master Plan adopted by the IMO [AMOC404.210 first row in table]
13. SOLAS Chapter IV regulation 2 [rule 404.02 sea area A4 definition]
15. National Standard for Commercial Vessels [rule 404.30]
16. recommendation 8 of the recommendations of the International Conference on Safety of Fishing Vessels, 1993 [rule 404.181(2A) and AMOC 404.181]

**Refer to rule 404.03(2) for the description of an AMOC. Draft proposed AMOCs are located at the end of these proposed rules**
Part objective


This date, 11 October 2023, is only a marker for now. The actual date will not be known until the Agreement has been signed by the required number of States representing the required number of vessels.

The Agreement sets internationally agreed minimum standards relating to the safety of fishing vessels through the design, construction, and equipment of fishing vessels 24 metres or more in length that are certificated to operate in the unlimited area or operate in the unlimited area that are a new vessel or undergo a major conversion after the Agreement enters into force. These minimum standards will apply, through this Part, to New Zealand vessels operating or certificated to operate in the unlimited area.

Part 404 prescribes the requirements for the design, construction, and equipment of New Zealand fishing vessels that are fishing vessels as defined in the Agreement operating in the unlimited area. These vessels are either new or have undergone a major conversion after the Agreement enters into force and are referred to as New Zealand Cape Town vessels in this Part. Part 404 also prescribes the requirements for foreign fishing vessels within the applicability and scope of the Agreement that visit New Zealand ports. These vessels are referred to as foreign Cape Town vessels in this Part.

The Agreement also imposes requirements on existing fishing ships that operate in the unlimited area. Chapters VII, VIII, IX, and X of the Agreement also apply to existing fishing vessels 24 metres or more in length. Chapter X of the Agreement also contains additional equipment requirements for existing fishing vessels less than 24 metres in length that operate in the unlimited area. These requirements are implemented through consequential amendments to other appropriate Parts in which those existing vessels are referred. These requirements have either a 5 or 10-year transition before coming into effect.

The authority for making Part 404 is found in sections 36(1)(a), 36(1)(b), 36(1)(c), 36(1)(d), 36(1)(f), 36(1)(j), 36(1)(l), 36(1)(p), 36(1)(q), 36(1)(t), 36(1)(ta), and 36(1)(u)(ii) of the Maritime Transport Act 1994.

Maritime rules are disallowable instruments under the Legislation Act 2012. Under that Act, the rules are required to be tabled in the House of Representatives. The House of Representatives may, by resolution, disallow any rules. The Regulations Review Committee is the select committee responsible for considering rules under that Act.

Entry into force

This Part 404 comes into force as follows:

(a) subparts A and B come into force on 11 October 2023:

(b) consequential amendments, in Schedule 1, come into force as described in the relevant amendment.

CTA Ch1 Reg1(4) states:

Where a Party has concluded that it is not immediately possible to implement all of the measures provided for in chapters VII, VIII, IX and X on existing vessels, the Party may, in accordance with a plan, progressively implement the provisions of chapter IX (radiocommunications) over a period of no more than 10 years and the provisions of chapters VII, VIII and X over a period of no more than 5 years.

The above must be communicated to IMO with reasons for the transition and the requirements being transitioned.
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GENERAL

404.01 Application

(1) This Part applies to the following vessels:
   (a) a New Zealand Cape Town vessel;
   (b) a foreign Cape Town vessel.

(2) This Part applies, in relation to a vessel referred to in subrule (1), to the owner, the operator, the master, the builder, and the surveyor of that vessel, as specified in the rules.

(3) The limits to the scope of the application for each subpart are specified in the subpart and, where appropriate, for a chapter, section, a rule in a subpart, or an appendix, are specified in the chapter, section, rule, or appendix.

This is the overarching applicability. None of the rules in subparts A or B will apply to vessels not described above.

Both subparts A and B align with the definition of fishing vessel in the Cape Town Agreement (the Agreement). This is found in Article 2 as follows

“fishing vessel” means any vessel used commercially for catching fish, whales, seals, walrus or other living resources of the sea

Note that whereas Part 40D applies to ships within the scope of the Fisheries Act, Part 404 applies to vessels defined as fishing vessels in the Agreement as above. The Fisheries Act focuses on catching marine fauna for the purpose of “sale” whereas the Agreement focuses on catching marine fauna for commercial purposes. For the purpose of maintaining consistency with the convention Part 404 will be aligned with the Agreement’s definition of fishing vessel rather than using the definition of fishing vessel (via the registration requirement) under the Fisheries Act.

404.02 Definitions (40D.2)

Where a heading includes a rule reference as above in brackets ("40D.2"), it indicates that the proposed rule under the heading is derived from or similar to that rule, eg 404.02 is derived from rule 40D.2. Part 40D largely reflects the Torremolinos Protocol, which shares similar provisions to those in the Cape Town Agreement.

In Part 404, unless the context otherwise requires—

Act means the Maritime Transport Act 1994:

Agreement means the Cape Town Agreement of 2012 on the implementation of the provisions of the Torremolinos Protocol of 1993 relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977:

AIS means Automatic Identification System:

AIS-SART means AIS Search And Rescue Transmitter:

certificate of survey means—
   (a) a certificate of survey issued by a surveyor under rule 44.41 of Part 44; or
   (b) any document that is deemed under Part 44 to be a current Certificate of Survey described in paragraph (a); or
(c) a certificate of survey issued under section 219 of the Shipping and Seamen Act 1952 and deemed to be issued or recognised as a maritime document under Part V of the Act pursuant to section 468(5) of the Act; or

(d) a certificate of survey issued under section 143 of the Act and saved under section 468(8) of the Act:

certificated to operate in the unlimited area means, in relation to a vessel, the current certificate of survey issued in respect of that vessel includes the unlimited area in its operating limits:

Certificate of Surveyor Recognition—

(a) has the same meaning as in Part 44; and

(b) includes any document that is deemed under Part 44 to be a valid Certificate of Surveyor Recognition:

cockpit means an exposed recess in the weather deck of a ship, extending not more than one half the length overall of the ship:

competent person means a person who in relation to a ship’s lifting appliances and loose cargo gear is authorised by—

(a) the manufacturer of that equipment; or

(b) a classification society in pursuance of a scheme of classification or certification of such equipment; or

(c) a testing establishment recognised by—

(i) for a New Zealand ship or a foreign ship, the Director; and

(ii) for a foreign ship, the Flag State Administration; or

(d) an international or national inspection agency approved by—

(i) for a New Zealand ship or a foreign ship, the Director; or

(ii) for a foreign ship, the Flag State Administration; or

(e) a Flag State Administration;—

to carry out any testing, thorough examination and issue of certificates of test required by this Part:

constructed under survey means construction subject to an initial survey conducted from the time of commencement of building of the ship until completion of the building of that ship:

Compare rule 40A.2

constructed under survey means constructed subject to an initial survey conducted by a surveyor who holds a Certificate of Surveyor Recognition entitling the surveyor to perform that function from the time of commencement of building of the ship until completion of the building of that ship:

current, in relation to a document means that it is valid, has not expired, and, in the case of a maritime document, has not been suspended or revoked by the Director:

deepest operating waterline means the waterline that corresponds to the minimum permissible operating freeboard:

design waterline means the deepest waterline at which the ship is designed to operate:

EPIRB means an electronic position indicating radio beacon:

exposed recess means a recess that is not completely enclosed by a weathertight superstructure:
Flag State Administration means the Government of the State under whose authority a ship is operating, or the Government of the State whose flag the ship is entitled to fly:

foreign Cape Town vessel has the same meaning as in rule 404.302:

foreign ship means any ship that is not a New Zealand ship:

freeboard deck means the first continuous deck above the marked load line required by rule 404.53(4) that has means of closing weathertight all openings in that deck leading below:

IMO means the International Maritime Organization:

IMO GMDSS Master Plan means the GMDSS Master Plan adopted by the IMO:

length means 96% of the total length on a waterline at 85% of the least moulded depth measured from the keel line, or as the length from the foreside of the stem to the axis of the rudder stock on that waterline, if that be greater. In vessels designed with rake of keel the waterline on which this length is measured is to be parallel to the designed waterline:

length overall means the length of the ship measured from the foreside of the head of the stem to the aftermost part of the transom or stern of the ship. Fittings (such as beltings, bowsprits, platforms, gantries, trim tabs, jet and outboard drive units) projecting beyond these terminal points must not be included in the overall length. Structures (such as bulbous bows, deckhouses and free flooding bait tanks) and buoyancy tubing projecting beyond these terminal points are to be included in the overall length:

lightship condition means the ship without fish catch, ice, cargo, fuel oil, lubricating oil, ballast water, fresh water and feed water in tanks, consumable stores, and crew and their effects:

machinery spaces of category A means those spaces, and trunks to such spaces, which contain—

(a) internal combustion machinery used for main propulsion; or

(b) internal combustion machinery used for purposes other than main propulsion where such machinery has in the aggregate a total power output of not less than 375 kW; or

(c) any oil-fired boiler or oil fuel unit:

major alteration means an alteration or modification of a vessel, including the replacement, removal or addition of any part of the vessel, that is likely to—

(a) significantly affect the structural integrity, tonnage, freeboard, cargo or passenger capacity, crew or passenger accommodation, conditions of assignment of load line, watertight subdivision, stability, structural fire protection; or

(b) result in significant changes to the propulsion machinery, auxiliary machinery, steering or method of propulsion of the vessel:

major repair means a repair in respect of any damage, defect, breakdown or grounding of the vessel that is likely to significantly affect the structural integrity, conditions of assignment of load line, watertight subdivision, stability, structural fire protection, main propulsion machinery, method of propulsion, steering gear, or vital auxiliary machinery of the vessel:

master means any person (except a pilot) having command or charge of any vessel:

moulded depth means the vertical distance measured from the top of the keel to the underside of the upper deck at side. In wood and composite vessels the distance is measured from the lower edge of the keel rabbet:

National Standard for Commercial Vessels means the National Standard for Commercial Vessels published by the Standing Council on Transport and Infrastructure or, if no such entity exists, the entity responsible for the publication of those standards:
NAVAREA has the same meaning as defined in Annex 1 of IMO Resolution A.706(17); it is used to describe geographical sea areas for the purpose of coordinating the transmission of radio navigational warnings; the term NAVAREA followed by an identifying roman numeral is used as a short title to represent such an area:

New Zealand Cape Town vessel has the same meaning as in rule 404.3:

Note that New Zealand Cape Town vessels and foreign Cape Town vessels are, by definition, ships.

New Zealand ship means a ship that is registered under the Ship Registration Act 1992; and includes a ship that is not registered under that Act but is required or entitled to be registered under that Act:

owner means—

(a) In relation to a ship registered in New Zealand under the Ship Registration Act 1992, the registered owner of the ship:

(b) In relation to a ship registered in any place outside New Zealand, the registered owner of the ship:

(c) In relation to a ship to which paragraph (a) or (b) of this definition applies, where by virtue of any charter or demise or for any other reason, the registered owner is not responsible for the management of the ship, the charterer or other person who is for the time being so responsible:

(d) In relation to an unregistered ship or a registered ship that does not have a registered owner, the person who is for the time being responsible for the management of the ship:

Part means a group of rules made under the Maritime Transport Act 1994:

Record of Equipment means the supplement to the International Fishing Vessel Safety Certificate providing details of equipment listed in the Appendix of the Agreement.

sailing ship means a ship that—

(a) is designed to be navigated under wind power and for which any motor provided is an auxiliary means of propulsion; or

(b) possesses a non-dimensional ratio of (sail area) divided by (volume of displacement)²/₃ of more than 9:

Sea Area A4 has the same meaning as defined in SOLAS Chapter IV regulation 2:

ship has the same meaning as in section 2 of the Act:

sister ship means a ship that is—

(a) built to the same lines plan as a ship to which subpart A applies that has approved stability data; and

(b) in all respects, similar in construction and outfit as a ship to which subpart A applies that has approved stability data:

SOLAS means the International Convention for the Safety of Life at Sea 1974:

superstructure means the decked structure on the working deck extending from side to side of the ship, or with the side plating not being inboard of the shell plating more than 4 percent of the maximum breadth of the ship measured amidships:

superstructure deck means the complete or partial deck forming the top of a superstructure, deckhouse, or other erection situated at a height of not less than 1.8 metres above the working deck. The top of such superstructure, deckhouse, or other erection must be treated in the same way as the working deck if less than 1.8 metres above the working deck:
Surveyor means a person who holds a current Certificate of Surveyor Recognition under Part 44:

Unlimited area has the same meaning as in Part 20:

Vessel's design for the purposes of this Part, includes the vessel's structural integrity, watertightness and weathertightness, means of egress and access, intact stability and reserve of buoyancy, the vessel's damage stability and buoyancy requirements, and the provision of machinery and other installed systems and equipment necessary for the safe working of the vessel:

VHF (very high frequency) means the frequency spectrum between 30MHz and 300MHz:

Watertight means capable of preventing the passage of water through the structure in any direction under a head of water for which the surrounding structure is designed:

Weathertight means that in any sea condition water will not penetrate into the vessel:

Working deck means the lowest complete deck above the deepest operating waterline from which fishing is undertaken. Where two or more complete decks are fitted a lower deck may be accepted as a working deck provided that the deck is situated above the deepest operating waterline.

404.03 Interpretation

(1) A reference to a chapter or a regulation of the Agreement is a reference to a chapter or a regulation in the annex to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977, as modified by the 1993 Torremolinos Protocol and the Cape Town Agreement, as modified further from time to time.

(2) Where a matter in these rules is left to the Director to determine (for example where the matter must be "acceptable to the Director") then the means of complying with the rule may be set out in guidance material as an Acceptable Means of Compliance (AMOC) and published on the MNZ website.

Note the Regulatory Systems (Transport) Amendment Bill contains provisions enabling the Director to make transport instruments. It is possible that, subject to the outcome of that Bill, an AMOC may be replaced by a transport instrument.

(3) Where a rule in Part 404 requires compliance with a provision in the Agreement and that provision refers to a power or function of the Administration, that power or function may be exercised by the Director.

For example refer to reg 1(2)(c) of chapter V of the Agreement, which states "However, the Administration may increase this area for public spaces". Compare reg 23(1)(a) of chapter IV, which states "Means may be provided to the satisfaction of the Administration for ...".

Where such powers and functions in the Agreement are not directly referenced in a rule, subrule (3) enables the the Director to exercise those powers and functions, for example by way of an AMOC (acceptable means of compliance) where appropriate.

404.04 to 404.09 Reserved

Rule numbers are reserved to provide space for any future amendments. They are also used to align with rules in Part 40D to allow the reader to compare a provision here with a similar provision in Part 40D.
SUBPART A

NEW ZEALAND CAPE TOWN VESSELS

CHAPTER 1  GENERAL

Section 1 Definitions, application of subpart A, and compliance

404.1 Application of subpart A

Subpart A applies to New Zealand Cape Town vessels.

404.2 Definitions

In addition to the definitions in rule 404.02, in this subpart, unless the context otherwise requires—

dead ship condition means the condition under which the main propulsion plant, boilers, and auxiliaries are not in operation due to the absence of power:

definition of “dead ship condition” per CT ChIV reg3(b)

International Fishing Vessel Safety Certificate means a certificate issued by the Director under rule 404.11:

International Fishing Vessel Exemption Certificate means a certificate issued by the Director under rule 404.11:

Part A of chapter I of the Agreement means chapter 1 of the regulations of the Agreement, before regulation 6:

Part B of chapter I of the Agreement means chapter 1 of the regulations of the Agreement, from regulation 6 onwards:

404.3 Definition of New Zealand Cape Town vessel and major conversion

(1) New Zealand Cape Town vessel means a ship that—

(a) is a New Zealand ship; and

(b) is a "fishing vessel" as defined in Article 2 of the Torremolinos Protocol of 1993 Relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 (the “1993 Torremolinos Protocol”), subject to the exclusions in Article 3(2) of the 1993 Torremolinos Protocol; and

(c) is a “new vessel” as defined in regulation 2 of chapter 1 of the Agreement; and

(d) is 24 metres or more in length; and

(e) operates in the unlimited area or is certificated to operate in the unlimited area.

(2) For the purposes of subrule (1)(c), the date of entry into force referred to in regulation 2 of chapter 1 of the Agreement is 11 October 2023.

(3) The term "major conversion", used in the definition of “new vessel” in regulation 2 of chapter 1 of the Agreement referred to in subrule (1)(c), means a conversion of an existing ship—

(a) that substantially alters the dimensions or carrying capacity of the ship; or

(b) that changes the type of the ship; or
c) that the Director considers is intended to substantially prolong its life; or

d) that otherwise so alters the ship that, if it were a new ship, it would become subject to relevant provisions of the Agreement not applicable to it as an existing ship.

The definition of “new” in the Agreement excludes a ship delivered within 3 years after entry into force of the Agreement if the contract to build or convert started before the in-force date. If there is no contract then the date the keel is laid, or construction identifiable with a specific vessel begins; or assembly has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is less.

Comment sought

Is it appropriate to define the term “major conversion”? If so, is the proposed definition appropriate?

The Agreement does not define “major conversion”. The proposed definition is taken from MARPOL Annex I.

404.4 Compliance

(1) The owner of a New Zealand Cape Town vessel must hold an International Fishing Vessel Safety Certificate, supplemented by a Record of Equipment, and, if applicable, an International Fishing Vessel Exemption Certificate, for the vessel.

(2) The owner and the master of the vessel must—

(a) ensure the condition of the vessel and its equipment is maintained in accordance with the requirements of this subpart; and

(b) ensure the vessel is equipped in accordance with the requirements of this subpart; and

(c) comply with the requirements of this subpart.

404.5 to 404.9 Reserved

Section 2 Certificates

404.10 Application for certificate

(1) The applicant for an International Fishing Vessel Safety Certificate, or an International Fishing Vessel Exemption Certificate, must make an application in accordance with section 35 of the Act, and include, in a form required by the Director—

(a) a certificate of survey issued in accordance with rule 404.21; and

(b) details for the Record of Equipment; and

(c) such further particulars relating to the applicant or the vessel and details of the vessel’s construction, design, and equipment, as may be required by the Director.

(2) Every application must be submitted to the Director, with a payment of the appropriate application fee prescribed by the regulations made under the Act.
404.11 Issue and renewal of certificates

(1) Upon application by the owner under section 35 of the Act, the Director may, in accordance with section 41 of the Act and regulation 11 of chapter 1 of the Agreement, and in the form prescribed in the Appendix of the Agreement, issue—

(a) an International Fishing Vessel Safety Certificate, supplemented by a Record of Equipment; and
(b) if the vessel has an exemption in accordance with rule 404.15, an International Fishing Vessel Exemption Certificate—

for any vessel that has been surveyed in accordance with the Agreement.

(2) An International Fishing Vessel Safety Certificate is a maritime document.

(3) An International Fishing Vessel Exemption Certificate is a maritime document.

404.12 Privileges of an International Fishing Vessel Safety Certificate

An International Fishing Vessel Safety Certificate together with any applicable International Fishing Vessel Exemption Certificate entitle the holder to operate a vessel to which this subpart applies as a fishing vessel in the unlimited area subject to any conditions imposed under section 34(3) of the Act by the Director and specified on the certificate.

The conditions on the certificates will reflect CT Chl reg 13(8)

404.13 Duration of Certificate

(1) An International Fishing Vessel Safety Certificate may be issued for a period not exceeding 5 years.

(2) An International Fishing Vessel Exemption Certificate may be issued for a period not exceeding 5 years but, in any case, must not exceed the date of expiry of the International Fishing Vessel Safety Certificate to which it relates.

CT Chl reg 13(1)

404.14 Certificates required to be kept on board

The master of a New Zealand Cape Town vessel must ensure that the vessel’s International Fishing Vessel Safety Certificate, supplemented by the Record of Equipment, and, where applicable, International Fishing Vessel Exemption Certificate—

(a) is kept on board the vessel at all times; and
(b) is produced when requested by the Director.

CT Chl reg 15

404.15 Exemptions

(1) Subject to and in accordance with section 47 of the Act, the Director may exempt any vessel that embodies features of a novel kind from any of the provisions of this subpart described in regulation 3(1) of chapter 1 of the Agreement.

(2) Subject to and in accordance with section 47 of the Act, the Director may exempt any vessel from any of the provisions of this subpart as described in regulation 3(2) of chapter 1 of the Agreement.
Subject to and in accordance with section 47 of the Act, the Director may exempt any vessel from undergoing an annual survey as described in regulation 1(6) of chapter 1 of the Agreement.

Refer rule 404.21(3) where comment is sought whether to remove the above subrule (3) so as not to require an annual survey.

### 404.16 Equivalents

Subject to and in accordance with section 47 of the Act, the Director may exempt an equivalent to any fitting, material, appliance, apparatus to be fitted or carried, or other provision to be made in a vessel required by this subpart, if the Director is satisfied by trial of such equivalent or otherwise, that it is at least as effective as that required by the provisions of this subpart.

CT ChI reg4

### 404.17 Additional safety equipment (40D.5)

The owner and the master of a New Zealand Cape Town vessel that is provided with any—

(a) life saving appliances additional to those required by rule 404.190; or
(b) fire appliances additional to those required by rules 404.130 to 404.133, as applicable; or
(c) radiocommunications equipment additional to that required by rule 404.210; or
(d) navigation lights, shapes and sound signals additional to those required by Part 22; or
(e) navigation equipment additional to that required by Part 45—

must ensure that such additional appliances and equipment meet the applicable standard required by this subpart, and are well maintained and in good working order.

### 404.18 to 404.19 Reserved

### Section 3 Design and survey

### 404.20 Design (40D.7)

(1) The owner of a New Zealand Cape Town vessel must ensure that either subrule (a) or (b) is complied with as follows:

(a) the vessel’s design is approved by a surveyor, who holds a current Certificate of Surveyor Recognition that entitles the surveyor to perform that function, as—
   (i) fit for its intended service and intended operating limits; and
   (ii) complying with all applicable maritime and marine protection rules; and
   (iii) complying with all applicable standards in the Agreement:

(b) the vessel is certificated in accordance with rule 404.30(2).

(1A) The owner of a New Zealand Cape Town vessel must ensure that, if the vessel undergoes major alteration or permanently changes its operating limits, the vessel’s design is approved by a surveyor, who holds a current Certificate of Surveyor Recognition that entitles the surveyor to perform that function, as—

(i) fit for its intended service and intended operating limits; and
(ii) complying with all applicable maritime and marine protection rules; and
(iii) complying with all applicable standards in the Agreement.

404.21 Survey (40D.8)

(1) A surveyor must not issue a certificate of survey unless the surveyor is satisfied that—
(a) the vessel has had its design approved in accordance with rule 404.20; and
(b) the vessel complies with all applicable maritime rules and marine protection rules; and
(c) the vessel and the vessel’s equipment comply with all applicable standards of the Agreement and are in all respects fit for its intended use and operating limits; and
(d) the vessel is equipped in accordance with the standards of the Agreement.

(2) The owner must ensure a surveyor completes the surveys and inspections in accordance with Part B of Chapter I of the Agreement.

[(3) An annual survey, specified in regulations 7(1)(d) and 9(1)(d) of Chapter I of the Agreement, is not required.]

Comment sought
Should subrule (3) be inserted and delete rule 404.15(3) so that annual survey will not be required?

(4) Upon completion of—
(a) surveys or inspections of life-saving appliances and other equipment of a vessel referred to in regulation 7 of Chapter I of the Agreement; or
(b) surveys or inspections of radio installations of vessels referred to in regulation 8 of Chapter I of the Agreement; or
(c) surveys or inspections of structure, machinery, or equipment of a vessel referred to in regulation 9 of Chapter I of the Agreement—

the surveyor who undertook the survey or inspection must endorse the International Fishing Vessel Safety Certificate related to the vessel in accordance with regulation 7(3), 8(3), or 9(3), subject to regulations 13(4), 13(7), and 13(8), of Chapter I of the Agreement as applicable.

(5) The owner and the master of a New Zealand Cape Town vessel must ensure that after the survey that takes into account those matters prescribed in subrule (1), no changes are made in the structural arrangements, machinery, equipment, and other items covered by the survey, without the approval of a surveyor.

404.22 to 404.29 Reserved
CHAPTER 2 CONSTRUCTION, WATERTIGHT INTEGRITY, AND EQUIPMENT

404.30 Construction (40D.9)

(1) A vessel must—
   (a) be fitted with a weathertight weather deck throughout the length of the vessel; and
   (b) be such that the strength and construction of the hull, superstructures, deckhouses, machinery casings, companionways and any other structures are sufficient to withstand the sea and weather conditions likely to be encountered in the vessel's operating limits.

(2) A vessel complies with subrule (1)(b) if any one of the following subrules (a) to (c) is complied with:
   (a) the vessel was constructed under survey and has been certified as being constructed in accordance with hull or full certification standards, by any one of the following classification societies:
      (i) American Bureau of Shipping:
      (ii) Bureau Veritas:
      (iii) DNV GL AS, DNV GL, DNV, or GL:
      (iv) Lloyd's Register of Shipping:
      (v) Nippon Kaiji Kyokai:
   (b) the vessel was constructed under survey, and—
      (i) has been certified by a marine safety authority of one of the States or Territories of Australia as complying with the design and construction requirements that applied as at the vessel's date of build, of either the—
         (aa) Uniform Shipping Laws Code; or—
         (bb) National Standard for Commercial Vessels; and
      (ii) the Director considers the operating limits stated in the certificate are equivalent to the vessel's operating limits in New Zealand:
   (c) the vessel—
      (i) has undergone design approval in accordance with rule 404.20; and
      (ii) has undergone a structural survey by a surveyor who holds a current Certificate of Surveyor Recognition that entitles the surveyor to perform that function; and
      (iii) is fit for its intended purpose to the satisfaction of a surveyor.

(3) A vessel that is not built in accordance with subrule (2) must be constructed under survey by a surveyor who holds a current Certificate of Surveyor Recognition that entitles the surveyor to perform that function for that purpose.

(4) Reserved

404.31 Watertight bulkheads (40D.11)

(1) Except as provided in subrule (7), every vessel must be fitted with a vertically continuous watertight collision bulkhead that extends to the uppermost continuous deck.

(2) Reserved

(3) The position of the collision bulkhead, required by subrule (1), measured aft of the foreside of the stem at the design waterline must be between the limits given in Table 1

<p>| Table 1 |</p>
<table>
<thead>
<tr>
<th>Vessel</th>
<th>Minimum (metres)</th>
<th>Maximum (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 45 metres in length</td>
<td>0.05L</td>
<td>0.05L + 1.35</td>
</tr>
<tr>
<td>45 or more metres in length</td>
<td>0.05L</td>
<td>0.08L</td>
</tr>
</tbody>
</table>

(4) Each vessel must be fitted with watertight bulkheads extending to the first deck above the design waterline, at each end of the machinery space.

(5) Each vessel must be fitted with an after peak watertight bulkhead forward of the rudder stock which—
   (a) encloses the stern tubes in a watertight compartment; and
   (b) extends to the first deck above the design waterline.

(6) Each vessel of 75 metres or more in length must be fitted with a watertight double bottom, as far as practicable, between the collision bulkhead and the after peak bulkhead.

(7) Wood bulkheads in any wooden boat must be watertight as far as practicable.

(8) For any vessel the openings in watertight bulkheads must be—
   (a) the minimum number compatible with the general arrangement and operational needs of the vessel; and
   (b) fitted with satisfactory watertight closing appliances of an equivalent strength to the adjacent unpierced structure.

(9) Pipes piercing the collision bulkhead of any vessel, must be fitted with suitable valves operable from above the working deck with the valve chest secured at the collision bulkhead inside the fore peak.

(10) Reserved

(11) In any vessel, no door, manhole, ventilation duct or any other opening must be fitted in the collision bulkhead below the working deck.

(12) If a pipe, scupper, electric cable, or other equipment is carried through a watertight bulkhead in any vessel—
   (a) it must be located as high as practicable; and
   (b) such provisions as are necessary must be made to ensure the watertightness of the bulkhead is maintained.

(13) Where a forecastle is fitted to any vessel, and the forecastle extends aft of the position of the collision bulkhead, the bulkhead must be extended weathertight to the forecastle deck.

(14) The extension required by subrule (13), is not required to be fitted directly over the bulkhead below provided—
   (a) it is located within the limits given in subrule (3); and
   (b) the part of the deck that forms the step is made weathertight.

(15) Any openings in the extension required by subrule (13) must be—
   (a) kept to a minimum compatible with the design and operation of the vessel; and
   (b) capable of being closed weathertight.

404.32 Watertight doors (40D.12)

(1) In any vessel of less than 45 metres in length, watertight doors must be of the sliding type or hinged type that—
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(a) are capable of being operated locally from each side of the door; and
(b) are normally kept closed at sea; and
(c) have a notice attached on each side of the door to state that the door must be kept closed at sea.

(2) In any vessel of 45 metres or more in length, watertight doors must be—
   (a) of the sliding type in—
       (i) spaces where it is intended to open them at sea and if located with their sills below the deepest operating waterline, unless the surveyor considers it to be impracticable or unnecessary taking into account the type and operation of the vessel; and
       (ii) the lower part of a machinery space where there is access from it to a shaft tunnel; and
   (b) in all other cases, of either—
       (i) the sliding type; or
       (ii) the hinged type, provided they comply with the requirements in subrule (1)(a) to (c).

(3) Sliding watertight doors must be capable of being operated when the vessel is listed up to 15° either way.

(4) Sliding watertight doors, whether manually operated or otherwise, must—
   (a) be capable of being operated locally from each side of the door; and
   (b) in any vessel of 45 metres or more in length, be capable of being operated by remote control from an accessible position above the working deck, except when the doors are fitted in crew accommodation spaces.

(5) There must be provided at remote operating positions a means to indicate when a sliding watertight door is open or closed.

404.33 Weathertight doors (40D.13) (CT ChII reg 4)

(1) All access openings in enclosed superstructures and enclosed deck erections through which water could enter and endanger the vessel must be fitted with doors—
   (a) permanently attached to the deck superstructure, framed and stiffened so that the whole structure is of equivalent strength to the unpierced structure, and weathertight when closed; and
   (b) capable of being opened from each side.

(2) The height above deck of sills in those doorways, in companionways, superstructure and machinery casings that give direct access to parts of the deck exposed to the weather and sea must be as given in Table 2.

(3) Where an opening is provided in the side of a superstructure or deck erection for the purpose of discharging fish waste overboard, a weathertight closing arrangement must be fitted to prevent water entering the enclosed superstructure or deck erection from that opening.

(4) Each fish flap on a stern trawler must be power-operated and capable of being controlled from a position that provides an unobstructed view of the operation of the flap.

CT ChII reg (2)

Table 2
Minimum height of sill on working deck | Minimum height of sill on superstructure deck
---|---
600 mm* | 300 mm*

* Where operating experience has shown justification, and on approval of the surveyor, these heights, except in the doorways giving direct access to machinery spaces, may be reduced to not less than 380 mm on the working deck and 150 mm on a superstructure deck.

404.34 Hatchway openings and covers and other deck openings (40D.14) *(CT ChII reg 4, 5, 6, 8)*

(1) All hatchway openings—

(a) must be provided with covers; and

(b) if intended to be open during fishing operations, must be arranged near to the vessel's centreline, except where other hatch positions are approved by the surveyor.

(1A) Dimensions of access hatches must not be less than 600 mm by 600 mm or less than 600 mm diameter.

CT ChVI reg 2(2)

(2) Metal covers must—

(a) be fitted with clamping devices and gaskets sufficient to ensure weathertightness; and

(b) have their strength calculated for the following loads:

(i) 10.0 kN/m² for vessels of 24 metres in length; and

(ii) 17.0 kN/m² for vessels of 100 metres or more in length.

For lengths of more than 24 metres and less than 100 metres, the load values must be determined by interpolation.

The surveyor may permit reduced loads of not less than 75% of the above values for covers to hatchways situated on the superstructure deck in a position abaft a point located 0.25L from the forward perpendicular. If the cover is subject to a cargo load greater than that given above, this must be used in the calculation. For mild steel covers, the maximum stress calculated from the above loading and multiplied by 4.25 is not to exceed the minimum ultimate strength of the mild steel. Also the deflections must not be greater than 0.0028 times the span. Covers made of other metals must be of equivalent strength to those of mild steel and must have sufficient stiffness to ensure weathertightness under the loads specified above.

(3) Reserved

(4) Non-metal covers must not be used on any vessel.

(5) The height above deck of hatchway coamings must be as given in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Minimum height of coaming on working deck</th>
<th>Minimum height of coaming on superstructure deck</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 mm</td>
<td>300 mm</td>
</tr>
</tbody>
</table>
Where operating experience has shown justification, and on approval by the surveyor, the height of coamings may be reduced, or the coamings omitted entirely, provided that the safety of the vessel is not thereby impaired. In such cases, the hatchway opening must be kept as small as practicable and the covers permanently attached by hinges or equivalent means. The covers must be capable of being rapidly closed, and battened down or otherwise secured by arrangements that are acceptable to the surveyor.

(6) If a manhole, flush deck scuttle or hatch in the deck is required to be fitted in relation to a fishing operation, the manhole, flush deck scuttle or hatch must—

(a) be of the screw, bayonet, or equivalent type; and
(b) be capable of being closed watertight; and
(c) in the case of a hatch, have a cover that can be permanently attached to an adjacent structure.

(7) Every opening in the working or superstructure deck must be protected by an enclosed structure fitted with one or more weathertight doors or devices equivalent to weathertight doors, unless the opening is a hatchway, machinery space opening, manhole, or flush deck scuttle.

(8) Every companionway must be situated—

(a) as close as practicable to the centreline of the vessel; and
(b) to comply with the applicable stability requirements in rule 404.51.

(9) Every hinged cover of a hatchway or other opening must be protected against accidental closure by a positive securing device.

(10) The owner of a fishing vessel must ensure that—

(a) every escape hatch must be capable of being opened from each side of its cover; and
(b) every hinged escape hatch cover must be protected against accidental closing; and
(c) every heavy cover on an escape hatch must be fitted with appropriate counterweights; and
(d) the dimensions and location of escape hatches must be to the satisfaction of the surveyor; and
(e) if deemed necessary by a surveyor, hand holds or other aids must be fitted to enable effective use of the escape hatch.

404.35 Machinery space openings (40D.15)

Machinery space openings in weather decks must be—

(a) framed and enclosed by casings of a strength equivalent to the adjacent superstructure; and
(b) if they are external access openings in the casings, fitted with doors that comply with rule 404.33; and
(c) if they are openings in the casing other than access openings, fitted with covers of equivalent strength to the unpierced structure, permanently attached to the casing, and capable of being closed weathertight.

404.36 Reserved

404.37 Ventilators (40D.17) (CT Chll reg 9)

(A1) A ventilator opening must not be located below the working deck or in the side of the hull.
1. Coamings of ventilators must be—
   (a) of equivalent strength to the adjacent structure; and
   (b) except as provided in subrule (2), capable of being closed weathertight by closing appliances permanently attached to the ventilator or adjacent structure.

2. Closing appliances need not be fitted to ventilators the coamings of which extend to more than the heights above the deck shown in Table 4.

   Table 4
<table>
<thead>
<tr>
<th>Vessel</th>
<th>Height above working deck</th>
<th>Height above superstructure deck</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 metres or more in length</td>
<td>4.5 metres</td>
<td>2.3 metres</td>
</tr>
<tr>
<td>less than 45 metres in length</td>
<td>3.4 metres</td>
<td>1.7 metres</td>
</tr>
</tbody>
</table>

3. Reserved

4. Where the coaming of any ventilator exceeds 900 mm in height it must be adequately supported.

5. The height above deck of machinery space ventilator coamings must be acceptable to the surveyor. Other ventilator coaming heights above deck must be in accordance with Table 5.

   Table 5
<table>
<thead>
<tr>
<th>Vessel</th>
<th>Minimum height above working deck</th>
<th>Minimum height above superstructure deck</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 metres or more in length</td>
<td>900 mm</td>
<td>760 mm</td>
</tr>
<tr>
<td>less than 45 metres in length</td>
<td>760 mm</td>
<td>450 mm</td>
</tr>
</tbody>
</table>

6. Every vessel must have a means of closing off the air to every engine room vent.

404.38 Air pipes (40D.18) (CT ChII reg 10)

1. Where air pipes to tanks and void spaces below deck extend above the working or superstructure decks—
   (a) the exposed parts of the pipes must be:
      (i) of equivalent strength to the adjacent structures; and
      (ii) fitted with appropriate protection; and
   (b) openings of air pipes of more than 30 mm bore must be provided with a means of closing that is permanently attached to the pipe or adjacent structure.

2. The height of air pipes above deck to the point where water may have access below must be—
   (a) at least 760 mm on the working deck; and
   (b) at least 450 mm on the superstructure deck;
   provided that the surveyor may accept a reduction in the height of an air pipe to avoid interference with the fishing operations.

404.39 Sounding devices (40D.19) (CT ChII reg 11)

1. Sounding devices that are to the satisfaction of the surveyor must be fitted—
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(a) to the bilges of those compartments that are not readily accessible at all times during the voyage; and
(b) to all tanks and cofferdams.

(2) Where sounding pipes are fitted—
   (a) their upper ends must be extended:
      (i) to a readily accessible position; and
      (ii) where practicable, above the working deck; and
   (b) their openings must be provided with a permanently attached means of closing.

(3) Sounding pipes that are not extended above the working deck, as referred to in subrule (2)(a)(ii), must be fitted with automatic self-closing devices.

404.40 Portlights and windows (40D.20) (CT Chll reg 12)

(1) Portlights to spaces below the working deck and to spaces within the enclosed structures on that deck must be fitted with hinged deadlights capable of being closed watertight. The surveyor may accept portlights without deadlights in side and aft bulkheads of deckhouses on the working deck if satisfied the safety of the vessel will not be impaired.

(2) A portlight must not be fitted in such a position that its sill is less than 500 mm above the design waterline.

(3) Portlights fitted less than 1000 mm above the design waterline must be of the fixed type.

(4) Portlights, together with their glasses and deadlights must be—
   (a) of construction to the satisfaction of the surveyor; and
   (b) suitably protected if prone to be damaged by fishing gear.

(5) Toughened safety glass or suitable permanently transparent material must be fitted in all wheelhouse windows and the windows of other structures above the working deck. The thickness of glass or other material used, and the means of securing the windows and the width of the bearing surfaces must be to the satisfaction of the surveyor.

404.41 Inlets, discharges, and sea water piping (40D.21) (CT Chll reg 13)

(1) Discharges led through the shell, either from spaces below the working deck or from within enclosed superstructures or deckhouses on the working deck fitted with doors that comply with rule 404.33, must be fitted with accessible means for preventing water from passing inboard.

(2) Except as provided in subrule (4), each separate discharge led through the shell must have an automatic non-return valve with a positive means of closing it from an accessible position, unless the surveyor considers that the entry of water into the vessel through the opening is not likely to lead to dangerous flooding and that the thickness of piping is sufficient.

(3) The means for operating any positive action valve must be provided with an indicator for the means of operating the valve that shows whether the valve is open or closed.

(4) In machinery spaces where crew are present during a voyage, the main and auxiliary sea inlets and discharges may be controlled locally. The controls must be accessible and provided with indicators showing whether the valves are open or closed.

(5) Fittings attached to the shell and the valves required by subrule (1) or (2) must be of steel, bronze, or other material acceptable to the surveyor.

(6) All pipes that carry sea water from a sea inlet must be of marine quality metal, except that suitable reinforced synthetic rubber piping may be used in short lengths for vibration damping.

(7) Where non-metallic piping or reinforced synthetic rubber piping is used it must—
(a) have a high resistance to salt water, fuel oil, heat, and vibration; and
(b) be capable of operating under suction without collapse and resultant reduction in effective area; and
(c) for non-metallic piping, have resistance to impact damage; and
(d) be readily visible and protected against mechanical damage and contact with hot surfaces.

(8) Flammable material must not be used for inlet, discharge, or sea water piping in engine room spaces.

(9) Reserved

(10) Engine exhaust outlets that penetrate the hull below the deck must be provided with an efficient means to prevent backflooding into the hull through the exhaust system.

(11) The materials used in the piping system and their connection to the vessel must be metallurgically compatible.

404.42 Water freeing arrangements (40D.23) (CT ChII reg 14 paras 1, 2, 3, 4, 6)

(1) Where bulwarks on open weather parts of the working deck form wells, the minimum freeing port area (A) in square metres, on each side of the vessel for each well on the working deck must be determined in relation to the length (ℓ) and height of bulwark in the well as follows—

(a) \[ A = K \times ℓ \]
   where: \[ K = 0.07 \]
   (ℓ need not be taken as greater than 70 percent of the vessel's length)

(b) where the bulwark is more than 1.2 metres in average height the required area must be increased by 0.004 square metres per metre of length of well for each 100 mm difference in height; and

(c) where the bulwark is less than 900 mm in average height, the required area may be decreased by 0.004 square metres per metre of length of well for each 100 mm difference in height.

(2) The freeing port area calculated according to subrule (1) must be increased where the surveyor considers that the vessel's sheer is not sufficient to ensure that the deck is rapidly and effectively freed of water.

(3) The minimum freeing port area for each well on an open weather superstructure deck must be not less than one half the area (A) given in subrule (1).

(4) For any vessel to which this rule applies where the sea may enter over the stern and flood the deck into a superstructure that is open at its aft end, freeing ports must be fitted in the sides of the open superstructure that are acceptable to the surveyor.

(5) Freeing ports must be so arranged along the length of bulwarks as to ensure that the deck is freed of water most rapidly and effectively. Lower edges of freeing ports must be as near to the deck as practicable.

(6) Freeing ports over 300 mm in depth must be fitted with bars spaced not more than 230 mm nor less than 150 mm apart, or with other suitable protective arrangements approved by the surveyor. If fitted, the construction of freeing port covers must be approved by the surveyor. Sliding covers must not be fitted and no locking devices must be fitted to hinged covers.

(7) The master must ensure that freeing ports are maintained and kept free of any obstruction or means of permanent closing when the vessel is at sea.

(8) Poundboards and means for stowage of the fishing gear must be arranged so that the effectiveness of freeing ports will not be impaired.
Poundboards must be so constructed that they—
(a) can be locked in position when in use; and
(b) do not hamper the discharge of shipped water.

CT ChII reg 14(5)

404.43 Reserved

404.44 Anchor and mooring equipment (40D.71 to 40D.74) (CT ChII reg 15)

(1) The owner of any vessel must ensure that the vessel is provided with—
(a) anchoring equipment, anchor chains or wire ropes, stoppers, a windlass or other arrangements for dropping and hoisting the anchor and for holding the vessel at anchor in all foreseeable service conditions; and
(b) mooring equipment for safe mooring in all operating conditions acceptable to the Director.

The proposed acceptable means of compliance (AMOC) with subrule (b) are set out at the end of these proposed rules as AMOC404.44

404.45 to 404.49 Reserved
CHAPTER 3  STABILITY AND ASSOCIATED SEAWORTHINESS

404.50  Sailing ships

(1) Rules 404.51 to 404.54 do not apply to sailing ships.
(2) Appendix 1 of Part 40E applies to sailing ships to which this subpart applies.
(3) A sailing ship’s intact stability must be determined and documented in accordance with Appendix 1 of Part 40E.

404.51  Intact stability (40D.33)

(1) Each vessel must comply with the intact stability requirements prescribed in subrules (2) to (7).
(2) Except as provided in subrule (3), the actual displacement and position of the centre of gravity for the lightship condition must be determined from the results of an inclining experiment conducted or witnessed by a surveyor.
(3) A sister ship is not required to conduct an inclining test provided the ship has a displacement check carried out that produces a result that is within a limit of the lead sister ship’s displacement that is satisfactory to a surveyor.
(4) The surveyor referred to in subrule (2) must—
   (a) produce curves of statical stability (GZ curves) for—
      (i) departure for the fishing grounds with full fuel, stores, ice, and fishing gear; and
      (ii) departure from the fishing grounds with full catch; and
      (iii) arrival at home port with full catch and 10% fuel and stores; and
      (iv) arrival at home port with 10% fuel, stores, and a minimum catch, that is normally to be 20% of a full catch but may be up to 40%, provided the surveyor is satisfied that operating patterns justify such a value; and
      (v) any other actual operating conditions the surveyor considers would produce the lowest values of the parameters contained in the criteria required by subrule (4)(c); and
   (b) in determining the righting lever curves (GZ curves), take the following into account—
      (i) allowance for the weight of wet fishing nets and other fishing gear on the deck; and
      (ii) homogeneous distribution of the catch, unless this is inconsistent with practice; and
      (iii) catch on deck, if anticipated, in operating conditions referred to in subrules (4)(a)(ii), (iii), and (v); and
      (iv) water ballast if carried; and
      (v) allowance for the free surface effect of liquids and, if applicable, catch carried; and
      (vi) where a vessel operates in areas where ice accretion is likely to occur, make the following icing allowance—
         (aa) 30 kg/m² on exposed weather decks and gangways; and
         (bb) 7.5 kg/m² for projected lateral area of each side of the vessel above the water plane; and
(cc) the projected lateral area of discontinuous surfaces of rail, spars (except masts) and rigging of vessels having no sails and the projected lateral area of other small objects must be computed by increasing the total projected area of continuous surfaces by 5% and the static moments of this area by 10%; and

(c) confirm that the curves of statical stability for the loaded conditions required by subrule (4)(a) meet the following criteria—

(i) the area under the righting lever curve (GZ curve) must not be less than—

(aa) 0.055 metre-radians up to 30° angle of heel; and

(bb) 0.090 metre-radians up to 40°; and

(ii) the area under the GZ curve between the angles of heel of 30° and 40° or between 30° and \( \theta_f \) if this angle is less than 40° must not be less than 0.03 metre-radians; and

(iii) the righting lever (GZ) must be at least 200 millimetres at an angle of heel equal to, or greater than, 30°; and

(iv) the maximum righting lever (GZmax) must occur at an angle of heel preferably exceeding 30°, but not less than 25°; and

(v) the initial metacentric height (GM)—

(aa) for single deck vessels of less than 70 metres in length, must not be less than 0.35 metres; or

(bb) for vessels of 70 metres in length and over with complete superstructure, may be reduced from 0.35 metres, to the satisfaction of the surveyor, but not be less than 0.15 metres; and

(vi) the range of positive stability must not be less than 60° and

(d) confirm that the angle of heel at which progressive flooding of fish holds could occur through hatches that remain open during fishing operations and that cannot rapidly be closed, is at least 20°, unless the stability criteria of subrule (4)(c) can be satisfied with the respective fish holds partially or completely flooded; and

(e) where arrangements other than bilge keels are provided to limit the angles of roll, be satisfied that the stability criteria given in subrule (4)(c) are maintained in all operating conditions; and

(f) taking account of the seasonal weather conditions, the sea states in which the vessel will operate, the type of vessel, and its mode of operation, be satisfied that a vessel is able to withstand—

(i) the effect of severe wind and rolling in associated sea conditions; and

(ii) the effect of water on deck.

(5) The stability information must be prepared in a form acceptable to the Director and must—

(a) be approved and supplied to the owner, by the surveyor referred to in subrule (2); and

(b) enable the master to assess with ease and certainty the stability of the vessel under various operating conditions; and

(c) include specific instructions to the master regarding those operating conditions that could adversely affect either the stability or trim of the vessel.

(6) The owner and the master of a vessel must ensure that the stability information prepared in accordance with subrule (5) is kept on board the vessel, and readily accessible at all times.
(7) If a vessel that was previously subject to an inclining test has undergone a major repair, or major alteration, the owner must ensure the stability information, prepared in accordance with subrule (5), is revised to the satisfaction of the surveyor.

404.52 Reserved

404.53 Freeboard (40D.35)

(1) The surveyor must be satisfied that the bow height of any vessel is sufficient to prevent the excessive shipping of water, taking into account—
   (a) the seasonal weather conditions; and
   (b) the sea states in which the vessel will operate; and
   (c) the type of vessel; and
   (d) the mode of operation.

(2) For any vessel, the following must be approved by the surveyor in accordance with subrule (3):
   (a) a minimum permissible operating freeboard; and
   (b) a maximum permissible trim, if applicable.

(3) A minimum permissible operating freeboard and, if used, a maximum permissible trim, must be—
   (a) such that in the associated operating condition, the stability criteria of rule 404.51(4) are satisfied, and the scantling draught is not exceeded; and
   (b) clearly noted in the stability information required by rules 404.51(5); and
   (c) posted up in the wheelhouse, in a prominent position, clearly visible to the master and crew of the vessel.

(4) Every vessel—
   (a) for which a minimum permissible operating freeboard is approved by a surveyor, must be marked with a freeboard line amidships, port, and starboard; and
   (b) where a maximum permissible trim by the stern is also approved by the surveyor, must be marked with a freeboard line on the transom or stern of the vessel to indicate the maximum permissible submergence of the transom or stern at that position.

(5) Every freeboard line required under subrule (4)(a) and (b)—
   (a) must be 300 mm long by 30 mm deep permanently marked and painted light on dark backgrounds or dark on light backgrounds; and
   (b) at its upper edge, must coincide with the maximum permissible operating draught.

404.54 Subdivision and damage stability

The owner of any vessel—
   (a) of 100 metres or more in length; and
   (b) that carries 100 or more persons on board during normal fishing operations—must ensure that the vessel is capable of remaining afloat with positive stability after the flooding of any one compartment.

404.55 to 404.59 Reserved
CHAPTER 4 MACHINERY AND ELECTRICAL INSTALLATIONS AND PERIODICALLY UNATTENDED MACHINERY SPACES

Section 1 GENERAL

404.60 General (40D.24)

(1) Main propulsion, control, steam pipe, fuel oil, compressed air, refrigeration systems, auxiliary machinery, boilers and other pressure vessels, piping and pumping arrangements, steering equipment and gears, shafts and couplings for power transmission must be—
(a) designed; and
(b) constructed; and
(c) tested; and
(d) installed; and
(e) serviced—
to the satisfaction of the surveyor. The surveyor must also be satisfied that this machinery and equipment is protected so as to reduce to a minimum any danger to persons on board.

(2) Where the main engine or engines are not fitted with hand starting arrangements, provision must be made for an alternative method of starting that—
(a) is on board the vessel; and
(b) operates without external aid.

(3) Machinery spaces must be designed and constructed so as to provide safe and free access to all machinery and its controls as well as to any parts that may require servicing. Such spaces must be adequately ventilated.

(3A) For vessels 45 metres or more in length, means must be provided whereby the machinery can be brought into operation from the dead ship condition without external aid.

(4) For vessels 45 metres or more in length, main propulsion machinery and all auxiliary machinery essential to the propulsion and the safety of the vessel must, as fitted, be capable of operating whether the vessel is upright or listed up to 15° either way under static conditions and up to 22.5° either way under dynamic conditions (that is, when rolling either way and simultaneously pitching (inclined dynamically) up to 7.5° by bow or stern).

(4A) For vessels 45 metres or more in length, every oil-fired steam boiler that is intended to operate without manual supervision must have safety arrangements that shut off the fuel supply and give an alarm in the case of low water level, air supply failure, or flame failure.

(4B) For vessels 45 metres or more in length, every steam boiler and every unfired steam generator must be provided with not less than two safety valves of adequate capacity.

CT ChIV reg 3 and 6

404.61 Propulsion and auxiliary machinery (40D.25)

(1) Sufficient astern power must be provided for adequate manoeuvrability of the vessel under all normal operating conditions.

(1A) For vessels 45 metres or more in length, the ability of the machinery to reverse the direction of thrust of the propeller in sufficient time and so to bring the vessel to rest
within a reasonable distance from maximum ahead service speed must be demonstrated at sea.

CT ChIV reg 5(2)

(2) Main and auxiliary machinery essential for the propulsion and safety of the vessel must be provided with effective means of control, and visual instrumentation indicating essential operating characteristics.

(3) Where applicable, means must be provided to protect against overpressure of main or auxiliary machinery including pressure vessels.

(4) Reserved

(5) Any sailing ship must be provided with an auxiliary motor as means of propulsion with adequate forward and astern power to safely navigate the vessel without the assistance of sails.

(6) For vessels 45 metres or more in length, special consideration must be given to the design, construction, and installation of propulsion machinery systems so that any mode of their vibrations do not cause undue stresses in such machinery systems in the normal operating ranges.

CT ChIV reg 3(5)

(7) For vessels 45 metres or more in length—

(a) internal combustion engines of a cylinder diameter greater than 200 millimetres or a crankcase volume greater than 0.6 cubic metres must be provided with crankcase explosion relief valves of an approved type with sufficient relief area; and

(b) main propulsion machinery and, where applicable, auxiliary machinery, must be provided with automatic shut-off arrangements in the case of failures, such as lubricating oil supply failure, which could lead rapidly to damage, complete breakdown or explosion; an advance alarm must also be provided so that warning is given before automatic shut-off.

CT ChIV reg 4(2)

(8) For vessels 45 metres or more in length, where remote control of propulsion machinery is provided from the wheelhouse, the following apply:

(a) under all operating conditions, including manoeuvering, the speed, direction of thrust and, if applicable, the pitch of the propeller must be fully controllable from the wheelhouse:

(b) the remote control referred to in sub-paragraph (a) must be performed by means of a control device acceptable to the Director with, where necessary, means of preventing overload of the propulsion machinery:

(c) the main propulsion machinery must be provided with an emergency stopping device in the wheelhouse and independent from the wheelhouse control system referred to in sub-paragraph (a):

(d) remote control of the propulsion machinery must be possible only from one station at a time; at any control station interlocked control units may be permitted. There must be at each station an indicator showing which station is in control of the propulsion machinery. The transfer of control between the wheelhouse and machinery spaces must be possible only in the machinery space or control room:

(e) indicators must be fitted in the wheelhouse for:

(i) propeller speed and direction in the case of fixed propellers:
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(ii) propeller speed and pitch position in the case of controllable pitch propellers:

(iii) advance alarm as required in subrule (7)(b):

(f) it must be possible to control the propulsion machinery locally, even in the case of failure in any part of the remote control system:

(g) unless otherwise acceptable to the Director, the design of the remote control system must be such that if it fails an alarm will be given and the pre-set speed and direction of thrust will be maintained until local control is in operation:

(h) special arrangements must be provided to ensure that automatic starting does not exhaust the starting possibilities. An alarm must be provided to indicate low starting air pressure and must be set at a level which will still permit main engine starting operations.

CT ChIV reg 8(1)

(9) For vessels 45 metres or more in length, where the main propulsion and associated machinery including sources of main electrical supply are provided with various degrees of automatic or remote control and are under continuous manned supervision from a control room, the control room must be so designed, equipped, and installed that the machinery operation will be as safe and effective as if it were under direct supervision.

CT ChIV reg 8(2)

(10) For vessels 45 metres or more in length, in general, automatic starting, operational, and control systems must include means for manually overriding the automatic means, even in the case of failure of any part of the automatic and remote control system.

CT ChIV reg 8(3)

404.62 Safety system for periodically unattended machinery spaces

(1) Rule 40D.224A applies to vessels 45 metres or more in length, with periodically unattended machinery spaces.

(2) A safety system must be provided as follows:

(a) any serious malfunction in machinery or boiler operations that presents an immediate danger must initiate the automatic shut-down of that part of the plant and an alarm must be given:

(b) shut-down of the propulsion system must not be automatically activated except in cases which could lead to serious damage, complete breakdown, or explosion:

(c) where arrangements for overriding the shut-down of the main propelling machinery are fitted, these must be such as to preclude inadvertent activation:

(d) visual means must be provided to show whether the shut-down override has been activated.

CT ChIV reg 24

404.63 Fire safety for periodically unattended machinery spaces

(1) The following applies to vessels 45 metres or more in length, with periodically unattended machinery spaces:

(a) special consideration must be given to high pressure fuel oil pipes, including, where practicable, ensuring leakages from such piping systems are collected in a suitable drain tank that is provided with a high level alarm:
(b) where daily service fuel oil tanks are filled automatically or by remote control, means must be provided to prevent overflow spillages; and similar consideration must be given to other equipment which treats flammable liquids automatically, for example fuel oil purifiers, which, whenever practicable, must be installed in a special space reserved for purifiers and their heaters:

(c) where fuel oil daily service tanks or settling tanks are fitted with heating arrangements, a high temperature alarm must be provided if the flashpoint of the fuel oil can be exceeded:

(d) an approved fire detection system based on a self-monitoring principle and including facilities for periodical testing must be installed in machinery spaces:

(e) the detection system must initiate both audible and visual alarm in the wheelhouse and in sufficient appropriate spaces to be heard and observed by persons on board, when the vessel is in harbour:

(f) the fire detection system must be fed automatically from an emergency source of power if the main source of power fails:

(g) internal combustion engines of 2,500 kW and over must be provided with crankcase oil mist detectors or engine bearing temperature detectors or equivalent devices:

(h) a fixed fire-extinguishing system acceptable to the Director must be provided that complies with the requirements of regulations 22 and 40 of Chapter V of the Agreement.

(2) For vessels 75 metres or more in length with periodically unattended machinery spaces provision must be made for immediate water delivery from the fire main system either by:

(a) remote starting arrangements of one of the main fire pumps in the wheelhouse and at the fire control station, if any; or

(b) permanent pressurisation of the fire main system, due regard being paid to the possibility of freezing.

CT ChI V reg 19

404.64 to 404.69 Reserved

Section 2 MACHINERY INSTALLATIONS

404.70 Steering gear (40D.26)

(1) Every vessel must be provided with efficient means of steering.

(1A) For vessels 45 metres or more in length—

(a) the main steering gear must, with the vessel at its maximum permissible operating draught, be capable of putting the rudder over from 35 degrees on one side to 35 degrees on the other side with the vessel running ahead at maximum service speed; and

(b) the rudder must be capable of being put over from 35 degrees on either side to 30 degrees on the other side in not more than 28 seconds, under the same conditions; and

(c) the main steering gear must be operated by power where necessary to fulfill the requirements in this subrule (1A).

Subrule (1A) included to reflect CT ChI V reg13(7)

(1B) For vessels 45 metres or more in length, the auxiliary means for actuating the rudder must be—
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(a) capable of putting the rudder over from 15 degrees on one side to 15 degrees on the other side in not more than 60 seconds with the vessel running at one half of its maximum service speed ahead or 7 knots whichever is the greater; and

(b) operated by power where necessary to fulfill the requirements in this subrule (1B).

Subrule (1B) included to reflect CT ChIV reg13(10)

(2) If a steering gear is fitted with remote control, arrangements must be made for emergency steering in the event of failure of the control. Such arrangements must provide power steering. The main steering gear and the means of emergency steering must be arranged so that a single failure in one of them will not render the other inoperative. Where the main steering gear comprises two or more identical power units an emergency steering gear need not be fitted if the main steering gear is capable of fully operating the rudder when any one of the units is out of operation.

Subrule (2) included to reflect CT ChIV reg13(10)

(3) The position of the rudder, if power operated, must be indicated in the wheelhouse.

Subrule (3) included to reflect CT ChIV reg13(3)

(3A) For vessels 45 metres or more in length, the rudder angle indication for power-operated steering gear must be independent of the steering gear control system.

Subrule (3A) included to reflect 2nd requirement in CT ChIV reg13(3)

(3B) For vessels 45 metres or more in length, in the event of failure of any of the steering gear units an alarm must be given in the wheelhouse.

Subrule (3A) included to reflect CT ChIV reg13(4)

(4) Indicators showing the motors of electric and electrohydraulic steering gear are operating must be installed in the wheelhouse.

Subrule (4) included to reflect CT ChIV reg13(5)

(4A) For vessels 45 metres or more in length, short circuit protection, an overload alarm and a no-voltage alarm must be provided for these circuits and motors; protection against excess current, if provided, must be for not less than twice the full load current of the motor or circuit so protected, and must be arranged to permit the passage of the appropriate starting currents.

Subrule (4A) included to reflect CT ChIV reg13(6)

(5) For vessels 45 metres or more in length—

(a) the main steering gear must be of adequate strength and sufficient to steer the vessel at maximum service speed; and

(b) the main steering gear and rudder stock must be so designed that they will not be damaged at maximum speed astern or by manoeuvring during fishing operations.

Subrule (5) included to reflect CT ChIV reg13(7)

(6) For vessels 45 metres or more in length, the main steering gear power unit must be arranged to start either by manual means in the wheelhouse or automatically when power is restored after a power failure.

Subrule (6) included to reflect CT ChIV reg13(9)

(7) For vessels 45 metres or more in length, the auxiliary means for actuating the rudder must be of adequate strength and sufficient to steer the vessel at navigable speed and capable of being brought speedily into action in an emergency.

Subrule (7) included to reflect CT ChIV reg13(10)

(8) For vessels 75 metres or more in length, electric or electrohydraulic steering gear must be served by at least two circuits fed from the main switchboard and these circuits must be as widely separated as possible.

Subrule (8) included to reflect CT ChIV reg13(11)
404.71 Fuel oil, lubricating oil, and other flammable oils (40D.27)

(1) Fuel tanks and their associated fittings must be constructed, tested, and installed to the satisfaction of the surveyor.

(2) For vessels 45 metres or more in length, the arrangements for fuel oil, lubricating oil, and other flammable oils must comply with the standards in Regulation 10 of Chapter IV of the Agreement.

CT ChIV reg10(9) to (11)

Note rule 404.03(3), which provides that any matter in regulation 10 of Chapter IV of the Agreement that is to be determined by the Administration is, for the purposes of this rule 404.71, a matter to be determined by the Director.

404.72 Bilge pumping arrangements (40D.28)

(1) Except as provided for in subrule (2), every vessel must have a bilge pumping system that, under all practical conditions and regardless of whether the vessel is upright or listed, is capable of efficiently pumping and draining any watertight compartment, other than a permanent oil or water tank, to a standard that is satisfactory to a surveyor.

(2) With the approval of the surveyor, each watertight compartment of less than 7% of the total under deck volume may be drained into an adjacent compartment by means of a self-closing valve or cock that must be—

(a) fitted outside the compartment being drained; and

(b) operable from a readily accessible position.

(3) reserved

(4) The bilge system must be provided with a bilge distribution box located in an accessible position and the valves in that bilge distribution box must be of a non-return type.

(5) In a vessel where fish handling or processing may cause quantities of water to accumulate in enclosed spaces, adequate drainage must be provided.

(6) For vessels 45 metres or more in length, bilge and ballast pumping systems arrangements must be as follows:

(a) the arrangements must prevent water passing from the sea or from water ballast spaces into holds or into machinery spaces or from one watertight compartment to another:

(b) the bilge connection to any pump that draws from the sea or from water ballast spaces must be fitted with either a non-return valve or a cock that cannot be opened simultaneously either to the bilges and to the sea or to the bilges and water ballast spaces:

(c) valves in bilge distribution boxes must be of a non-return type.

CT ChIV reg11(6)

404.73 Bilge pumps (rule 40D.28A)

(1) For vessels 45 metres or more in length—

(a) at least two independently driven power bilge pumps must be provided, one of which may be driven by the main engine. A ballast pump or other general service pump of sufficient capacity may be used as a power driven bilge pump; and

(b) power bilge pumps must be capable of giving a speed of water of at least 2 metres per second through the main bilge pipe which must have an internal diameter of at least:
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\[ d = 25 + 1.68 \left[ L(B+D) \right]^{1/2} \]

where:
- \( d \) is the internal diameter in millimetres:
- \( L \) is the length in metres:
- \( B \) is the breadth in metres (for multi-hull it is the breadth of a single hull):
- \( D \) is the moulded depth to the watertight deck in metres:

however, the actual internal diameter of the bilge main may be rounded off to the nearest standard size acceptable to the Director; and

c) each of the bilge pumps provided in accordance with this rule must be provided with a direct bilge suction, one of these suctions drawing from the port side of the machinery space and the other from the starboard side, except that in the case of a vessel of less than 75 metres in length only one bilge pump need be provided with a direct bilge suction; and

d) no bilge suction may have an inside diameter of less than 50 millimetres. The arrangement and sizing of the bilge system must be such that the full rated capacity of the pump specified above can be applied to each of the watertight compartments located between the collision and afterpeak bulkheads.

(2) For vessels 45 metres or more in length, a bilge ejector in combination with an independently driven high pressure sea-water pump may be installed as a substitute for one independently driven bilge pump required by subrule (1)(a), provided this arrangement is acceptable to the Director.

CT ChIV reg11(2) and (3)

404.74 Bilge piping (40D.28B)

(1) Bilge and ballast pumping systems must be arranged so as to prevent water passing from the sea or from water ballast spaces into holds or machinery spaces, or from one watertight compartment to another.

(2) The bilge connection to a pump that draws from the sea or from water ballast spaces must be fitted with a non-return valve, or a cock that cannot be opened simultaneously, to either—

(a) the bilges and the sea; or

(b) the bilges and the water ballast spaces.

(3) All manually operated bilge valves must be readily accessible.

(4) A strum box or strainer must be provided if the surveyor considers it necessary to protect the bilge suction line from obstruction.

(5) Strum box or strainer holes must not be greater than 10 mm in diameter and the aggregate area of the holes must be at least twice the area of the suction pipe.

(6) Bilge pipes must not be led through oil fuel, ballast or double bottom tanks, unless these pipes are of heavy gauge steel construction.

CT ChIV reg11(5)

(7) For vessels 45 metres or more in length, any bilge pipe piercing a collision bulkhead must be fitted with a positive means of closing at the bulkhead with remote control from the working deck with an indicator showing the position of the valve provided that, if the valve is fitted on the after side of the bulkhead and is readily accessible under all service conditions, the remote control may be dispensed with.
404.75 to 404.77  Reserved

404.78  Bilge alarm (40D.28C)

(1) A vessel that has inboard propulsion machinery and through hull fittings, not including an open or partially decked vessel, must be fitted with a bilge level device that is connected to an audible alarm located near the steering position.

(2) The power supply for the audible alarm must be available at all times persons are on board the vessel.

(3) A vessel fitted with an automatic submersible bilge pump in accordance with rule 404.73(1) must have a visual alarm at the steering position to indicate the pump is running.

404.79  Further alarm requirements for vessels 45m or more in length

(1) For vessels 75 metres or more in length, an engineers' alarm must be provided to be operated from the engine control room or at the manoeuvring platform as appropriate, and must be clearly audible in the engineers' accommodation.

(2) For vessels 45 metres or more in length, an alarm system must be provided to indicate any fault in periodically unattended machinery spaces requiring attention.

(3) For the alarm system required in subrule (2)—
   (a) the alarm system must be capable of sounding an audible alarm in the machinery space and must indicate visually each separate alarm function at a suitable position; and
   (b) the alarm system must have a connection to the engineers' cabins through a selector switch to ensure connection to one of those cabins and to the engineers' public rooms, if any, or an equivalent arrangement acceptable to the Director; and
   (c) an engineers' alarm and an alarm to the wheelhouse for persons on watch must be activated if an alarm function has not received attention within a limited period acceptable to the Director; and
   (d) audible and visual alarms must be activated in the wheelhouse for any situation requiring action by the responsible person on watch or which should be brought to that person's attention; and
   (e) the alarm system must, as far as is practicable, be designed on the fail-safe principle.

(4) The alarm system required in subrule (2) must be—
   (a) continuously powered with automatic change-over to a stand-by power supply in case of loss of normal power; and
   (b) activated by failure of the normal power supply; and
   (c) able to indicate at the same time more than one fault and the acceptance of any alarm must not inhibit another alarm.

(5) The alarm system required in subrule (2) must meet the following requirements:
   (a) acceptance at the position referred to in subrule (3)(a) of any alarm condition must be indicated at the positions where it was shown:
   (b) alarms must be maintained until they are accepted and the visual indications must remain until the fault has been corrected:
   (c) all alarms must automatically reset when the fault has been rectified.
404.80 Refrigeration systems for the preservation of the catch (40D.29)

(1) Refrigeration systems must be designed, constructed, tested and installed—
   (a) so as to take account of the safety of the system; and
   (b) so as to take account of the emission of substances from the refrigerant that are hazardous to human health and the environment; and
   (c) to the satisfaction of the surveyor.

(2) In refrigerating machinery spaces and refrigerating rooms, at least one exit must be capable of being opened from the inside. Where practicable, exits from spaces containing refrigerating machinery using toxic or flammable gas must not lead directly into any accommodation spaces.

(3) Where any refrigerant harmful to persons is used in a refrigeration system, at least two sets of breathing apparatus must be provided and maintained by the owner, one of which must be located in a position not likely to become inaccessible in the event of contamination by leaking refrigerant. Where self-contained breathing apparatus is used, spare cylinders must be provided by the owner.

(4) Adequate guidance for the safe operation and emergency procedures for the refrigeration system must be provided on board the vessel, which shall include the display of a suitable warning at the point of access to refrigerating machinery which uses toxic or flammable gas.

(5) Reserved

(5A) For vessels 45 metres or more in length, any space containing refrigerating machinery including condensers and gas tanks utilizing toxic refrigerants must, except as provided in subrule (5B)—
   (a) be separated from any adjacent space by gastight bulkheads; and
   (b) be fitted with a leak detection system having an indicator outside the space adjacent to the entrance; and
   (c) be provided with an independent ventilation system and a water spray system.

(5B) If the requirements in subrule (5A) are not practicable due to the size of the vessel, the refrigeration system may be installed in the machinery space provided—
   (a) the quantity of refrigerant used will not cause danger to persons in the machinery space, should all the gas escape; and
   (b) an alarm is fitted to give warning of a dangerous concentration of gas should any leakage occur in the space.

(5C) For vessels 45 metres or more in length, in refrigerating machinery spaces and refrigerating rooms—
   (a) alarms must be connected to the wheelhouse or control stations or escape exits to prevent persons being trapped; and
   (b) at least one exit from each such space must be capable of being opened from the inside; and
   (c) where practicable, exits from the spaces containing refrigerating machinery using toxic or flammable gas must not lead directly into any accommodation spaces.
404.81 Communication to and from wheelhouse

(1) For vessels 45 metres or more in length, two separate means of communication between the wheelhouse and the machinery space control platform must be provided, one of which shall be an engine-room telegraph.

(2) For vessels 75 metres or more in length, with periodically unattended machinery spaces, one of the two separate means of communication referred to in subrule (1) must be a reliable vocal communication.

(3) For vessels 75 metres or more in length, with periodically unattended machinery spaces, a reliable means of vocal communication must be provided between the wheelhouse and the engineers' accommodation.

CT ChIV regs 7 and 21

404.82 Noise

For vessels 45 metres or more in length, measures must be taken to reduce the effects of noise upon personnel in machinery spaces to levels acceptable to the Director.

CT ChIV reg12

404.83 to 404.89 Reserved

Section 3 ELECTRICAL

404.90 General (40D.30)

A vessel must be fitted with a permanently installed electrical system that—

(a) is not hazardous to crew; and

(b) is convenient to operate; and

(c) provides a high degree of reliability; and

(d) minimises the risk of fire.

404.91 Design (40D.30A)

(1) The owner of a vessel must ensure that the information set out in subrule (2) is provided in a clear and legible form to and approved by a surveyor recognised by the Director for that purpose before the vessel is built, or the electrical systems are altered or modified, as the case may be.

(2) The diagrams and information required by subrule (1) are—

(a) schematic diagrams of the main and any emergency power and lighting systems which include—

(i) a description of the type of electrical systems of supply installed; and

(ii) ratings of generators, transformers, batteries, charging sources, inverters, semi-conductor converters; and

(iii) all feeders connected to each switchboard; and

(iv) insulation type, size, and current loadings of feeder and final sub-circuit cables; and

(v) make, protection characteristic curve, prospective short circuit, and over current ratings of all circuit breakers and fuses; and
(b) simplified diagrams of generation circuits, battery charging, interconnector circuits, and feeder circuits; and

(c) arrangement and location plans of main and emergency switchboards plus any distribution boards; and

(d) plans showing the location of the main and emergency sources of power, radio battery, inverters, and battery chargers; and

(e) electrical load calculations used to determine the capacities of main and emergency generators and battery banks; and

(f) circuit diagram(s) of electrically powered bilge pumps plus bilge level alarms and pump monitoring systems; and

(g) circuit diagrams of electrically powered navigation lights, controls, and monitoring; and

(h) volt drop calculations of each of the following:
   (i) main power feeder circuit; and
   (ii) navigation light circuit; and
   (iii) bilge pump circuit; and
   (iv) vhf radio power supply circuit.

404.92 Installation and materials (40D.30B)

(1) The builder of a vessel must ensure that the installation of electrical wiring and equipment is carried out by suitably qualified persons experienced in marine electrical work.

(2) The owner must ensure that all electrical equipment is marked or identified in accordance with the relevant electrical systems standard referred to in rule 404.93.

(3) The owner must ensure that any markings on electrical equipment are consistent with the terminology used in the owner’s manual supplied in accordance with rule 404.94.

(3A) For vessels 45 metres or more in length, all metal sheaths and armour of cables must be electrically continuous and must be earthed

\[ CT \text{ ChIV reg18(5)(a)} \]

(4) A surveyor must be satisfied that the location of the electrical equipment, switchboards, and conductors will not expose them to water, oil, heat, or other environmental conditions.

404.93 Electrical systems (40D.30C)

(1) For vessels less than 45 metres in length, the electrical systems must comply with either—
   (a) the relevant rules of a classification society named in rule 404.30(2)(a); or
   (b) the applicable parts of the IEC 60092 series of standards – *Electrical installations in vessels*.

(2) For vessels 45 metres or more in length—
   (a) where a distribution system, whether primary or secondary, for power, heating, or lighting, with no connection to earth is used, a device capable of monitoring the insulation level to earth must be provided; and
   (b) where the distribution system is in accordance with subrule (a) and a voltage exceeding 55 volts direct current or 55 volts, root mean square, between conductors, is used, a device capable of continuously monitoring the insulation
level to earth and of giving an audible or visual indication of abnormally low insulation values must be provided; and

(c) distribution systems which are supplied at a voltage not exceeding 250 volts direct current or 250 volts, root mean square, between conductors and that are limited in extent, may comply with subrule (a) if acceptable to the Director.

(3) For vessels 75 metres or more in length—

(a) the hull return system of distribution shall not be used for power, heating, or lighting; and

(b) the requirement of subrule (a) does not preclude, under conditions acceptable to the Director, the use of—

(i) impressed current cathodic protective systems; or

(ii) limited and locally earthed systems; or

(iii) insulation level monitoring devices provided the circulation current does not exceed 30 milliamperes under the most unfavourable conditions.

(4) For vessels 45 metres or more in length, where the hull return system is used, all final sub-circuits (all circuits fitted after the last protective device) must be two wire and special precautions, acceptable to the Director, must be taken.

CT ChIV reg18(3) and (4)

404.94 Documentation (40D.30E)

(1) The owner and the master of a vessel must ensure a manual containing the information set out in subrules (2) and (3) is kept on board the vessel and readily accessible at all times.

(2) The manual must include the following information:

(a) diagrams identifying the electrical circuits of the vessel with the locations of electrical devices in the vessel and identification of conductors by colour or other means:

(b) the location and a description of the functions of electrical controls, dials, switches, fuses, and circuit-breakers installed on the panel-board:

(c) instructions for operating and maintaining the electrical system.

(3) The manual must include the following warning instructions:

(a) never work on the electrical installation while the electrical system is energised; and

(b) never modify the craft’s electrical systems or relevant drawings; and

(c) never use the electrical system if the shore power reverse polarity indicator is activated; and

(d) never alter or modify the rated current amperage of overcurrent protective devices; and

(e) never install or replace electrical appliances or devices with components exceeding the rated current amperage of the circuit; and

(f) never leave the vessel unattended with the electrical system energised except battery chargers, automatic bilge-pumps, fire protection and alarm circuits.
404.95 Batteries (40D.31)

(1) When the sole means of starting the propulsion engine is by battery, there must be an alternative battery available of equal voltage and capacity that can be directly connected on its own to the starter motor via a change-over switch.

(2) Each battery bank must have a means of charging.

(3) Every vessel battery must be—

(a) stowed in an acid proof box; and

(b) adequately covered to prevent damage; and

(c) adequately ventilated to prevent the accumulation of gas.

404.96 Emergency source of electrical power (40D.32)

(1) Any vessel of 45 metres or more in length must be provided with a self-contained emergency source of electrical power located, to the satisfaction of the surveyor, outside the machinery spaces and above the freeboard deck. The emergency source of electrical power must be so arranged as to ensure its functioning in the event of fire or other causes of failure of the main electrical installations.

(2) Having regard to starting current and the transitory nature of certain loads, the emergency source of electrical power must be capable of serving simultaneously for a period of at least three hours—

(a) the VHF radio installation required by rule 404.210, and if applicable:

(i) the MF/HF radio installation required by rule 404.210; and

(ii) the ship earth station required by rule 404.210; and

(b) Internal communication equipment, fire detecting systems and signals that may be required in an emergency; and

(c) the navigation lights if solely electrical, and the emergency lights:

(i) of launching stations and overside of the vessel; and

(ii) in all alleyways, stairways and exits; and

(iii) in spaces containing machinery or the emergency source of power; and

(iv) in control stations; and

(v) in fish handling and fish processing spaces; and

(d) the operation of the emergency fire pump, if any.

(3) The emergency source of electrical power must be either a generator or an accumulator battery. Automatic starting arrangements must be fitted to the surveyor’s satisfaction.

(4) The emergency switchboard must be installed as near as practicable to the emergency source of power.

(5) The emergency generator and its prime mover and any accumulator battery must be arranged so as to ensure that they will function at full rated power when the vessel is upright and when rolling up to an angle of 22.5° either way and simultaneously pitching 10° by bow or stern, or is in any combination of angles within those limits.

(6) The emergency source of electrical power and automatic starting equipment must be so constructed and arranged as to enable adequate testing to be carried out by the crew while the vessel is in the operating condition.
404.97 Navigation lights (40D.32A)

(1) Each navigation light must be controlled and protected in each non-earthed pole by a switch, and either a fuse or circuit breaker mounted on a distribution board reserved for this purpose. The distribution board must be accessible to the person on watch.

(2) Each navigation light on a vessel must be provided with an automatic indicator giving audible or visual indication of failure of the light.

(3) Cables supplying navigation lights must be sized to ensure that total circuit volt drop does not exceed 3 percent of the supply system voltage.

404.98 Lightning protection (40D.32B)

(1) If fitted, lightning conductors must comply with the requirements of subrules (2) to (6).

(2) In wood and composite vessels fitted with wooden masts, the lightning conductors must comply with the following:
   (a) they must be of continuous copper tape or rope, or a combination of copper tape and rope, having a cross sectional area not less than 100 mm² which must be riveted with copper rivets or fastened with copper clamps to a suitable copper spike not less than 13 mm in diameter, projecting at least 150 mm above the top of the mast; and
   (b) where tape is used, the lower end of the tape must terminate at the point at which the shrouds leave the mast, and must be securely clamped to a copper rope of not less than 13 mm diameter. This copper rope must be led down the shrouds and must be securely clamped to a copper plate not less than 0.2 m² in area, fixed well below the light waterline and attached to the vessel's hull in such a manner that is immersed under all normal conditions of heel.

(3) In wood and composite vessels fitted with steel masts, each mast must be connected to a copper plate in accordance with the requirements of rule 404.151(2). The copper rope must be securely attached to, and in good electrical contact with, the mast at or above the point at which the shrouds leave the mast.

(4) In steel vessels fitted with wooden masts, the lightning conductors must be of copper tape or rope terminating in a spike, as required by rule 404.151(2). At the lower end this copper tape or rope must be securely clamped to the nearest metal forming part of the hull of the vessel.

(5) Lightning conductors must be run as straight as possible, and sharp bends in the conductors must be avoided. All clamps used must be of brass or copper and efficiently locked. No connection must be dependent on a soldered joint.

(6) The resistance of the lightning conductor, measured between the mast head and the position on the earth plate or hull to which the lightning conductor is earthed, must not exceed 0.02 ohms.

404.99 Tests and trials (40D.32C)

A vessel's electrical system must be inspected and tested to the satisfaction of the surveyor in accordance with the requirements of the relevant standard referred to in rule 404.93.

Section 4 PERIODICALLY UNATTENDED MACHINERY SPACES

404.100 to 404.109 Reserved

404.110 Safety system for periodically unattended machinery spaces

(1) Rule 404.110 applies to vessels 45 metres or more in length, with periodically unattended machinery spaces.
(2) A safety system must be provided as follows:

(a) any serious malfunction in machinery or boiler operations that presents an immediate danger must initiate the automatic shut-down of that part of the plant and an alarm must be given:

(b) shut-down of the propulsion system must not be automatically activated except in cases which could lead to serious damage, complete breakdown, or explosion:

(c) where arrangements for overriding the shut-down of the main propelling machinery are fitted, these must be such as to preclude inadvertent activation:

(d) visual means must be provided to show whether the shut-down override has been activated.

404.111 Reserved

404.112 Fire safety for periodically unattended machinery spaces

(1) The following applies to vessels 45 metres or more in length, with periodically unattended machinery spaces:

(a) special consideration must be given to high pressure fuel oil pipes, including, where practicable, ensuring leakages from such piping systems are collected in a suitable drain tank that is provided with a high level alarm:

(b) where daily service fuel oil tanks are filled automatically or by remote control, means must be provided to prevent overflow spillages; and similar consideration must be given to other equipment which treats flammable liquids automatically, for example fuel oil purifiers, which, whenever practicable, must be installed in a special space reserved for purifiers and their heaters:

(c) where fuel oil daily service tanks or settling tanks are fitted with heating arrangements, a high temperature alarm must be provided if the flashpoint of the fuel oil can be exceeded:

(d) an approved fire detection system based on a self-monitoring principle and including facilities for periodical testing must be installed in machinery spaces:

(e) the detection system must initiate both audible and visual alarm in the wheelhouse and in sufficient appropriate spaces to be heard and observed by persons on board, when the vessel is in harbour:

(f) the fire detection system must be fed automatically from an emergency source of power if the main source of power fails:

(g) internal combustion engines of 2,500 kW and over must be provided with crankcase oil mist detectors or engine bearing temperature detectors or equivalent devices:

(h) a fixed fire-extinguishing system acceptable to the Director must be provided that complies with the requirements of regulations 22 and 40 of Chapter V of the Agreement.

(2) For vessels 75 metres or more in length with periodically unattended machinery spaces provision must be made for immediate water delivery from the fire main system either by:

(a) remote starting arrangements of one of the main fire pumps in the wheelhouse and at the fire control station, if any; or

(b) permanent pressurisation of the fire main system, due regard being paid to the possibility of freezing.
Section 5 FISH PROCESSING EQUIPMENT

404.120 Fish processing equipment (40D.82)

aligns with the Code of Safety for Fishermen and Fishing Vessels Ch V Sn 9

The owner of any vessel that is fitted with fish processing equipment must ensure that the equipment complies with the following—

(a) the arrangement of fish processing equipment must ensure free access for inspection, operation, and sanitary treatment of the equipment. Working areas in way of processing equipment must not be less than 750 mm wide; and

(b) the materials used to insulate fish processing equipment, including piping, must be non-combustible, durable and stable under conditions of vibration and are not to have an external surface temperature harmful to personnel on contact. The insulation must be securely fastened. Asbestos or asbestos based materials must not be used as insulation; and

(c) machinery and installations operating under pressure must be manufactured in compliance with national or international standards acceptable to the Director; and

(d) machinery and other installations from which vapour, gas, dust, or other harmful substance may readily escape or be emitted during operation must be fitted with exhaust devices. Suction ends of these devices must be located as near as possible to the sources of vapour, gas, dust, or other harmful substance and the piping must be arranged so that discharged products do not constitute a hazard to personnel; and

(e) where several conveyors are working in one line, emergency switches must be provided at intervals of not more than 10 metres for stopping all conveyors working in the line. Where the length of the conveyors is 15 metres or more, sound or light signals must be provided for giving warning when the conveyor starts; and

(f) dampers, cocks, valves and other stopping devices must be positioned so that they are readily accessible and safe for operation; and

(g) machinery and equipment in working spaces must be fitted on strong and rigid foundations securely connected to the vessel's structure; and

(h) moving parts of machinery and other installations, as well as gears that may present a hazard, must be adequately guarded; and

(i) machinery and installations that require routine servicing at a height of more than 2 metres must be equipped with platforms at least 600 mm in width and guarded with rails not less than 1 metre in height; and

(j) fish processing equipment operating with water must be provided with effective drainage systems, having regard to their susceptibility to clogging; and

(k) loading and unloading devices for the machinery and other installations must be arranged at a safe and convenient height for operation; and

(l) steam or vapour outlets of equipment must be arranged as high as possible. Outlet pipes must be at least 50 mm in diameter and lead into open air. Vapour from outlets is not to obscure visibility; and

(m) filling openings of machinery and other installations must be within easy reach of personnel. Lids of filling openings must have suitable means of closing so as to prevent steam, hot water or vapour emerging into the space, and must be counter-balanced or provided with other safe means of securing in the open position when required; and
(n) suitable precautions must be taken to protect personnel against the harmful effects of excessive noise.

404.121 to 404.129 Reserved
CHAPTER 5   FIRE PROTECTION, FIRE DETECTION, FIRE EXTINCTION, AND FIRE FIGHTING

Comment sought
Chapters 5 uses an alternative approach that provides more flexibility in the rules and is less cluttered with detailed prescriptive requirements. It establishes the requirements to comply at a high level and directs the user to another rule Part or to an AMOC in which the Director outlines what an acceptable means of compliance is for a particular requirement that has referred to the requirement to be “acceptable to the Director”.
Is this approach preferred by users to that, say, used for Chapters 2, 3, and 4 above, which contain the prescriptive requirements in the rules (rather than in an AMOC)?

404.130 General — vessels of 60 metres or more in length

The owner and the master of a vessel of 60 metres or more in length must ensure that fire safety measures are provided on the vessel that—
(a) comply with the applicable requirements in Chapter V of the Agreement; and
(b) include fire fighting appliances—
   (i) in accordance with rule 404.133; and
   (ii) that meet standards that are acceptable to the Director.

The means of complying with rule 404.130(1)(b)(ii) are set out at the end of these proposed rules under the heading AMOC404.130.
Note rules 404.03(2) and (3) provide for the Director to exercise the discretions of the Administration in Chapter V of the Agreement.

404.131 General — vessels of 45 metres or more in length and less than 60 metres in length

The owner and the master of a vessel of 45 metres or more in length and less than 60 metres in length must ensure that fire safety measures are provided on the vessel that—
(a) comply with the applicable requirements in Chapter V of the Agreement; and
(b) include fire fighting appliances—
   (i) in accordance with rule 404.133; and
   (ii) that meet standards that are acceptable to the Director.

The means of complying with rule 404.131(1)(b)(ii) are set out at the end of these proposed rules under the heading AMOC404.131.
Note rules 404.03(2) and (3) provide for the Director to exercise the discretions of the Administration in Chapter V of the Agreement.

404.132 General (40D.64) — vessels less than 45 metres in length

The owner and the master of a vessel less than 45 metres in length must ensure that fire safety measures are provided on the vessel that—
(a) comply with the requirements in rules 404.142 to 404.149; and
(b) include fire fighting appliances—
   (i) in accordance with rule 404.133; and
(ii) that meet standards that are acceptable to the Director.

The means of complying with rule 404.132(1)(b)(ii) are set out at the end of these proposed rules under the heading AMOC404.132.

404.133 General (40D.64) — All vessels

(1) The owner and the master of a vessel must ensure that the vessel's fire appliances comply with the standards specified in Part 42B.

(2) The owner and the master of a vessel must ensure that the vessel's fire appliances are—
   (a) well maintained; and
   (b) inspected; and
   (c) serviced—in accordance with the requirements of Part 42B.

(3) The master of a vessel must ensure that all the vessel's fire appliances are—
   (a) in good working order; and
   (b) ready for immediate use—

before the vessel commences a voyage and at all times during the voyage.

Note rule 42B.71 provides flexibility regarding the alignment of Part 42B standards and the Agreement.

404.134 to 404.140 Reserved
Fire safety measures — vessels less than 45 metres in length

Vessels less than 45 metres in length are not applicable to Chapter 5 of the Agreement and so are set out below

404.141 Application (40D.38, 40D.39(3), and 40D.52 to 40D.57)

Rules 404.142 to 404.149 apply to vessels less than 45 metres in length.

404.142 Definitions relating to fire protection (40D.38)

In this chapter—

“**A**” class divisions means those divisions formed by bulkheads and decks that comply with 404.143(1):

accommodation spaces means those spaces used for lounges, mess rooms, recreational rooms, corridors, lavatories, cabins, offices, hospitals, pantries containing no cooking appliances, and similar spaces:

“**B**” class divisions means those divisions formed by bulkheads, decks, ceilings or linings that comply with 404.143(2):

“**C**” class divisions means those divisions formed by bulkheads, decks, ceilings or linings that comply with 404.143(3):

continuous “**B**” class ceilings or linings are those "B" class ceilings or linings that terminate only at an "A" or "B" class division:

control stations are those spaces in which the vessel’s radio or main navigation equipment or the emergency source of power is located, or where the fire recording or fire control equipment is centralised:

”**F**" class divisions means those divisions formed by bulkheads, decks, ceilings, or linings that comply with 404.143(4):

low flame spread means that the surface thus described that complies with rule 404.143(5):

machinery spaces means those machinery spaces of category A and all other spaces containing propulsion machinery, boilers, fuel oil units, steam and internal combustion engines, generators, steering gear, major electrical machinery, oil filling stations, refrigerating, stabilising, ventilating and air conditioning machinery and similar spaces, and trunks to such spaces:

non-combustible material means a material that complies with rule 404.143(6):

service spaces are those spaces used for galleys, pantries containing cooking appliances, lockers and store-rooms, workshops other than those forming part of the machinery spaces, and similar spaces and trunks to such spaces:

standard fire test means a test in which specimens are exposed in a test furnace to temperatures corresponding approximately to the standard time-temperature curve, where that test complies with rule 404.143(7).

404.143 Standards relating to fire protection

The following standards apply in relation to the terms defined in rule 404.142:

1. **“A” class divisions** must be—
   a) constructed of steel or other equivalent material; and
   b) suitably stiffened; and
(c) so constructed as to be capable of preventing the passage of smoke and flame to the end of the one-hour standard fire test; and

(d) insulated with approved non-combustible materials, such that the average temperature of the unexposed side will not rise more than 139°C above the original temperature, nor will the temperature, at any one point, including any joint, rise more than 180°C above the original temperature, within the time listed below:

Class "A-60"  60 min
Class "A-30"  30 min
Class "A-15"   15 min
Class "A-0"   0 min:

(2) **“B” class divisions** must—

(a) be so constructed as to be capable of preventing the passage of flame to the end of the first one-half hour of the standard fire test; and

(b) have an insulation value such that the average temperature of the unexposed side will not rise more than 139°C above the original temperature, nor will the temperature at any one point, including any joint, rise more than 225°C above the original temperature, within the time listed below:

Class "B-15"   15 min
Class "B-0"   0 min; and

(c) be constructed of approved non-combustible materials and all materials entering into the construction and erection of "B" class divisions must be non-combustible with the exception that combustible veneers may be permitted by a surveyor, provided the surveyor is satisfied that the use of a combustible veneer does not compromise the requirements of rules 404.144 to 404.149:

(3) **“C” class divisions**—

(a) must be constructed of non-combustible materials approved by the Director; and

(b) need meet no requirements relative to the passage of smoke and flame nor the limiting of temperature rise; and

(c) may contain combustible veneers if permitted by the surveyor, provided the surveyor is satisfied that their use does not compromise the requirements of rules 404.144 to 404.149:

(4) **"F" class divisions** must—

(a) be so constructed as to be capable of preventing the passage of flame to the end of the first one-half hour of the standard fire test; and

(b) have an insulation value such that the average temperature of the unexposed side will not rise more than 139°C above the original temperature, nor will the temperature at any one point, including any joint, rise more than 229°C above the original temperature, up to the end of the first one-half hour of the standard fire test:

(5) **low flame spread** means that the surface thus described must comply with the following—

(a) the surface must adequately restrict the spread of flame; and

(b) an established test procedure to determine the material's adequacy is that laid down in Australian Standard 1530 Part 3 "Methods for fire tests on building materials, components and structures - Simultaneous determination of ignitability, flame propagation, heat release and smoke release", where the material must meet the following criteria—

(i) spread of flame index, not to exceed 3; and

(ii) ignitability index plus heat involved index not to exceed 7 (in total); and

(iii) smoke developed index, not to exceed 4; and
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(c) the Director may accept a smoke developed index of up to 5 where the spread of flame index does not exceed 1, and the ignitability index plus the heat evolved index does not exceed 3; and

(d) the Director may accept evidence of approval as a low flame spread material by the Administration of another state or a classification society, where tests have been carried out in accordance with other relevant national or international standards:

(6) **non-combustible material** must not burn or give off flammable vapours in sufficient quantity for self-ignition when heated to approximately 750° C, this being determined by the test procedure laid down in the Improved Recommendation on Test Method for Qualifying Marine Construction Materials as Non-Combustible adopted by the International Maritime Organization by resolution A.472(XII), as amended by that organisation from time to time:

(7) **standard fire test** must comply with the following—

(a) the specimens of the relevant bulkheads or decks must be exposed in a test furnace to temperatures corresponding approximately to the standard time-temperature curve; and

(b) the specimen must have an exposed surface of not less than 4.65 m² and a height (or length of deck) of 2.44 m, resembling as closely as possible the intended construction and including where appropriate at least one joint; and

(c) the standard time-temperature curve is defined by a smooth curve drawn through the following temperature points measured above the initial furnace temperature:

\[
\begin{align*}
&\text{at the end of the first 5 min} \quad 556° \text{ C} \\
&\text{at the end of the first 10 min} \quad 659° \text{ C} \\
&\text{at the end of the first 15 min} \quad 718° \text{ C} \\
&\text{at the end of the first 30 min} \quad 821° \text{ C} \\
&\text{at the end of the first 60 min} \quad 925° \text{ C}.
\end{align*}
\]

404.144 Structure (40D.52)

(1) The hull, superstructure, structural bulkheads, decks, and deckhouses must be constructed of non-combustible materials. The Director may permit combustible construction provided the requirements of subrules (2)(b), (3)(b), and (3)(c), and the additional fire-extinguishing requirements in the machinery spaces of such vessels acceptable to the Director in rule 404.132(b)(ii) are complied with.

(2) In any vessel the hull of which is constructed of non-combustible materials, the decks and bulkheads separating machinery spaces of category A from accommodation spaces or control stations must be constructed to "A-60" class division standard where the machinery space of category A is not provided with a fixed fire-extinguishing system and to "A-30" class division standard where such a system is fitted. Decks and bulkheads separating other machinery spaces from accommodation service spaces and control stations must be constructed to "A" class division standard and insulated to the satisfaction of the surveyor, except that the surveyor may permit the fitting of "B-15" class divisions for separating such spaces as the master's cabin from the wheelhouse.

(b) In any vessel, the hull of which is constructed of combustible materials, the decks and bulkheads separating machinery spaces from accommodation spaces, service spaces or control stations must be constructed to "F" class or "B-15" class division...
(3) In any vessel, the hull of which is constructed of non-combustible materials, bulkheads of corridors serving accommodation spaces, service spaces and control stations must be of constructed of "B-15" class divisions.

(b) In any vessel, the hull of which is constructed of combustible materials, bulkheads of corridors serving accommodation spaces, service spaces and control stations must be constructed of "F" class divisions.

(c) Any bulkhead required by subrule (3)(a) or subrule (3)(b) must extend from deck to deck unless a continuous ceiling of the same class division as the bulkhead is fitted on both sides of the bulkhead, in which case the bulkhead may terminate at the continuous ceiling.

(4) Interior stairways serving accommodation spaces, service spaces or control stations must be of steel or other equivalent material. Such stairways must be within enclosures constructed of "F" class divisions in any vessel the hull of which is constructed of combustible materials, or "B-15" class divisions in any vessel the hull of which is constructed of non-combustible materials, provided that where a stairway penetrates only one deck it need be enclosed at one level only.

(5) Doors and other closures of openings in bulkheads and decks referred to in subrules (2) and (3), doors fitted to stairway enclosures referred to in subrule (4), and doors fitted in engine and boiler casings, must be, as far as practicable, equivalent in resisting fire to the divisions in which they are fitted. Doors to machinery spaces of category A must be self closing.

(6) Lift trunks that pass through the accommodation and service spaces must be constructed of steel or equivalent material and must be provided with means of closing that will permit control of draught and smoke.

(7) In any vessel, the hull of which is constructed of combustible materials, the boundary bulkheads and decks of spaces containing any emergency source of power, and bulkheads and decks between galleys, paint rooms, lamp rooms or any store rooms that contain appreciable quantities of highly flammable materials, and accommodation spaces, service spaces or control stations, must be constructed of "F" class or "B-15" class divisions.

(b) In any vessel, the hull of which is constructed of non-combustible materials, the decks and bulkheads referred to in subrule (7)(a) must be constructed of "A" class divisions insulated to minimise the risk of fire to the satisfaction of the surveyor. The surveyor may accept "B-15" class divisions between a galley and accommodation spaces, service spaces, and control stations, provided the galley contains only electrically heated furnaces, electrically heated hot water appliances, or other electrically heated appliances.

(c) Highly flammable products must be carried in sealed containers approved by the surveyor.

(8) Where bulkheads or decks required by subrule (2), (3), (5) or (7) to be "A" class, "B" class or "F" class divisions, are penetrated for the passage of cables, pipes, trunks, ducts, or other similar services, arrangements must be made to the satisfaction of the surveyor to ensure that the fire integrity of the division is not impaired.

(9) Air spaces enclosed behind ceilings, panellings, or linings in accommodation spaces, service spaces, and control stations, must be divided by close-fitting draught stops spaced not more than 7m apart.
Windows and skylights to machinery spaces must be as follows:

(a) where skylights can be opened, they must be capable of being closed from outside the space. Skylights containing glass panels must be fitted with external shutters of steel or other equivalent material permanently attached. The glass panels must be of wire reinforced glass; and

(b) glass or similar materials must not be fitted in machinery space boundaries. This does not preclude the use of wire reinforced glass for skylights and glass in control rooms within the machinery spaces.

Insulating materials in accommodation spaces, service spaces (except domestic refrigerating compartments), control stations and machinery spaces must be non-combustible. The surface of insulation fitted on the internal boundaries of machinery spaces of category A must be impervious to oil or oil vapours.

Within compartments used for stowage of fish, combustible insulation must be protected by close fitting cladding.

Notwithstanding the requirements of this rule 404.144, the surveyor may accept "A-0" class divisions in lieu of "B-15" or "F" class divisions, after having regard to the amount of combustible materials used in adjacent spaces.

404.145 Ventilation systems (40D.53)

(1) Except as provided in subrule (2), means must be provided to stop fans and close main openings to ventilation systems from outside the spaces served.

(2) Means must be provided for closing, from a safe position, the annular spaces around the funnels.

(3) Ventilation openings may be permitted in and under the doors in corridor bulkheads except that such openings are not permitted in and under stairway enclosures doors. The openings must be provided only in the lower half of a door. Where such opening is in or under a door, the total net area of any such opening or openings must not exceed 0.05 m². When such opening is cut in a door it must be fitted with a grille made of non-combustible material.

(4) Ventilation ducts for machinery spaces of category A or galleys are not, except where the surveyor permits otherwise, to pass through accommodation spaces, service spaces or control stations. Where the surveyor permits this arrangement, the ducts must be constructed of steel or equivalent material and arranged to preserve the integrity of the divisions.

(5) Ventilation ducts of accommodation spaces, service spaces or control stations are not, except where the surveyor permits otherwise, to pass through machinery spaces of category A or through galleys. Where the surveyor permits this arrangement, the ducts must be constructed of steel or equivalent material and arranged to preserve the integrity of the divisions.

(6) Store rooms containing appreciable quantities of highly flammable products must be provided with ventilation arrangements that are separate from other ventilation systems. Ventilation must be arranged at high and low levels and the inlets and outlets of ventilators must be positioned in safe areas. Suitable wire mesh guards to arrest sparks must be fitted over inlet and outlet ventilation openings.

(7) Ventilation systems serving machinery spaces must be independent of systems serving other spaces.

(8) Where trunks or ducts serve spaces on both sides of "A" class bulkheads or decks, dampers must be fitted so as to prevent the spread of fire and smoke between compartments. Manual dampers must be operable from both sides of the bulkhead or the deck. Where the trunks or ducts with a free cross-sectional area exceeding 0.02 m² pass through "A" class bulkheads or decks, automatic self-closing dampers must be fitted. Trunks serving compartments situated only on one side of such bulkheads, where the
ventilation ducts with a free cross-sectional area exceeding 0.02 m² pass through "A" class bulkheads or decks, the openings must be lined with a steel sheet sleeve.

404.146 Heating installations (40D.54)

(1) Electric radiators must be fixed in position and so constructed as to minimise fire risks.

(2) Heating by means of open fires is not permitted. Heating stoves and other similar devices must be firmly secured and adequate protection and insulation against fire must be provided beneath and around such appliances and in way of the uptakes. Uptakes of stoves that burn solid fuel must be arranged and designed so as to minimise the possibility of becoming blocked by combustion products and must have a ready means for cleaning. Dampers for limiting draughts in uptakes are, when in the closed position, still to leave an adequate area open. Spaces in which stoves are installed must be provided with ventilators of sufficient area to provide adequate combustion air for the stove. Such ventilators must have no means of closure and their position must be such that closing appliances in accordance with rule 404.37 are not required.

(3) Open gas flame appliances, except cooking stoves, domestic refrigerators and water heaters, are not permitted. Spaces containing any such stoves, refrigerators or water heaters must have adequate ventilation to remove fumes and possible gas leakage to a safe space. All pipes conveying gas from container to stove, refrigerator or water heater must be of steel or other material approved by the surveyor. Automatic safety gas shut-off devices must be fitted to operate on loss of pressure in the gas main pipe or flame failure on any appliance.

404.147 Miscellaneous items (40D.55)

(1) Exposed surfaces within accommodation spaces, service spaces, control stations, corridor and stairway enclosures, and the concealed surfaces behind bulkheads, ceilings, panellings and linings in accommodation spaces, service spaces, and control stations must have low flame-spread characteristics.

(2) All exposed surfaces of fibre reinforced plastic construction within accommodation and service spaces, control stations, machinery spaces of category A and other machinery spaces of similar fire risk must have a final lay-up layer of resin—

   (a) with inherent fire-retardant properties; or

   (b) coated with a fire-retardant paint; or

   (c) protected by non-combustible materials.

(3) Paints, varnishes and other finishes used on exposed interior surfaces must not be capable of producing excessive quantities of smoke or toxic gases or vapours. The surveyor must be satisfied that they are not of a nature to offer an undue fire hazard.

(4) Primary deck coverings within accommodation and service spaces and control stations, must be of material approved by the surveyor, that will not readily ignite or give rise to toxic or explosive hazards at elevated temperatures.

(5)

   (a) In accommodation and service spaces and control stations, pipes penetrating "A" or "B" class divisions must be of a material acceptable to the surveyor, having regard to the temperature such divisions are required to withstand.

   (b) Materials readily rendered ineffective by heat must not be used for overboard scuppers, sanitary discharges, and other outlets where—

       (i) the outlets are close to the waterline; and

       (ii) failure of the material in the event of a fire would give rise to danger of flooding.
(6) All waste receptacles other than those used in fish processing must be constructed of non-combustible materials with no openings in the sides or bottom.

(7) Machinery driving fuel oil transfer pumps, fuel oil unit pumps and other similar fuel pumps must be fitted with remote controls situated outside the space in which they are located so that they can be stopped in the event of a fire arising in the space in which they are located.

(8) Drip trays must be fitted where necessary to prevent oil leaking into bilges.

404.148 Storage of gas cylinders and dangerous materials (40D.56)

(1) Cylinders for compressed, liquefied or dissolved gases must—
   (a) be clearly marked by means of identifying colours in accordance with NZS 5807:1980 Code of Practice for Industrial Identification by Colour, Wording or other Coding; and
   (b) have a clearly legible identification of the name and chemical formula of their contents; and
   (c) be properly secured.

(2) Cylinders containing flammable or other dangerous gases and expended cylinders must be—
   (a) stored and properly secured on open decks, and all valves, pressure regulators and pipes leading from such cylinders must be protected against damage; and
   (b) protected against excessive variations in temperature, direct rays of the sun, and accumulation of snow. However, the surveyor may permit such cylinders to be stored in compartments that comply with the requirements of subrules (3) to (5) inclusive.

(3) Spaces containing highly flammable liquids, and where permitted, liquefied gas, must have direct access from open decks only. Pressure-adjusting devices and relief valves must exhaust within the compartment. Where boundary bulkheads of such compartments adjoin other enclosed spaces, they must be gastight.

(4) Except as necessary for service within the space, electrical wiring and fittings are not permitted within compartments used for the storage of highly flammable liquids or liquefied gases. Where such electrical fittings are installed, they must be to the satisfaction of the surveyor for use in a flammable atmosphere. Sources of heat must be kept clear of such spaces and "No Smoking" and "No naked light" notices must be displayed in a prominent position.

(5) Separate storage must be provided for each type of compressed gas. Compartments used for the storage of such gases must not be used for storage of other combustible products nor for tools or objects not part of the gas distribution system. The surveyor may relax these requirements after taking into consideration the characteristics, volume and intended use of such compressed gases.

404.149 Means of escape (40D.57)

(1) Except as provided in subrule (3), at least two widely separated means of escape, including the normal means of access, must be provided from all accommodation spaces and spaces in which the crew is normally employed, to the open deck, and from there, to survival craft.

(2) Each means of escape referred to in subrule (1) must comply with the following:
   (a) below the weather deck the main means of escape must be a stairway and the second means of escape must be a trunk or a stairway; and
   (b) above the weather deck the means of escape must be stairways or doors to an open deck or a combination of these; and
(c) a corridor or part of a corridor from which there is only one route of escape must not exceed 7m in length; and
(d) the width and continuity of each means of escape must be acceptable to the surveyor.

(2A) The surveyor may permit only one means of escape, due regard being paid to the nature and location of spaces and to the number of persons who normally might be accommodated or employed there.

(3) Two means of escape must be provided from every machinery space of category A which must be as widely separated as possible. Vertical escapes must be by means of steel ladders. Where the size of the machinery spaces makes it impracticable, one of these means of escape may be omitted. In such cases special consideration must be given to the remaining exit.

(4) Lifts must not be considered as forming one of the required means of escape.

404.150 to 404.179 Reserved
CHAPTER 6  PROTECTION OF THE CREW

404.180  General (40D.65)

(1) The surfaces of decks and of flooring in working spaces on board must be so designed or treated as to minimise the possibility of personnel slipping.

(1A) A lifeline system must be designed to be effective for all needs and the necessary wires, ropes, shackles, eye bolts, and cleats must be provided.

(2) Decks of machinery spaces, galleys, fish handling and deck equipment operating areas, and the deck areas at the foot and head of ladders and in front of doors, must be provided with anti-skid surfaces.

(3) Where necessary, stairways and ladders must be provided for safe working at sea and in port. They must be of adequate size and strength. Means of access to holds and similar parts of the vessel must consist of fixed ladders or stairs. Fixed vertical ladders must be so situated as to be protected from damage. Treads of stairways must be flat and prepared to minimise slipping. Stairways of more than 1 metre in height must have handrails.

404.181  Bulwarks, rails, and guards (40D.22)

(1) Efficient bulwarks or guard rails must be fitted on all exposed parts of the working deck and on superstructure decks to which crew have normal access except as provided in subrule (1A).

(1A) If a bulwark or guardrail will impede the safe navigation of the vessel, other means of protecting the safety of the crew may be used if that means is acceptable to the Director.

(2) Except as provided in subrule (3), the height of bulwarks or guard rails above deck must be at least 1 metre.

(2A) The minimum vertical distance from the deepest operating waterline to the lowest point of the top of the bulwark, or to the edge of the working deck if guard rails are fitted, must ensure adequate protection of the crew from water shipped on deck—

(a) taking into account the sea states and the weather conditions in which the vessel may operate, the areas of operation, type of vessel, and its method of fishing; and

(b) acceptable to the Director.

Comment sought

The following is AMOC404.181:

An acceptable means of compliance with subrule (2A) of rule 404.181: recommendation 8 of the recommendations of the International Conference on Safety of Fishing Vessels, 1993 as reproduced in attachment 3 to the consolidated text and provided in this consultation.

(3) Where the prescribed heights for bulwarks and guard rails would interfere with the normal fishing operations of the vessel, a lesser height may be approved by the surveyor, provided that—

(a) a reduction in height is not permitted in way of wheelhouse and deckhouse doors; and

(b) a fixed bulwark must not be less than 450 mm in height.

(4) Clearance below the lowest course of guard rails is not to exceed 230 mm. Other courses must not be more than 380 mm apart, and the distance between stanchions must not be more than 1.5 metres. On a vessel with rounded gunwales, guard rail supports must be placed on the flat of the deck. Rails must be free from sharp points,
edges and corners and be of sufficient strength to prevent persons from falling overboard.

(5) Storm rails must be fitted as necessary to the outside of all deckhouses and casings to secure safety of passage or work for the crew.

(6) Stern trawlers must be provided with suitable protection such as doors, gates or nets at the top of the stern ramp at the same height as the adjacent bulwark or guard rails.

(7) Every fishing vessel, other than a stern trawler, that has an opening between bulwarks must be provided with adequate protection for the crew from falling overboard, to the satisfaction of the surveyor.

404.182 Winches and other lifting equipment (40D.67)

(1) Moving parts of winches and of warp and chain leads that may present a hazard must be, as far as practicable, adequately guarded and fenced.

(2) The controls of winches must be placed so that the winch driver has ample room for their unimpeded operation and an unobstructed view of the winch and working area.

(3) Where a winch is provided with local and remote controls, these must be arranged so as to prevent simultaneous operation.

(4) Winches must be provided with means to prevent—
   (a) overloading; and
   (b) the accidental release of a load that might endanger the crew or vessel if the power supply fails.

(5) Winches must be equipped with means of effectively arresting and holding the safe working load. The brakes of winches must be proof tested before installation with a static load 25 percent in excess of the maximum safe working load. Brakes must be provided with simple and easily accessible means of adjustment. Every winch drum that could be uncoupled from the drive must be furnished with a separate brake.

(6) Where manually operated guiding on gear is installed—
   (a) the operating wheels must—
      (i) not have open spokes or protrusions that could cause injury to the operator; and
      (ii) be capable of being disengaged when the warps are paying out.
   (b) the guiding on gear must be capable of being disengaged when the warps are paying out.

(7) Winch barrels must be provided with means for fastening wire ends that are so designed as to prevent kinking of the wires.

(8) Where practicable, warps between lead rollers and sheaves and rollers must be guarded.

(9) Chains and other suitable devices must be provided for stoppering off trawl boards.

(10) Wires and warps provided must be of adequate strength for the anticipated loads.

(11) All elements of a fishing gear system must be designed, arranged and installed to provide safe and convenient operation.

(12) The owner of a vessel must ensure that no lifting appliance or its associated working gear is used in loading or unloading the vessel unless—
   (a) the lifting appliance is tested by a competent person before it is brought into service or after it has undergone any substantial repairs; and
   (b) the proof load for such a test is 25% in excess of the safe working load of the lifting appliance; and
(c) the lifting appliance is clearly and permanently marked with its safe working load for each operating condition; and

(d) the safe working load is marked on each lifting appliance, to the satisfaction of a competent person, having regard to the design, strength, material of construction, and the proposed use of the lifting appliance.

(13) Lifting appliances and their associated working gear must be maintained in good order. Adequate restraint must be provided to prevent movement of lifted or hoisted fishing gear that could present a hazard to the vessel or crew.

404.183 Skylights

Skylights or other similar openings must be fitted with protective bars not more than 350 mm apart.

404.184 to 404.189 Reserved
CHAPTER 7 LIFE SAVING APPLIANCES AND ARRANGEMENTS

Comment sought
Same question posed as for Chapter 5 above.

Chapter 7 uses an alternative approach to that used in Chapters 2, 3, and 4 that provides more flexibility in the rules and is less cluttered with detailed prescriptive requirements. It establishes the requirements to comply at a high level and directs the user to another rule Part or to an AMOC in which the Director outlines what an acceptable means of compliance is for a particular requirement that has referred to the requirement to be “acceptable to the Director”.

Is this approach (using AMOCs) preferred by users to the alternative approach in Chapters 2, 3, and 4 above, which contains the prescriptive requirements in the rules?

404.190 General (40D.37)

(1) The owner and the master of a vessel of 45 metres or more in length must ensure that life saving appliances and equipment on the vessel comply with the requirements in Chapter VII of the Agreement.

(2) The owner and the master of a vessel less than 45 metres in length must ensure that life saving appliances are provided that are acceptable to the Director.

The means of complying with rule 404.190(2) are set out at the end of these proposed rules under the heading AMOC404.190

(3) The owner and the master of any vessel must ensure that the vessel’s life saving appliances comply with the performance standards specified in Part 42A.

(4) The owner and the master of any vessel must ensure that the vessel’s life saving appliances are—
   (a) well maintained; and
   (b) inspected; and
   (c) serviced—
       in accordance with the requirements of Part 42A.

(5) The master of any vessel must ensure that all life saving appliances are—
   (a) in good working order; and
   (b) ready for immediate use—
       before the vessel commences a voyage and at all times during the voyage.

404.191 to 404.199 Reserved
CHAPTER 8  EMERGENCY PROCEDURES, MUSTERS, AND DRILLS

404.200 to 404.209  Reserved

Rules relevant to CT ChVIII are in Part 23
CHAPTER 9  RADIOCOMMUNICATIONS

Comment sought

Same question posed as for Chapters 5 and 7 above.

Chapter 9 uses an alternative approach similar to that used in Chapters 5 and 7 that provides more flexibility in the rules and is less cluttered with detailed prescriptive requirements. It establishes the requirements to comply at a high level and directs the user to another rule Part or to an AMOC in which the Director outlines what an acceptable means of compliance is for a particular requirement that has referred to the requirement to be “acceptable to the Director”.

Is this approach (using AMOCs) preferred by users to the alternative approach in Chapters 2, 3, and 4 above, which contains the prescriptive requirements in the rules?

404.210  General (40D.68)

(1) The owner and the master of a vessel of 45 metres or more in length must ensure that radiocommunications equipment and procedures on the vessel comply with the requirements in Chapter IX of the Agreement.

(2) The owner and the master of a vessel less than 45 metres in length must ensure that radiocommunications equipment and procedures are provided in accordance with standards that are acceptable to the Director.

The means of complying with rule 404.210(2) are set out at the end of these proposed rules under the heading AMOC404.210

(3) The owner and the master of any vessel must ensure that the radiocommunications equipment complies with the performance standards prescribed in Part 43.

(4) The owner and the master of any vessel must ensure that the radiocommunications equipment is—

   (a) maintained; and
   (b) inspected; and
   (c) serviced;

in accordance with the requirements of Part 43.

(5) The master of any vessel must ensure that all radiocommunications equipment is—

   (a) in working order; and
   (b) correctly configured with vessel details; and
   (c) ready for immediate use;

before the vessel commences a voyage and at all times during any voyage.

404.211 to 404.219  Reserved
CHAPTER 10 NAVIGATIONAL EQUIPMENT AND ARRANGEMENTS

404.220 Navigating bridge visibility(40D.69)

(1) Any vessel of 45 metres or more in length must meet all the following requirements:
   
   (a) the view of the sea surface from the conning position must not be obscured by more than two vessel lengths, or 500 metres, whichever is less, forward of the bow to 10° on either side, irrespective of the vessel's draught and trim:
   
   (b) no blind sector caused by fishing gear or other obstructions outside the wheelhouse forward of the beam that obstructs the view of the sea surface as seen from the conning position, is to exceed 10°. The total arc of blind sectors must not exceed 20°. The clear sectors between blind sectors must be at least 5°. However, in the view described in subrule (1)(a), each individual blind sector is not to exceed 5°:
   
   (c) the height of the lower edge of the navigating bridge front windows above the bridge deck must be kept as low as possible. In no case is the lower edge to present an obstruction to the forward view as described in this rule:
   
   (d) the upper edge of the navigating bridge front windows must allow a forward view of the horizon for a person with a height of eye of 1800 mm above the bridge deck at the conning position when the vessel is pitching in heavy seas. If the surveyor is satisfied that a 1800 mm height of eye is unreasonable and impractical, the surveyor may reduce the height of eye to a minimum of 1600 mm:
   
   (e) the horizontal field of vision from the conning position must extend over an arc of not less than 225°, that is from right ahead to not less than 22.5° abaft the beam on either side of the vessel:
   
   (f) from each bridge wing, the horizontal field of vision must extend over an arc of at least 225°, that is from at least 45° on the opposite bow through right ahead and then from right ahead to right astern through 180° on the same side of the vessel:
   
   (g) from the main steering position the horizontal field of vision must extend over an arc from right ahead to at least 60° on each side of the vessel:
   
   (h) windows must meet all the following requirements:
      
      (i) framing between navigating bridge windows must be kept to a minimum and must not be installed immediately forward of any workstation:
      
      (ii) the bridge front windows must be inclined from the vertical plane top out, at an angle of not less than 10° and not more than 25°:
      
      (iii) polarised or tinted windows must not be fitted:
      
      (iv) a clear view through at least two of the navigating bridge front windows and depending on the bridge configuration, an additional number of clear view windows must be provided at all times, regardless of weather conditions.
   
(2) Any vessel of less than 45 metres in length must meet all the following requirements:

   (a) the wheelhouse must be designed to afford the helmsman as wide an arc of visibility as possible, both ahead and abaft the beam, and where practicable, all round visibility:
   
   (b) wheelhouse windows forward of the helm position and those essential for the safe navigation of the vessel must not be polarised or tinted.

404.221 to 404.249 Reserved
CHAPTER 11 CREW ACCOMMODATION

This Chapter aligns with the Code of Safety for Fishermen and Fishing Vessels Ch XI. The following rules relate to “crew accommodation” and mirror rules in Part 40D (rules 40D.76 to 40D.81).

404.250 General (40D.76)

(1) The owner of any vessel that will be away from port for more than 24 hours, must ensure that adequate sleeping, eating, cooking, and sanitary facilities are provided in accordance with rules 404.250 to 404.255 inclusive.

(2) The location, structure, and arrangement of the crew accommodation must be such as to ensure security, protection against the weather and the sea, and insulation from heat, cold, and noise. No crew accommodation spaces are to be located forward of the collision bulkhead.

(3) Bulkheads and decks between accommodation spaces and fish holds, machinery spaces, fuel tanks, galleys, engine, deck and other store rooms, drying rooms, communal wash places or water closets must be constructed so as to prevent the infiltration of fumes and odours. Direct openings into sleeping rooms from such places must be avoided wherever reasonable or practicable. That part of the bulkhead separating such places from sleeping rooms, and also external bulkheads, must be gastight and, where necessary, must prevent the passage of water.

(4) All internal surfaces must be of a material that is easily kept clean, and is impervious to damp.

(5) Unless otherwise approved by the surveyor, the clear headroom in areas of free movement throughout the crew accommodation must be not less than 1.9 metres.

(6) Crew accommodation spaces must be provided with adequate ventilation to ensure sufficient air changes for a comfortable living environment and must have lighting such as to permit a person with normal vision to read in that space.

404.251 Sleeping rooms (40D.77)

(1) Wherever practicable, access to sleeping rooms must be through a doorway. If access is from the main deck to below, it must be by way of an inclined ladder or stairway.

(2) Where a hazard (such as a galley area) is located between a sleeping room and the open deck, an emergency escape must be provided, which permits access to the open deck without passing through the area of hazard.

(3) Each crew member must be provided with an individual bunk, the minimum inside dimensions of which must be 1.9 metres by 0.68 metres.

(4) The clearance above any bunk must not be less than 600 mm. The lowest bunk must not be less than 300 mm above the deck.

(5) Bunks must not be placed side by side in such a way that access to one bunk can only be obtained over another bunk. The minimum clear deck space between bunks must be at least 600 mm.

(6) When one bunk is placed over another, a dustproof base of wood or other suitable material must be fitted to the upper bunk.

(7) Each bunk must be fitted with a mattress of a type that will not attract pests or insects. The mattress and cover must be of non-inflammable material.

(8) Each crew member must be provided with adequate storage space in the sleeping room in the form of a locker for the storage of personal items and clothes.
404.252 Toilet facilities (40D.78)

(1) Wherever practicable, toilets, wash basins and shower or bath facilities must be provided as follows—
   (a) one flush toilet or suitable alternative for every 8 persons or less; and
   (b) one shower or bath with hot and cold fresh water for every 8 persons or less; and
   (c) one wash basin with hot and cold fresh water for every 8 persons or less.

(2) The location and construction of the toilet facilities must provide privacy to the users.

(3) The toilet space must be vented to atmosphere.

404.253 Mess rooms (40D.79)

(1) Each vessel must be provided with adequate table and seating arrangements for the number of crew likely to use them at any one time.

(2) Wherever reasonable and practical, mess room accommodation separate from sleeping rooms must be provided.

(3) The mess room accommodation must be as close to the galley as practicable.

(4) Adequate facilities must be provided for the hygienic storage and preparation of food and drinks and the proper disposal of waste.

404.254 Cooking and beverage facilities (40D.80)

(1) Each vessel must be provided with satisfactory cooking appliances and equipment that is, wherever practicable, to be fitted in a separate galley.

(2) Galleys must be—
   (a) of sufficient dimensions for their purpose; and
   (b) fitted with storage space; and
   (c) provided with drainage.

(3) Refrigeration storage of sufficient capacity for the crew numbers must be provided.

(4) Facilities must be readily available for the provision to the crew of hot beverages and cool water.

404.255 Washing facilities (40D.81)

Facilities must be provided for washing and drying clothes, appropriate to the time the vessel is to remain at sea.

404.256 to 404.300 Reserved
SUBPART B

FOREIGN CAPE TOWN VESSELS

SECTION 1  APPLICATION AND DEFINITIONS

404.301 Application of subpart B – foreign Cape Town vessels
This subpart applies to foreign Cape Town vessels.

404.302 Definitions
In addition to the definitions in rule 404.02, in this subpart, unless the context otherwise requires—

**foreign Cape Town vessel** means a ship that—
(a) is a foreign ship; and
(b) is a “fishing vessel” as defined in Article 2 of the Torremolinos Protocol of 1993 Relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 (the “1993 Torremolinos Protocol”), subject to the exclusions in Article 3(2) of the 1993 Torremolinos Protocol; and
(c) is a ‘new vessel’ as defined in regulation 2 of Chapter 1 of the Agreement; and
(d) is 24 metres or more in length:

**non-Party State** means a State for which the Agreement has not entered into force:

**Party State** means a State for which the Agreement has entered into force:

**territorial sea of New Zealand** has the same meaning as in section 3 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977.

SECTION 2  CERTIFICATES AND PORT STATE CONTROL

404.303 Foreign Cape Town vessels certified under the Agreement
(1) The owner and the master of a foreign Cape Town vessel that is registered in a Party State must ensure—
(a) compliance with the requirements of the Agreement as given effect by the State; and
(b) that the vessel complies with the requirements of the Agreement as given effect by the State.

(2) Where a requirement referred to in subrule (1) relates to the construction and equipment of a vessel, then that requirement will apply in respect of that vessel from the date upon which construction and equipment requirements in the Agreement apply to that vessel in the Party State.

(3) The owner and the master of a foreign Cape Town vessel that is registered in a Party State must ensure that there is carried on board the vessel, accompanied by an English-language translation where it is not in English, in respect of that vessel—
(a) a current International Fishing Vessel Safety Certificate, including the Record of Equipment supplemented to it; and
(b) where applicable, a current International Fishing Vessel Exemption Certificate—
Invitation to Comment – Proposed Part 404: Design, Construction, and Equipment – New Zealand Cape Town Vessels and Foreign Cape Town Vessels and Consequential Rule Amendments

issued by or on behalf of the Party State in accordance with the Agreement.

(4) The master of a foreign Cape Town vessel must ensure that each certificate required under subrule (3) is produced when requested by the Director.

(5) The certificates referred to in subrule (3) must be the original or certified copies of the original.

404.304 All other foreign Cape Town vessels

(1) The owner and the master of a foreign Cape Town vessel to which rule 404.303 does not apply must ensure that there is carried on board the vessel the appropriate valid documents for that vessel issued by or on behalf of the flag state certifying compliance with the applicable requirements of the Agreement.

(2) The master of a foreign Cape Town vessel must ensure that a copy of each document required under subrule (1) is produced when requested by the Director.

(3) The documents referred to in subrule (1) must be the original or certified copies of the original.

SECTION 3 REQUEST FOR NEW ZEALAND TO CERTIFY FOREIGN SHIP

404.305 Issue or endorsement of certificates and duration – foreign Cape Town vessels

(1) For a foreign Cape Town vessel that is registered in a Party State, if requested by the Party State, the Director may—
   (a) arrange for the vessel to be surveyed in accordance with the Agreement; and
   (b) on receipt of payment of costs under subrule (4) and on receipt of a satisfactory survey report—
      (i) relating to an initial or renewal survey, and an application under section 35 of the Act, issue an International Fishing Vessel Safety Certificate, including the Record of Equipment supplemented to it, and, if applicable, an International Fishing Vessel Exemption Certificate in respect of the vessel under section 41 of the Act; or
      (ii) relating to an annual, periodical, intermediate, or additional survey, endorse or authorise a surveyor to endorse the International Fishing Vessel Safety Certificate and, if applicable, an International Fishing Vessel Exemption Certificate in respect of the vessel.

(2) An International Fishing Vessel Safety Certificate and an International Fishing Vessel Exemption Certificate issued in accordance with subrule (1)(b)(i) must state it was issued at the request of the other State.

(3) The Director must ensure that a copy of any International Fishing Vessel Safety Certificate and, if applicable, an International Fishing Vessel Exemption Certificate issued or endorsed under subrule (1), and the relevant survey report, are transmitted to the requesting State.

(4) The owner of the foreign Cape Town vessel in respect of which a request is made under subrule (1), is responsible for the costs of the survey, and any other associated costs of the surveyor or Director in relation to the issue or endorsement of the International Fishing Vessel Safety Certificate and, if applicable, the International Fishing Vessel Exemption Certificate.

(5) An International Fishing Vessel Safety Certificate and an International Fishing Vessel Exemption Certificate issued by the Director under this rule 404.305 is subject to the conditions specified in—
   (a) regulation 10(1) and (2) of chapter 1 of the Agreement; and
(6) An International Fishing Vessel Safety Certificate issued by the Director under this rule 404.305 shall be for a period at the discretion of the Director but, in any case, must be issued for a period not exceeding 5 years.

(7) An International Fishing Vessel Exemption Certificate issued by the Director under this rule 404.305 shall be for a period at the discretion of the Director but, in any case, must—
   (a) be issued for a period not exceeding 5 years; and
   (b) not exceed the date of expiry of the International Fishing Vessel Safety Certificate to which it relates.

(8) An International Fishing Vessel Safety Certificate and an International Fishing Vessel Exemption Certificate issued by the Director under this rule 404.305 are maritime documents.

Comment sought
The above rule provides the Director with a discretion and aligns with CT Ch1 regulation 12. It will be difficult for the issuer of a maritime document to manage the document, or the activity for which it is issued, when it is held by person not in New Zealand or subject to New Zealand law.

The alternative, preferred, approach is to delete the above rule 404.305.
No Appendices in Part 404

Unlike Part 40D, Part 404 does not contain appendices. The details that would normally appear in an appendix have been inserted into AMOCs (documents made by the Director referred to as Acceptable Means of Compliance). The AMOCs are presented at the end of these draft rules and in many cases mirror the Appendices in Part 40D as follows:

**Where is Part 40D Appendix 1 reflected in Part 404?**
refer to draft Acceptable Means of Compliance (AMOC 404.190) at the end of these proposed amendments.

**Where is Part 40D Appendix 2 reflected in Part 404?**
refer to draft Acceptable Means of Compliance (AMOC404.130, AMOC404.131, and AMOC404.132) at the end of these proposed amendments.

**Where is Part 40D Appendix 3 reflected in Part 404?**
refer to draft Acceptable Means of Compliance (AMOC 404.210) at the end of these proposed amendments.

**Where is Part 40D Appendix 4 reflected in Part 404?**
refer to draft Acceptable Means of Compliance (AMOC404.44) at the end of these proposed amendments.
The Agreement imposes few requirements on ships less than 24 metres in length. These are contained in Chapter X of the Agreement. The following regulations in Chapter X apply to vessels less than 24 m in length:

- Reg 3(2) is covered already in current rule 45.24(1)
- Reg 3(5) is covered already in current rule 45.28(1)
- Reg 3(7) is covered already in current rule 40D.68(2)
- Reg 3(10) is not currently covered (rule 45.32 for ships > 45 m) – refer new rule 45.32A
- Reg 3(16) is not currently covered – refer new rule 45.32A
- Reg 4 is covered already in rule 25.4
- Reg 5(1) is not currently covered – refer new rule 45.28A below
- Reg 5(3) n/a
Part 19: Maritime Transport Operator – Certification and Responsibilities

19.2 Definitions

In rule 19.2, in the definition of maritime transport operation—

(a) in paragraph (a)(i), replace “in accordance with” with “under”:

(b) replace paragraph (a)(ii), with the following:

“(ii) it operates under a certificate of compliance issued by the Director and a safe operational plan approved by an authorised person, under Part 40A, 40D, 40F, 80, 81, or 82.”.

The reference to Part 81 above will be removed by another rule change on 30 September 2020

(c) in paragraph (a)(iii), replace both occurrences of “in accordance with” with “under”:

(d) in paragraph (a)(v), replace “in accordance with” with “under”:

(e) in paragraph (a)(vi), replace “in accordance with” with “under”:

(f) in paragraph (b)(ii)(A), replace “in accordance with” with “under”:

(g) in paragraph (b)(ii)(B), replace “in accordance with” with “under”.
Part 23: Operating Procedures and Training

23.2 Definitions

In rule 23.2, replace the definition of fishing ship with the following:

“fishing ship means a ship that is required to be registered under New Zealand fisheries legislation.”.

23.25 Application of rules 23.26 to 23.30

In rule 23.25(4), replace “hose” with “those”.

23.29 Fishing ships that proceed into the unlimited area, and fishing ships of 45 metres or more in length that proceed beyond the coastal limit but not beyond the offshore limit

(1) Except as otherwise specified, rule 23.29 applies to fishing ships that proceed into the unlimited area and fishing ships of 45 metres or more in length that proceed beyond the coastal limit but not beyond the offshore limit.

(1A) The master of a ship to which this rule applies must ensure that clear instructions to be followed in the event of an emergency are provided for every person on board.

(2) A ship to which this rule applies must have muster lists which comply with the requirements of rule 23.18.

(3) The owner and the master of a ship to which this rule applies must ensure that the general emergency signal for summoning crew to muster stations and initiating the actions included in the muster list consists of seven or more short blasts followed by one long blast on the ship’s whistle or siren.

(3A) Subrule (3B) applies only to the following ships, and only from the following dates:

(a) a ship to which subpart A of Part 404 applies, from 11 October 2023;

(b) a ship 24 metres or more in length that is certificated to operate in the unlimited area or operates in the unlimited area, to which Part 40D applies, from 11 October 2028.

(3B) The owner and the master of a ship to which subrule (3A) applies must ensure, in addition to the requirements in subrule (3), the general emergency signal is capable of being sounded on an electrically operated bell or klaxon or other equivalent warning system that is powered from the ship’s main supply and the emergency source of electrical power required by rule 40D.32 or rule 404.96 as applicable.

(4) The owner and the master of a ship to which this rule applies must ensure that the ship carries out emergency training and drills which comply with the requirements of rule 23.21, except rule 23.21(2).

(4A) Subrule (4B) applies only to the following ships, and only from the following dates:

(a) a ship to which subpart A of Part 404 applies, from 11 October 2023;

(b) a ship 24 metres or more in length that is certificated to operate in the unlimited area or operates in the unlimited area, to which Part 40D applies, from 11 October 2028.
(4B) Where equipment is carried on a voluntary basis, the master of a ship to which subrule (4A) applies must ensure that—
(a) the equipment is used in the drills; and
(b) the drills are adjusted accordingly—
when drills are conducted under rule 23.21 on the ship.

(5) The owner and the master of a ship to which this rule applies must ensure that the ship carries out on-board training and instruction which comply with the requirements of rule 23.22.

(6) The master of a ship to which this rule applies must ensure that the steering gear is tested as required by rule 23.23.

(7) The master of a ship to which this rule applies must make logbook entries that comply with the requirements of rule 23.24.

(7A) Subrules (7B) and (7C) apply only to the following ships, and only from the following dates:
(a) a ship to which subpart A of Part 404 applies, from 11 October 2023:
(b) a ship 24 metres or more in length that is certificated to operate in the unlimited area or operates in the unlimited area, to which Part 40D applies, from 11 October 2028.

(7B) The owner and the master of a ship to which subrule (7A) applies must ensure that there is provided in each crew mess room or recreation room, or in each crew cabin, a training manual or audio visual aid complying with the requirements of subrules (2) and (3) of rule 42A.41.

(7C) The owner and the master of a ship to which subrule (7A) applies must ensure that all members of the crew and the master receive training in emergency procedures to the minimum standard set out in Appendix 1A to this Part.

23.48A New rule [Signalling equipment]

(1) Subrule (2) applies only to the following ships, and only from the following dates:
(a) a ship 45 metres or more in length to which subpart A of Part 404 applies, from 11 October 2023:
(b) a ship 45 metres or more in length that is certificated to operate in the unlimited area or operates in the unlimited area, to which Part 40D applies, from 11 October 2028.

(2) The owner and the master of a ship to which subrule (1) applies must ensure that the ship is provided with a full complement of flags and pennants to enable communications to be sent using the International Code of Signals.

CT ChX reg 5(2)

Part 23  Appendix 1A  Minimum training requirements for crew and master in emergency procedures under 23.29(7C) operating in the unlimited area

The training in emergency procedures required by rule 23.29(7C) must include the following, as appropriate:

(a) types of emergencies which may occur, such as collisions, fire and foundering;
(b) types of life-saving appliances normally carried on ships;
(c) need to adhere to the principles of survival;
(d) value of training and drills;
(e) need to be ready for any emergency and to be constantly aware of:
   (i) the information in the muster list, in particular:
      (aa) each crew member’s specific duties in any emergency;
      (bb) each crew member’s own survival station;
      (cc) the signals calling the crew to their survival craft or fire stations;
   (ii) location of each crew member’s own lifejacket and spare lifejackets;
   (iii) location of fire alarm controls;
   (iv) means of escape;
   (v) consequences of panic;
(f) actions to be taken in respect to lifting persons from ships and survival craft by helicopter;
(g) actions to be taken when called to survival craft stations, including:
   (i) putting on suitable clothing;
   (ii) donning of lifejacket;
   (iii) collecting additional protection such as blankets, time permitting;
(h) actions to be taken when required to abandon ship, such as:
   (i) how to board survival craft from vessel and water;
   (ii) how to jump into the sea from a height and reduce the risk of injury when entering the water;
(i) actions to be taken when in the water, such as:
   (i) how to survive in circumstances of:
      (aa) fire or oil on the water:
      (bb) cold conditions:
      (cc) shark-infested waters;
   (ii) how to right a capsized survival craft:
(j) actions to be taken when aboard a survival craft, such as:
(i) getting the survival craft quickly clear of the ship;
(ii) protection against cold or extreme heat;
(iii) using a drogue or sea-anchor;
(iv) keeping a look-out;
(v) recovering and caring for survivors;
(vi) facilitating detection by others.
(vii) checking equipment available for use in the survival craft and using it correctly;
(viii) remaining, so far as possible, in the vicinity.

(k) main dangers to survivors and the general principles of survival, including:
(i) precautions to be taken in cold climates;
(ii) precautions to be taken in tropical climates;
(iii) exposure to sun, wind, rain and sea;
(iv) importance of wearing suitable clothing;
(v) protective measures in survival craft;
(vi) effects of immersion in the water, and of hypothermia;
(vii) importance of preserving body fluids;
(viii) protection against seasickness;
(ix) proper use of fresh water and food;
(x) effects of drinking seawater;
(xi) means available for facilitating detection by others;
(xii) importance of maintaining morale.

(l) actions to be taken in respect to fire fighting:
(i) the use of fire hoses with different nozzles;
(ii) the use of fire extinguishers;
(iii) knowledge of the location of fire doors;
(iv) the use of breathing apparatus.
Part 40D: Design, Construction and Equipment – Fishing Ships

Part objective

Part 40D prescribes the requirements for the design, construction and equipment of New Zealand fishing ships registered under the Fisheries Acts of 1983 or 1996. Except for the requirements for crew accommodation, Part 40D excludes fishing ships to which Part 404 applies, which are ships 24 metres or more in length that are certificated to operate in the unlimited area or operate in the unlimited area and are either built or modified after Part 404 comes into effect.

For fishing ships of more than 6 metres in length, and any boats of lesser length which may operate beyond enclosed waters and more than 2 miles from the coast, the requirements are specifically stated in the body of Part 40D. For fishing boats of 6 metres or less in length which do not proceed beyond enclosed limits or more than 2 miles from the coast, owners are required to gain approval of a Safe Operating Plan in accordance with Appendix 5 to Part 40D. Owners of the latter boats are in this way relieved of the requirement to operate the ship under a Maritime Transport Operator Plan, as would otherwise be the case.

For ships beyond 45 metres in length, the requirements reflect, in many respects, those of the 1993 Protocol to the Torremolinos International Convention for the Safety of Fishing Vessels. However it is not the intention of this Part to implement the Protocol fully in New Zealand law because the survey and certification requirements are inconsistent with current New Zealand maritime safety policy and rules.

The authority for making Part 40D is found in sections 36(a), 36(b), 36(c), 36(d), 36(j), 36(l), 36(p), 36(q), 36(t) and 36(u)(ii) of the Maritime Transport Act 1994.

Maritime Rules are subject to the Regulations (Disallowance) Act 1989. Under that Act the rules are required to be tabled in the House of Representatives. The House of Representatives may, by resolution, disallow any rules. The Regulations Review Committee is the select committee responsible for considering rules under this Act.

40D.2 Definitions

foreign Cape Town vessel has the same meaning as in rule 404.302;
New Zealand Cape Town vessel has the same meaning as in rule 404.3;

40D.3 Application and compliance

(1) Except as provided in rules 40D.3(2), (3), (4), (5), and (6), this Part applies to—
   (a) every New Zealand ship that is required to be registered under New Zealand fisheries legislation, or recognised by the Director as being engaged in fisheries research, that is used in a maritime transport operation; and
   (b) every foreign ship that—
       (i) is required to be registered under New Zealand fisheries legislation; and
       (ii) does not have certificates that can be recognised by the Director under section 41 of the Act; and
       (iii) is used in a maritime transport operation.

(2) Rules 40D.4 to 40D.82 inclusive do not apply to any ship of 6 metres or less in length to which rule 40D.83 applies.

(3) Rules 40D.33 to 40D.36 do not apply to sailing ships, which must comply with the intact stability requirement of Appendix 1 of Part 40E.

(4) This Part does not apply where a permit has been issued under section 91 of the Fisheries Act 1996 to the owner of a ship, and the ship is being used for eel fishing only.

(5) This Part does not apply to a New Zealand Cape Town vessel.
Part 40D Appendix 1 Life saving appliances

1.1 Unlimited ships

The requirements in Appendix 1.1 apply to ships that proceed in the unlimited area.

Appendix 1.1 will be amended as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Survival craft – two-way VHF radiotelephone | **Until 11 October 2028, every** ship of 45 metres or more in length must be provided with at least 3 two-way VHF radiotelephones for survival craft. The two-way VHF radio telephones must comply with the Performance Standards for Survival Craft Two-Way VHF Radiotelephone Apparatus adopted by the International Maritime Organization by—

(a) resolution A.762(18), if installed before 23 November 1996; or

(b) resolution A.809(19), if installed on or after 23 November 1996.

**From 11 October 2028, every ship of 45m or more in length must be provided with at least three two-way VHF radiotelephone apparatus.**

**Such apparatus shall conform to performance standards acceptable to the Director.**

If a fixed two-way VHF radiotelephone apparatus is fitted in a survival craft, it shall conform to performance standards acceptable to the Director.

The following is AMOC40DApp1.1:

Acceptable Means of Compliance (AMOC) for Part 40D Appendix 1.1 Survival craft – two-way VHF radiotelephone is as follows:

The standards acceptable to the Director in both instances referred above will be those meeting the Recommendation on Performance standards for survival craft portable two-way VHF radiotelephone apparatus, adopted by the IMO by resolution A.809(19), annex 1 or annex 2, as applicable, and the Revised performance standards for survival craft portable two-way VHF radiotelephone apparatus, adopted by resolution MSC.149(77).
Part 40D Appendix 3.3 Radiocommunication equipment

3.3 Ships that proceed beyond offshore limits

The requirements in Appendix 3.3 apply to ships that proceed beyond offshore limits.

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVTEX</td>
<td>From 11 October 2033, for ships 45m or more in length, a receiver capable of receiving international NAVTEX service broadcasts if the ship is engaged on voyages in any area in which an international NAVTEX service is provided</td>
</tr>
</tbody>
</table>

CT ChIX reg6(1)(d)

Radar Transponder or AIS-SART

From 11 October 2028, a ship less than 45 m in length must be provided with either—

(1) a radar transponder capable of operating in the 9 Ghz band and that complies with rule 43.22, which must be stowed so that it can be easily used.; or

(2) an AIS-SART that complies with rule 43.22A in Part 43.

From 11 October 2028, a ship 45 m or more in length must be provided with a transponder conforming to standards acceptable to the Director—

(1) on each side of the ship in such locations they can be rapidly placed in any survival craft; or

(2) stowed in each survival craft.

The following is AMOC40DApp1.1:

Acceptable Means of Compliance (AMOC) for Part 40D Appendix 3.3 Radar Transponder or AIS-SART is as follows:

The standard acceptable to the Director referred above will be those meeting Recommendation on Performance standards for survival craft radar transponders for use in search and rescue operations, adopted by the IMO by resolution A.802(19), as amended.

CT ChVII reg14

Part 42B: Safety Equipment – Fire Appliances Performance Standards

42B.3 Application

(1) Subject to rule 42B.3(2), Part 42B applies to fire appliances that are installed or intended to be installed on any New Zealand ship, if maritime rules—
(a) require the ship to be provided with that type of fire appliance; and
(b) require that type of fire appliance to meet the requirements of Part 42B.

(2) Part 42B does not apply to a fire appliance on a ship that—
(a) was placed on a ship before 1 February 2001, as required by the legislation in force at the time of its placement; and
(b) complies with the applicable standard for that appliance prescribed by the legislation in force at the time of its placement on the ship; and
(c) remains fit for purpose to the satisfaction of a surveyor.

42B.10A Pressure gauge

(1) Subrule (2) applies only to the following ships, and only from the following dates—
(a) from 11 October 2023; and
(b) to a ship—
   (i) 45 metres or more in length to which subpart A of Part 404 applies; and
   (ii) for which the method of protection adopted under rule 404.40 is method IIF.

(2) For ships to which subrule (1) applies, a gauge indicating the pressure in the system must be provided at each section stop valve and at a central station.

42B.64 Fire hoses

(1) Fire hoses must be made of closely woven flax-canvas and rubber, or synthetic material approved by a surveyor, and must be provided with couplings, branch pipes, nozzles and other necessary fittings that comply with New Zealand Standard NZS 4505:1977 Specification for Fire-Fighting Waterway Equipment or British Standard BS 336:1989 Specification for fire hose couplings and ancillary equipment.

(2) Fittings must be of gunmetal to prevent corrosion and seizing.

(3A) Subrule (3B) applies only to the following ships, and only from the following dates—
(a) from 11 October 2023; and
(b) to a vessel 45 metres or more in length to which subpart A of Part 404 applies.

(3B) For a ship to which subrule (3A) applies, single lengths of fire hose must not exceed 20 metres.

Part 43: Radio

43.3 Application

(1) This Part applies to every New Zealand ship that is required by any rule in Part 40A, 40B, 40C, 40D, 40E, 40F or 404 of the maritime rules to carry radio communication equipment.

(2) Rule 43.5(6) applies to the following ships while they are at a New Zealand port or offshore terminal—
(a) a foreign passenger ship; and
(b) a foreign non-passenger ship of 300 gross tonnage or more.

(3) This Part does not apply to—
(a) any pleasure vessel; or
(b) any ship of the New Zealand Defence Force.
Part 45: Navigational Equipment

45.2 Definitions

In rule 45.2 replace the definition of “fishing ship” with—
“fishing ship means a ship that is required to be registered under New Zealand fisheries legislation;”.

45.24 Magnetic compasses - fishing ships that proceed into the unlimited area

(1) Subject to rules 45.24(4) and 45.24(5D), a fishing ship that proceeds into the unlimited area must be fitted with two compasses that are capable of being adjusted, one of which must be for use as a steering compass and the other for use as a standard compass.

(2) The owner and the master of a ship that is fitted with a standard compass must ensure that the compass —
(a) is sited on the centre line of the ship in a position from which the view of the horizon is least obstructed; and
(b) is fitted with an efficient means of illumination and a device for dimming that illumination; and
(c) has an apparent card diameter of not less than 125 millimetres readable from the steering position; and
(d) is corrected so as to have not more than 5° deviation on any heading; and
(e) is suspended by gimbals; and
(f) is fitted in a binnacle or permanently fitted on a wooden stand at a convenient height to enable bearings of terrestrial and celestial objects to be taken, and is provided with suitable fittings for the placing of the necessary correctors; and
(g) is placed so that any electrical devices, electronic devices, items of magnetic material, or other equipment likely to exert disturbing influences, are located —
(i) as far away as is practicable from the compass; and
(ii) at least as far away as recommended in manufacturing instructions; and
(iii) in any case, not less than half a metre away; and
(h) is provided with a means for taking accurate bearings of terrestrial and celestial objects; and
(i) if on an open deck or top of a deckhouse, is provided with safe and convenient access and adequate guard rails so that the person using the compass can at all times be assured of protection from slipping or falling.

(3) The owner and the master of a ship fitted with a steering compass must ensure that the steering compass —
(a) is sited —
(i) forward of the steering wheel; and
(ii) on or near the centre line of the ship; and
(iii) in a position from which the view of the horizon is least obstructed; and
(b) is fitted with an efficient means of illumination and a device for dimming that illumination; and
(c) is adjusted so as to have no more than 5° deviation on any heading; and
(d) is suspended by gimbals or has internal gimballing; and
(e) is permanently fitted on a shelf or stand with suitable fittings for placing the necessary correctors; and

(f) is placed so that any electrical devices, electronic devices, items of magnetic material, or other equipment likely to exert disturbing influences are located –
   (i) as far away as practicable from the compass; and
   (ii) at least as far away as recommended in manufacturing instructions; and
   (iii) in any case, not less than half a metre away.

(4) Except for a ship to which subrule (5D) applies, a steering compass will not be required if —
   (a) the standard compass is equipped with a device by which it may be read from the normal steering position with its protective cover in place; or
   (b) the card of a gyro-compass or transmitting compass can be read from the normal steering position.

The above exception is inserted to comply with CT ChX reg 3(1)(c) so that Cape Town ships under Part 404 and 40D ships 24 m or more must have 2 compasses

(5A) Subrules (5B), (5C), and (5D) apply only to the following ships, and only from the following dates:
   (a) a ship 24 metres or more in length to which subpart A of Part 404 applies, from 11 October 2023:
   (b) a ship 24 metres or more in length that is certificated to operate in the unlimited area or operates in the unlimited area, to which Part 40D applies, from 11 October 2028.

(5B) The owner of a ship to which subrule (5A) applies must ensure it is fitted with adequate means of communication between the standard compass position and the normal navigation control position.

(5C) The owner of a ship to which subrule (5A) applies must ensure it is provided with means such as an azimuth mirror or azimuth circle or sight vane for taking bearings as near as practicable over an arc of the horizon of 360°.

(5D) A steering compass is not required on a ship to which subrule (5A) applies if it is fitted with—
   (a) a spare magnetic compass interchangeable with the standard compass; or
   (b) a gyro-compass that meets the requirements of the International Maritime Organization Assembly Resolution A.424(XI).

45.24A Positioning receiving systems – fishing ships that proceed into the unlimited area

(1) Subrule (2) applies only to the following ships, and only from the following dates:
   (a) a ship 75 metres or more in length to which subpart A of Part 404 applies, from 11 October 2023:
   (b) a ship 75 metres or more in length that is certificated to operate in the unlimited area or operates in the unlimited area, to which Part 40D applies, from 11 October 2028.

(2) The owner and the master of a ship that is 75 metres or more in length to which subrule (1) applies must ensure that the ship is fitted with a receiver for a global satellite system or a terrestrial radio-navigation system, or other means suitable for use at all times throughout the intended voyage to establish and update the ship’s position by automatic means.
45.28 Equipment relating to emergency steering position

(1) A ship which has an emergency steering position must be provided with a telephone or other means of communication for relaying heading information to the emergency steering position.

(2) A fishing ship of 45 metres or more in length that is constructed on or after 1 February 1992 must be provided with equipment for supplying visual compass readings to the emergency steering position.

45.28A Signalling equipment

(1) Subrule (2) applies only to the following ships, and only from the following dates:
   (a) a ship to which subpart A of Part 404 applies, from 11 October 2023;
   (b) a ship that is certificated to operate in the unlimited area or operates in the unlimited area, to which Part 40D applies, from 11 October 2028.

(2) The owner and the master of a ship to which subrule (1) applies must ensure the ship is provided with a daylight signalling lamp—
   (a) the operation of which is not solely dependent upon the main source of electrical power; and
   (b) a power supply for which must include a portable battery.

Subrule (2) applies also to ships less than 24m to which Part 40D applies

45.32A Depth finder

(1) Subrule (2) applies only to the following ships, and only from the following dates:
   (a) a ship to which subpart A of Part 404 applies, from 11 October 2023;
   (b) a ship that is certificated to operate in the unlimited area or operates in the unlimited area, to which Part 40D applies, from 11 October 2028.

(2) The owner and the master of a ship to which subrule (1) applies that is 45 metres or more in length must ensure the ship is provided with an echo-sounding device.

(3) The owner and the master of a ship to which subrule (1) applies that is less than 45 metres in length must ensure the ship is provided with a means, acceptable to the Director, for determining the depth of water under the vessel.

Subrule (3) applies also to ships less than 24m to which Part 40D applies (refer Reg3(9) AND 3(10) CT ChX)

Chapter X of the Agreement applies to new and existing vessels regardless of their length. In other words it includes vessels less than 24m. Because new vessels of less than 24m are only included in Chapter X of the Agreement, by way of exception, they will continue to apply within the scope of Part 40D and not Part 404. For that reason they are not included in the definition of New Zealand Cape Town vessel.
Amendments to Parts 21, 23, 25, 43, 45, and 46 clarifying scope of fishing ship operations

These amendments clarify that registration under Fisheries Act 1996 includes ships that proceed beyond EEZ.

The following amendments are proposed:

21.9 Application of section 2

(1) Subject to rule 21.9(3), section 2 applies to every New Zealand ship which is—

(a) a commercial ship required to be registered under section 57 of the Fisheries Act 1983 or section 103 or 113D of the Fisheries Act 1996; or

23.2 Definitions

Fishing ship means a fishing ship that is required to be registered under section 57 of the Fisheries Act 1983 or section 103 or 113D of the Fisheries Act 1996:

25.2 Definitions

fishing vessel means a vessel that is required to be registered under section 57 of the Fisheries Act 1983 or section 103 of the Fisheries Act 1996:

43.2 Definitions

fishing ship means any ship that is required to be registered under section 57 of the Fisheries Act 1983 or section 103 or 113D of the Fisheries Act 1996 or recognised by the Director as being engaged in fisheries research:

45.2 Definitions

Fishing ship means a fishing ship registered under section 57 of the Fisheries Act 1983 or section 103 or 113D of the Fisheries Act 1996:

46.15 Application of section 2

(1) Section 2 applies to a New Zealand ship that is—

(a) a commercial ship required to be registered under section 57 of the Fisheries Act 1983 or section 103 or 113D of the Fisheries Act 1996; or
SCHEDULE 2

PROPOSED ACCEPTABLE MEANS OF COMPLIANCE (AMOCs)

THIS SCHEDULE CONTAINS AMOCs THAT, ALTHOUGH NOT A RULE OR INCLUDED IN PART 404, RELATE TO AND ARE REFERENCED IN PART 404
This acceptable means of compliance (AMOC) is determined by the Director as provided for under rule 404.44 and section 451(4) of the Maritime Transport Act 1994.

**Anchors, cables, and mooring equipment**

Compliance either with option 1 or option 2 is a means of compliance determined by the Director as acceptable under rule 404.44:

**Option 1:** compliance with the requirements of a classification society:

**Option 2:** compliance with the requirements set out below.

Option 2 mirrors annex II from code of safety for fishermen and fishing vessels, 2005, per recommendation in CT ChII regulation 15

**Requirements for anchor and mooring equipment**

1. The characteristics of anchors, chain, wires, towlines and mooring lines must be determined in accordance with the table in this AMOC, based on an equipment number "EN" as follows:

\[
EN = \Delta^{2/3} + 2B(a + \Sigma h_j) + 0.1A
\]

where:

- \(\Delta\) – is moulded displacement, in tonnes, to the maximum design waterline:
- \(B\) - is breadth, in m, and is the maximum breadth of the vessel, measured amidships to the moulded line of the frame in a vessel with a metal shell and to the outer surface of the hull in a vessel with a shell of any other material:
- \(a\) - is distance, in m, from the maximum design waterline to the upper edge of the uppermost complete deck at side amidships:
- \(h_j\) - is height, in m, on the centreline of each tier of deckhouses having a breadth greater than \(B/4\). For the lowest tier \(h_j\) must be measured at centreline from the upper deck or from a notional deck line where there is a local discontinuity in the upper deck. When calculating \(h_j\) shear and trim must be ignored:
- \(A\) - is area, in m², in profile view of the hull, within \(L\) (where \(L\) is length as defined below) and of superstructures and deckhouses above the maximum design waterline having a width greater than \(B/4\). Screens and bulwarks more than 1.5 m in height must be regarded as parts of deckhouses when determining \(h_j\) and \(A\):

   - **length**, for the purpose of the definition of \(A\) above, means 96 percent of the total length on the waterline at 85 percent of the least depth measured from the keel line, or as the length from the foreside of the stem to the axis of the rudder stock on that waterline, if that be greater. In vessels designed with a rake of keel, the waterline on which this length is measured is to be parallel to the designed waterline.

**Anchors and chains**

2. Vessels must be fitted with at least two anchors which must be located at the bow.

3. The weight of each anchor must be in accordance with the table in this AMOC.

4. "High holding power anchors" of a design approved by an inspecting organisation under Part 41 may be used as bower anchors; the minimum weight of each such anchor may be 75% of the table weight given in this AMOC.
The surveyor may require increased anchor equipment for vessels fishing in very rough waters and/or may permit reduction in the equipment for vessels operating in sheltered waters.

Anchors with a weight of and above 150 kg must be fitted in hawse pipes, skids or a similar arrangement that is suitable for the quick and safe operation in dropping and hoisting the anchors. If the weight of each of the anchors is below 300 kg, but greater than 150 kg, it may be accepted that only one of the anchors need be fitted in a hawse pipe or skid. Anchors must also be secured in the stowed position by means of a locking or lashing device.

In general, anchors must be fitted with anchor chains. The length and dimension of each anchor must be in accordance with the table in this AMOC.

For vessels less than 45 m in length, the chain of one anchor may be replaced with anchor wires of equal strength provided a chain meeting the requirements given in the table in this AMOC is maintained for the second one.

Where anchor wires are used as a substitute for anchor chains, their length must be equal to 1.5 times the corresponding tabular length of chain. In addition, a chain of not less than 12.5 m in length and of the same specifications, as set out in the table in this AMOC, must be provided between anchor and anchor wire.

Where the surveyor has permitted the use of trawl warp as anchor wire, must be satisfied that the arrangement does not reduce the efficiency required for the quick and safe operation in dropping and hoisting the anchors and for holding the vessel at anchor in all foreseeable service conditions. The requirements for a trawl warp must not be less than that required for anchor wire.

Anchor handling

Fishing vessels provided with anchors of or above 150 kg must be fitted with a windlass. The windlass must be fitted with a messenger wheel and/or drum for each anchor and means for the release of each messenger wheel or drum.

It must not be possible to carry the chains forward to the hawse pipe, skid or similar arrangement without the chain passing over the messenger wheels. When anchor wire is used, it must pass over a roller adjacent to the hawse pipe to avoid chafing.

The windlass, its support and its brakes must be capable of absorbing a static tension of at least 45% of the breaking strength of the anchor chain or anchor wire without the occurrence of any lasting deformations and without the brake losing its hold. Furthermore, a chain stopper or wire nipper must be fitted between the windlass and the hawse pipe or similar for each anchor chain or anchor wire capable of holding the vessel while at anchor. If chain stoppers or wire nippers are not fitted, the windlass, its support and its brake must be capable of absorbing a static tension of at least 80% of the breaking strength of the anchor chain or anchor wire. The chain stopper or wire nipper and their supports must be capable of absorbing a static tension of at least 80% of the breaking strength of the anchor chain/wire without the occurrence of any lasting deformations and without the chain stopper or wire nipper losing its hold.

If the trawl winch is fitted with messenger wheels, etc. and meets the requirements set out in clauses 11, 12, and 13, such a winch may be used as a windlass.

Fishing vessels which have been authorised to use trawl warp as anchor wire may use their trawl winch as a windlass provided the trawl warp can be wound on a drum with a braking device that is independent of the actual trawl warps in use for fishing. Lead blocks and guide rollers must be suitably fitted and arranged to prevent the warps from chafing at the deckhouses, superstructures, deck plating and equipment on deck.

If a vessel has lost its anchors, and it is not immediately possible to re-acquire them, the surveyor, after having assessed the conditions applying to the vessel, as given in clause 5, may permit otter boards/trawl doors with a least the same weight for anchors given in the table in this AMOC to be used for a limited period of time.
Towing lines

17 Vessels must be provided with at least one towing line with a length and breaking strength in accordance with the table in this AMOC. It must be appropriately located so that it is possible to make it ready for use at sea. The towing line may be replaced by one of the fishing vessel’s trawl warps if this has at least a similar length and breaking strength. If warp is used, a length of rope of at least 12.5 m with a minimum breaking strength as given in the table in this AMOC for the towing line must also be provided and attached to the warp.

Mooring equipment

18 Vessels must be provided with suitable cleats and bollards as well as hawseholes in order to moor the vessel securely. The number of bollards, must be determined in each individual case dependent on the size and deck arrangement of the vessel. The number must be sufficient to make it possible to fasten both the mooring line and a spring on each bollard on each side forward and aft. At least three bollards must be fitted forward, and at least two abaft of amidships. Cleats and bollards must be of such a size that it is possible to accommodate at least four turns of the mooring lines or towing line below the horns of the cleat or the upper protruding edge of the bollard. The area where cleats and bollards are to be fastened must be securely reinforced.

19 The vessel must be provided with at least four mooring lines, each of a length and breaking strength in accordance with the table in this AMOC.

In Part 40D the standards similar to the above are contained in Appendix 4, whereas in this proposed Part 404 they are in an AMOC. The essential difference is that Appendix 4 of Part 40D is made by the Minister, whereas the AMOC above is determined by the Director. The advantage of AMOCs (as above) is their flexibility and adaptability. The matters covered in AMOCs are technical in nature. An AMOC, although determined by the Director, is linked to a rule made by the Minister (in this case it is rule 404.44).
## Table

<table>
<thead>
<tr>
<th>Equipment number</th>
<th>Stockless bower anchors</th>
<th>Stud link chain cables for bower anchors</th>
<th>Towline</th>
<th>Mooring lines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weight per anchor (kg)</td>
<td>Diameter (mm)</td>
<td>Minimum length of each line (m)</td>
<td>Minimum breaking strength (kN)</td>
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</table>
ACCEPTABLE MEANS OF COMPLIANCE [AMOC]

DRAFT AMOC404.130 (ex Part 40D Appendix 2.1)

This acceptable means of compliance (AMOC) is determined by the Director as provided for under rule 404.130 and section 451(4) of the Maritime Transport Act 1994.

The requirements below apply to vessels 60 metres in length or more to which rule 404.130(b)(ii) applies.

Fire fighting measures relating to fire fighting appliances for vessels 60 metres in length or more

Fire fighting appliances

Compliance with the requirements set out below is a means of compliance determined by the Director as acceptable under rule 404.130(b)(ii):

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vessels in which Method IIF is adopted – Automatic sprinkler and fire alarm and fire detection system</td>
<td>An automatic sprinkler and fire alarm and fire detection system complying with rules 42B.9 to 42B.16 inclusive, must be installed and so arranged as to protect accommodation spaces and service spaces, except spaces that afford no substantial fire risk such as void spaces and sanitary spaces.</td>
</tr>
<tr>
<td>Vessels in which Method IIIF is adopted – Automatic fire alarm and fire detection system</td>
<td>An automatic fire alarm and fire detection system complying with rules 42B.4 to 42B.7 inclusive, must be installed and so arranged as to detect the presence of fire in all accommodation spaces and service spaces, except spaces that afford no substantial fire risk such as void spaces and sanitary spaces.</td>
</tr>
<tr>
<td>Cargo spaces – Fixed fire-extinguishing system</td>
<td>Cargo spaces of high fire risk must be protected by a fixed gaseous fire extinguishing system complying with rules 42B.20 to 42B.22 inclusive or other fire-extinguishing system that gives equivalent protection, to the satisfaction of the surveyor.</td>
</tr>
<tr>
<td>Fire pumps</td>
<td>At least two power operated fire pumps complying with rule 42B.61, must be fitted. If a fire in any one compartment could put all the fire pumps out of action, there must be an alternative means of providing water for fire fighting. In vessels of 75 metres or more in length this alternative means must be a fixed emergency power operated fire pump complying with rule 42B.61(9) that is independently driven.</td>
</tr>
<tr>
<td>Fire main</td>
<td>Where more than 1 fire hydrant is required, a fire main complying with rule 42B.63, must be provided.</td>
</tr>
<tr>
<td>Fire hydrants, fire hoses and nozzles</td>
<td>The number and position of the fire hydrants must be such that at least 2 jets of water not emanating from the same hydrant, one of which must be from a single length of fire hose, must reach any part of the vessel normally accessible to the crew while the vessel is being navigated. All required hydrants must be fitted with a fire hose complying with rule 42B.64 and a jet/spray nozzle complying with rule 42B.65. One hydrant must be located near the entrance of the space to be protected. All hose connections must be of the same type i.e. inter-connectable.</td>
</tr>
</tbody>
</table>

Compliance with Chapter V of the Agreement is also required per rule 404.130(a) in addition to the standards below.
All fire hydrants must comply with rule 42B.63.

**Portable fire extinguishers in control stations, accommodation and service spaces**

A sufficient number of portable fire extinguishers complying with rule 42B.57, must be provided in control stations and accommodation and service spaces to ensure that at least one extinguisher of a type appropriate to the class of fire anticipated in a space, is readily available for use in any part of such space. The total number of portable fire extinguishers in these spaces must be at least 5.

For every two portable fire extinguishers of the same type there must be provided one spare charge or a replacement extinguisher of the same type.

**Machinery spaces containing oil-fired boilers – Fixed fire-extinguishing systems, portable air-foam equipment, portable fire extinguishers, foam-type extinguisher and sand receptacle**

Each space containing oil-fired boilers or fuel oil units must be provided with one of the following fixed fire-extinguishing systems—

- a pressure water-spraying system complying with rules 42B.23 to 42B.26 inclusive; or
- a gaseous fire-extinguishing system complying with rules 42B.20 to 42B.22 inclusive; or
- a fire-extinguishing system using high expansion foam complying with rule 42B.31; or
- other fire-extinguishing system approved by the Director.

Where the engine and boiler rooms are not entirely separate, or if fuel oil can drain from the boiler room into the engine room, the combined engine and boiler rooms must be considered as one space.

Every boiler room must be provided with at least 1 portable foam applicator unit complying with rule 42B.56.

At least 2 portable foam fire extinguishers complying with rule 42B.57, must be provided in each firing space in each boiler room and in each space in which a part of the fuel oil installation is situated. At least 1 non-portable foam extinguisher complying with rule 42B.53 and of at least 135 litres capacity must be provided with hoses on reels suitable for reaching any part of the boiler room. The surveyor may relax the requirements of this paragraph having regard to the size and nature of the space to be protected and may accept other than foam extinguishers provided they are of the same classification and rating as that specified.

In each firing space there must be a receptacle containing sand, sawdust impregnated with soda or other approved dry material, in such quantity as may be required by the surveyor. Alternatively a portable fire extinguisher complying with rule 42B.57, and suitable for extinguishing an oil fire, may be provided.

**Spaces containing internal combustion machinery – Fixed fire-extinguishing systems, portable air-foam equipment, foam-type fire extinguishers, portable fire extinguishers**

Each space containing internal combustion machinery used either for main propulsion or for other purposes, when such machinery has a total power output of not less than 750 kW, must be provided with—

- one of the following fixed fire-extinguishing systems—
  - a pressure water-spraying system complying with rules 42B.23 to 42B.26 inclusive; or
  - a gaseous fire-extinguishing system complying with rules 42B.20 to 42B.22 inclusive; or
  - a fire-extinguishing system using high expansion foam
complying with rule 42B.31; and

at least 1 portable foam applicator unit complying with rule 42B.56; and

non-portable foam fire extinguishers complying with rule 42B.53

sufficient in number to enable foam to be directed on to any

part of the fuel and lubricating oil pressure systems, gearing

and other fire hazards. In addition, there must be provided a

sufficient number of portable foam extinguishers complying

with rule 42B.57, that are so located that any portable fire

extinguisher is not more than 10 metres walking distance

from any point in the space; provided that there must be at

least 2 such extinguishers in each such space. The

surveyor may relax these requirements for smaller spaces

and may accept other than foam extinguishers provided

they are of the same classification and rating as that

specified.

Spaces containing steam engines – Foam fire extinguishers, portable fire extinguishers

Spaces containing steam turbines or enclosed steam engines used for main propulsion, or for other purposes, when such machinery has a total power output of not less than 750 kW must be provided with the following arrangements—

b) non-portable foam fire extinguishers complying with rule 42B.53, each of at least 45 litres capacity and sufficient in number to enable foam to be directed on to any part of the pressure lubrication system, on to any part of the casings enclosing pressure lubricated parts of the turbines, engines or associated gearing, and any other fire hazards. Such extinguishers are not required to be provided if protection at least equivalent to that of this paragraph is provided in such spaces by a fixed fire-extinguishing system for machinery spaces complying with Part 42B; and

a sufficient number of portable fire extinguishers complying with rule 42B.57 and suitable for extinguishing an oil fire, that are so located that a portable fire extinguisher is not more than 10 metres walking distance from any point in the space.

Provided that there are at least 2 such extinguishers in each such space, and those extinguishers will not be required in addition to any provided in compliance with the requirement for portable fire extinguishers in an internal combustion machinery space.

Other machinery spaces – Portable fire extinguishers

Where in the opinion of a surveyor, a fire hazard exists in any machinery space for which no specific provisions for fire extinguishing appliances are prescribed, there must be provided in, or adjacent to, that space a number of portable fire extinguishers or other means of fire extinction that are acceptable to the surveyor.

Fixed fire extinguishing systems not required by this Part

Where fixed fire extinguishing systems that are not required by this Part are installed, such systems must be acceptable to the surveyor.

Shaft tunnel door

Where access is provided at a low level from an adjacent shaft tunnel to any machinery space of category A, a light steel fire-screen door must be provided in addition to any watertight door. This fire-screen door must be located on the side remote from the machinery space and must be capable of being operated from each side of the door.

International shore connection

At least one international shore connection complying with rule
<table>
<thead>
<tr>
<th><strong>Facilities</strong></th>
<th><strong>Requirements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>42B.60 must be provided.</td>
<td>Facilities must be available enabling an international shore connection to be used on either side of the vessel.</td>
</tr>
</tbody>
</table>

**Firefighter's outfits**

- At least 2 fire crew outfits complying with rule 42B.66 must be carried.
- The fire crew outfits must be stored so as to be easily accessible and ready for use.
- A breathing apparatus for each firefighter's outfits, complying with rule 42B.58 or rule 42B.59 must be carried.

**Fire control plan**

- A fire control plan complying with rule 42B.68 is required.

**Signage**

- Signs complying with rule 42B.69 must be provided to identify all fire fighting appliances and their location.

### Chapter V of the Agreement — discretions

The following applies to the discretions in Chapter V of the Agreement so far as they relate to the vessels under rule 404.130(a):

**Regulation 2(1)**

Re non-combustible material definition: must be determined in accordance with the Improved Recommendation on Test Method for Qualifying Marine Construction Materials as Non-Combustible adopted by the International Maritime Organization by resolution A.472(XII):

**Regulation 2(9)**

**Low flame spread** means that the surface thus described must comply with the following—

(a) the surface must adequately restrict the spread of flame; and

(b) an established test procedure to determine the material's adequacy is that laid down in Australian Standard 1530 Part 3 "Methods for fire tests on building materials, components and structures - Simultaneous determination of ignitability, flame propagation, heat release and smoke release", where the material must meet the following criteria—

(i) spread of flame index, not to exceed 3; and

(ii) ignitability index plus heat involved index not to exceed 7 (in total); and

(iii) smoke developed index, not to exceed 4; and

AS 1530:3 will be the 1999 edition

(c) the Director may accept a smoke developed index of up to 5 where the spread of flame index does not exceed 1, and the ignitability index plus the heat evolved index does not exceed 3; and

(d) the Director may accept evidence of approval as a low flame spread material by the Administration of another state or a classification society, where tests have been carried out in accordance with other relevant national or international standards:

**Regulation 4(4)**

The Director may exercise the discretion regarding Method IIIIF;

**Regulation 5(2)**

The Director may exercise the discretion regarding equivalent material;

**Tables 1 and 2 Note (f)**

The Director may exercise the discretion regarding fire insulation;

**Regulation 8(3)(a)**

The Director may exercise the discretion regarding propagation of flame:
Regulation 9(1)(b)(i) The Director may exercise the discretion regarding equivalent penetration protection:

Regulation 9(1)(c) The Director may exercise the discretion regarding permitted arrangements in machinery spaces:

Regulation 9(1)(d) The Director may exercise the discretion regarding permitted arrangements in accommodation spaces:

Regulation 9(1)(f) The Director may exercise the discretion regarding application to control stations:

Regulation 12(1) Cylinders for compressed, liquefied or dissolved gases must be clearly marked by means of identifying colours in accordance with NZS 5807:1980 Code of Practice for Industrial Identification by Colour, Wording or other Coding

In every other case any discretion provided to the Administration in respect of vessels to which this AMOC applies in regulations in Parts A and B of Chapter V of the Agreement may, if the discretion is not otherwise exercised, be exercised by the relevant surveyor.
ACCEPTABLE MEANS OF COMPLIANCE [AMOC]

DRAFT AMOC404.131 (ex Part 40D Appendix 2.2)

This acceptable means of compliance (AMOC) is determined by the Director as provided for under rule 404.131 and section 451(4) of the Maritime Transport Act 1994.

The requirements below apply to vessels 45 metres in length or more and less than 60 metres in length to which rule 404.131(b)(ii) applies.

**Fire fighting measures relating to fire fighting appliances for vessels 45 metres in length or more and less than 60 metres in length**

**Fire fighting appliances**

Compliance with the requirements set out below is a means of compliance determined by the Director as acceptable under rule 404.131(b)(ii):

1. Compliance with AMOC404.132; and
2. A fire control plan complying with 42B.68 is required.

Compliance with Chapter V of the Agreement is also required per rule 404.131(a) in addition to the standards in this AMOC.

**Chapter V of the Agreement — discretions**

The following applies to the discretions in Chapter V of the Agreement so far as they relate to the vessels under rule 404.131(a):

**Regulation 2(1)**

Re non-combustible material definition: must be determined in accordance with the *Improved Recommendation on Test Method for Qualifying Marine Construction Materials as Non-Combustible* adopted by the International Maritime Organization by resolution A.472(XII):

**Regulation 2(9)**

**Low flame spread** means that the surface thus described must comply with the following—

(a) the surface must adequately restrict the spread of flame; and

(b) an established test procedure to determine the material's adequacy is that laid down in Australian Standard 1530 Part 3 "Methods for fire tests on building materials, components and structures - Simultaneous determination of ignitability, flame propagation, heat release and smoke release", where the material must meet the following criteria—

(i) spread of flame index, not to exceed 3; and

(ii) ignitability index plus heat involved index not to exceed 7 (in total); and

(iii) smoke developed index, not to exceed 4; and

(c) the Director may accept a smoke developed index of up to 5 where the spread of flame index does not exceed 1, and the ignitability index plus the heat evolved index does not exceed 3; and

(d) the Director may accept evidence of approval as a low flame spread material by the Administration of another state or a classification.
society, where tests have been carried out in accordance with other relevant national or international standards:

Regulation 28(1) The Director may exercise the discretion regarding permissible combustive construction;

Regulation 29(4) The Director may exercise the discretion regarding permitted arrangements in machinery spaces:

Regulation 29(5) The Director may exercise the discretion regarding permitted arrangements in accommodation or service spaces or control stations:

Regulation 32(1) Cylinders for compressed, liquefied or dissolved gases must be clearly marked by means of identifying colours in accordance with NZS 5807:1980 Code of Practice for Industrial Identification by Colour, Wording or other Coding

Regulation 38(1) The Director may exercise the discretion regarding fire extinguishing systems and equivalents:

Regulation 42 A fire control plan is required.

In every other case any discretion provided to the Administration in respect of vessels to which this AMOC applies in regulations in Parts A and C of Chapter V of the Agreement may, if the discretion is not otherwise exercised, be exercised by the relevant surveyor.
This acceptable means of compliance (AMOC) is determined by the Director as provided for under rule 404.132 and section 451(4) of the Maritime Transport Act 1994.

Fire fighting measures relating to fire fighting appliances for vessels less than 45 metres in length

Compliance with the requirements set out below is a means of compliance determined by the Director as acceptable under rule 404.132(b)(ii):

The requirements below apply to vessels less than 45 metres in length to which rule 404.132(b)(ii) applies.

Fire fighting appliances

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Automatic fire alarm and fire detection systems | Every vessel that—  
   a) is constructed of combustible materials; or  
   a surveyor considers a fire risk due to—  
   the appreciable amounts of combustible materials used in the construction of accommodation spaces, service spaces and control stations; and  
   the size of those spaces; and  
   their arrangement; and  
   their location relative to control stations; and  
   where applicable, the flame-spread characteristics of the installed furniture  
   must have an automatic fixed fire alarm and fire detection system, complying with rules 42B.4 to 42B.8 inclusive, installed. |
| Fire pumps | The minimum number and type of fire pumps, complying with rule 42B.61, to be fitted must be as follows—  
   b) one power pump, that is not dependent upon the main machinery for its motive power; or  
   one power pump, that is driven by main propelling machinery, provided that the propeller shafting can be readily disconnected, or provided that a controllable pitch propeller is fitted.  
Where the pump required by paragraphs (a) or (b) is situated in a space containing oil-fired boilers or internal combustion type propelling machinery, an emergency fire pump must be fitted outside such spaces. If the emergency fire pump is power driven it must comply with rule 42B.61(6) and the power source must also be outside such spaces. |
<p>| Fire main, fire hydrants, fire hoses and nozzles | Fire hydrants must be positioned so as to allow easy and quick connection of fire hoses and so that at least one jet of water can be directed into any part of the vessel that is normally accessible during navigation. Where more than 1 hydrant is required to provide the number of water jets to meet this requirement a fire main, complying with rule 42B.63 must be provided. |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>The jet of water required must be from a single length of fire hose. In addition to the hydrants required above, a machinery space of category A must be provided with at least one hydrant complete with fire hose and dual purpose nozzle. This fire hydrant must be located outside the space and near the entrance.</td>
<td></td>
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<tr>
<td>A fire hose complying with rule 42B.64 must be provided for every required fire hydrant. At least one spare fire hose complying with rule 42B.64 must also be provided.</td>
<td></td>
</tr>
<tr>
<td>Each fire hose must be provided with couplings and a jet/spray nozzle complying with rule 42B.65. All hose connections must be of the same type i.e. inter-connectable.</td>
<td></td>
</tr>
<tr>
<td>Portable fire extinguishers in control stations and accommodation and service spaces</td>
<td>A sufficient number of portable fire extinguishers complying with rule 42B.57 must be provided in control stations and accommodation and service spaces to ensure that at least one extinguisher of a type appropriate to the class of fire anticipated in a space is readily available for use in any part of such spaces. The total number of portable fire extinguishers in these spaces, however, must not be less than 3. For every two portable fire extinguishers of the same type there must be provided one spare charge or a replacement extinguisher of the same type.</td>
</tr>
</tbody>
</table>
| Fire extinguishing appliances in machinery spaces – fixed fire extinguishing systems, foam extinguisher, portable fire extinguishers | Spaces containing oil fired boilers, fuel oil units or, in vessels of 45 metres or more in length, internal combustion machinery having a total power output of not less than 750 kW must be provided with one of the following fixed fire extinguishing systems—
  c) a pressure water spraying system complying with rules 42B.23 to 42B.26 inclusive; or
  a gaseous fire-extinguishing system complying with rules 42B.20 to 42B.22 inclusive; or
  a fire extinguishing system using high expansion foam complying with rule 42B.31; or
  other fire-extinguishing system approved by the Director. Where the engine and boiler rooms are not entirely separated from each other, or if fuel oil can drain from the boiler room into the engine room, the combined engine and boiler rooms must be considered as one compartment. Where a fixed fire extinguishing system is fitted it must be controlled from a readily accessible position outside the machinery space that is not likely to be cut off by a fire in the protected space. Vessels that—
  are constructed mainly or wholly of wood or fibre reinforced plastics; and
  are fitted with oil-fired boilers or internal combustion machinery; and
  have a deck of wood or fibre reinforced plastic in way of the machinery space—
  must be provided with one of the above fixed fire extinguishing systems. |
Vessels having machinery spaces not protected by a fixed fire extinguishing system must be provided with a non-portable foam fire extinguisher complying with rule 42B.53 with at least 45 litres capacity, or other non-portable fire extinguisher with equivalent classification and rating acceptable to a surveyor. Where the size of the machinery spaces makes this provision impracticable, the surveyor may accept an additional number of portable fire extinguishers complying with rule 42B.57 which are suitable for extinguishing oil fires.

In all machinery spaces of category A, at least 2 portable fire extinguishers complying with rule 42B.57 of a type suitable for extinguishing oil fires, must be provided. Where such spaces contain machinery that has a total power output of not less than 250 kW, at least 3 such extinguishers must be provided. One of the portable fire extinguishers must be located near the entrance to the space.

<table>
<thead>
<tr>
<th>Firefighter's outfit</th>
<th>At least two fire crew outfits complying with rule 42B.66 must be carried.</th>
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</thead>
<tbody>
<tr>
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<td>Their stowage and location must be to the satisfaction of a surveyor.</td>
</tr>
<tr>
<td></td>
<td>A breathing apparatus for each firefighter's outfits, complying with rule 42B.58 or rule 42B.59 must be carried.</td>
</tr>
</tbody>
</table>

| Signage | Signs complying with rule 42B.69 must be provided to identify all fire fighting appliances and their location. |
This acceptable means of compliance (AMOC) is determined by the Director as provided for under rule 404.190 and section 451(4) of the Maritime Transport Act 1994.

Life saving appliances for vessels less than 45 metres in length

Compliance with the requirements set out below is a means of compliance determined by the Director as acceptable under rule 404.190(2):

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Survival craft (comprising lifeboats, rescue boats and liferafts) | Every vessel must be provided with survival craft that have sufficient aggregate capacity to accommodate on each side of the vessel the total number of persons on board. Survival craft must be—  
  (a) lifeboats complying with rules 42A.6 and 42A.7; or  
  (b) liferafts complying with rules 42A.8 and 42A.9; or  
  (c) a combination of such lifeboats and liferafts.  
  Every liferaft must be provided with float free arrangements which provide for the liferaft to be released automatically in the event of the vessel sinking. Any hydrostatic release unit used in float-free arrangements must comply with the requirements of rule 42A.8.  
  Every vessel must be provided with a rescue boat complying with rule 42A.14, unless the vessel is provided with a lifeboat that fulfils the requirements for a rescue boat and is capable of being recovered after a rescue operation.  
  The number of lifeboats or rescue boats that are carried on a vessel must be sufficient to ensure that when the total number of persons on board abandon vessel not more than 9 liferafts need be marshalled by each lifeboat or rescue boat.  
  Each lifeboat or rescue boat must be provided with a launching appliance that complies with rule 42A.28(2). |
| Lifebuoys                                  | Sufficient lifebuoys complying with rule 42A.16 must be strategically placed around the vessel on each side so that the distance between lifebuoys is minimised. The lifebuoys must be accessible for immediate use at all times.  
  Every vessel must be provided with at least 4 lifebuoys, except that when carrying less than 8 persons, only one such lifebuoy per 2 persons need be carried, provided there is a minimum of 2 such lifebuoys on board.  
  At least half of the number of lifebuoys referred to above must be |
provided with self-igniting lights.

Except where only 2 lifebuoys are required to be carried, at least 2 of the lifebuoys provided with self-igniting lights must be provided with self-activating smoke signals. Where practicable, these must be capable of quick release from the navigating bridge.

At least one lifebuoy on each side of the vessel must be fitted with a buoyant lifeline. Such lifebuoys are not to have a self-igniting light.

<table>
<thead>
<tr>
<th>Lifejackets</th>
<th>Every vessel must be provided with one lifejacket that complies with rule 42A.18 and that has a buoyancy of at least 150 Newtons, for each person on board.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flares</td>
<td>Every vessel must be provided with 6 rocket parachute flares, and 2 buoyant smoke signals. Rocket parachute flares and buoyant smoke signals must comply with rule 42A.22 and rule 42A.24 respectively.</td>
</tr>
<tr>
<td>Line throwing appliance</td>
<td>Every vessel of 30 metres or more in length must be provided with one line throwing appliance complying with rule 42A.30.</td>
</tr>
</tbody>
</table>
| Immersion suits and anti-exposure suits | Every vessel that proceeds south of latitude 48° South must be provided with—
   a) one immersion suit complying with rule 42A.25 for each person assigned to crew the rescue boat; and one anti-exposure suit complying with rule 42A.26 for every person that does not have an immersion suit. Every vessel that proceeds south of latitude 60° South must be provided with an immersion suit for every person onboard who may be required to enter the water to board any of the survival craft provided. |
This acceptable means of compliance (AMOC) is determined by the Director as provided for under rule 404.210 and section 451(4) of the Maritime Transport Act 1994.

### Radiocommunications for vessels less than 45 metres in length

Compliance with the requirements set out below is a means of compliance determined by the Director as acceptable under rule 404.210(2):

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| MF/HF Radiotelephone fitted with Digital Select Calling (DSC) | The vessel must be provided with an MF/HF Radiotelephone that complies with either—  
(1) rule 43.15; or  
(2) rule 43.15, excluding the requirement for, and associated with, Narrow-band Direct Printing equipment contained in rule 43.15, provided the vessel—  
(a) operates between latitudes 76 degrees south and 76 degrees north; and  
(b) does not proceed into Sea Area A4; and  
(c) does not proceed into a NAVAREA where an operational High Frequency Narrow Band Direct Printing Maritime Safety Information broadcast service is provided by a country as indicated in the IMO GMDSS Master Plan. |
| VHF Radio | The vessel must be provided with a VHF radio that complies with rule 43.13. The VHF radio must be positioned so that it is possible to operate the distress alert from the normal navigation position. |
| Radar Transponder or AIS-SART | A vessel must be provided with either—  
(1) a radar transponder capable of operating in the 9 Ghz band and that complies with rule 43.22, which must be stowed so that it can be easily used; or  
(2) an AIS-SART that complies with rule 43.22A in Part 43. |
| EPIRB | The vessel must be provided with a satellite EPIRB capable of transmitting a distress alert either:  
(b) through the polar orbiting satellite service operating in the 406 Mhz band and complying with rule 43.18A or 43.19; or  
(c) if the vessel is engaged only on voyages within INMARSAT coverage, through the INMARSAT geostationary satellite service operating in the 1.6 |
<p>| | |</p>
<table>
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<tbody>
<tr>
<td>Ghz band and complying with rule 43.20.</td>
<td>The EPIRB must be stowed in an easily accessible position, ready to be manually released, and capable of floating free if the vessel sinks.</td>
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<tr>
<td><strong>IMO recognised Mobile Satellite Service</strong></td>
<td>The vessel must be provided with—</td>
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<td></td>
<td>(a) an IMO GMDSS recognised satellite service; or</td>
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<tr>
<td></td>
<td>(b) a ship earth station capable of receiving Maritime Safety Information (MSI), that complies with rules 43.16 and 43.24</td>
</tr>
<tr>
<td><strong>Automatic Identification System (AIS)</strong></td>
<td>Where the vessel is fitted with AIS it must be correctly configured with the vessels details. AIS operational use must comply with resolution A.917(22), as amended by A.956(23)</td>
</tr>
<tr>
<td><strong>Source of energy</strong></td>
<td>The vessel must have available at all times, while it is at sea, a supply of electrical energy sufficient to operate the radio installations and to charge any batteries used as part of a reserve source or sources of energy for the radio installations.</td>
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<tr>
<td></td>
<td>A reserve source or sources of energy must be provided on the vessel, to supply radio installations, for the purpose of conducting distress and safety radiocommunications, in the event of failure of the vessel's main and emergency sources of electrical power. The reserve source or sources of energy must be capable of simultaneously operating the VHF radio installation and, as appropriate, either the MF/HF radio installation or the ship earth station and any additional loads, for a period of at least:</td>
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<td>i) 3 hours; or</td>
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<td>1 hour, if the emergency source of electrical power complies fully with all relevant requirements of rule 404.96 including the requirements to supply the radio installations and is capable of serving for a period of at least 6 hours; and</td>
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<td>The reserve source or sources of energy need not supply independent HF and MF radio installations at the same time.</td>
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<td></td>
<td>The reserve source or sources of energy must be independent of the propelling power of the vessel and the vessel's electrical system.</td>
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<tr>
<td></td>
<td>Where in addition to the VHF radio installation, two or more other radio installations can be connected to the reserve sources of energy, they must be capable of simultaneously supplying, for the period specified, the VHF radio installation and:</td>
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<tr>
<td></td>
<td>d) all other radio installations that can be connected to the reserve source or sources of energy at the same time; or whichever of the other radio installations will consume the most power, if only one of the other radio installations can be connected to the reserve source or sources of energy at the same time as the VHF radio installation.</td>
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<td>Where a reserve source of energy consists of a rechargeable accumulator battery or batteries:</td>
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<tr>
<td></td>
<td>e) a means of automatically charging such batteries must be provided that must be capable of recharging them to</td>
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</tbody>
</table>
minimum capacity requirements within 10 hours; and
the capacity of the battery or batteries must be checked, at
intervals not exceeding 12 months, when the vessel is not
at sea.

The siting and installation of accumulator batteries that provide
a reserve source of energy must be such as to ensure:

f) the highest degree of service; and
a reasonable lifetime; and
reasonable safety; and
that the battery temperatures remain within the manufacturer’s
specifications whether under charge or idle; and
that, when fully charged, the batteries will provide at least the
minimum required hours of operation under all weather
conditions.

Clock
The vessel must be provided with a reliable clock fully visible to
the radio operator, mounted in the immediate vicinity of the
radio installation.

Card of instructions
The vessel must be provided with a legible and easily
accessible card that explains in simple terms the use of the
radio equipment and distress procedures to an unskilled person
for use in an emergency.

Emergency electric light
The vessel must be provided with an emergency electric light
that—
g) is independent of the system that supplies the normal
lighting of the radio installations; and
is permanently arranged so as to be capable of providing
sufficient illumination of—
the operating controls of the radio installations; and
the clock; and
the card of instructions; and
is controlled by a switch, clearly labelled to indicate its purpose,
placed at the operating position of the MF/HF and
INMARSAT.

Documentation
The vessel must be provided with the following documents:
h) Radio handbook for coastal vessels; a guide to maritime
communications in New Zealand; and
Vessel Station Radio Licence; and
Call sign and MMSI number which are both to be displayed;
and
if visiting foreign ports—
a list of radio stations of countries that are to be visited;
and
an International Telecommunications Union manual for
use in the Maritime Mobile and the Maritime Mobile
Satellite Services.