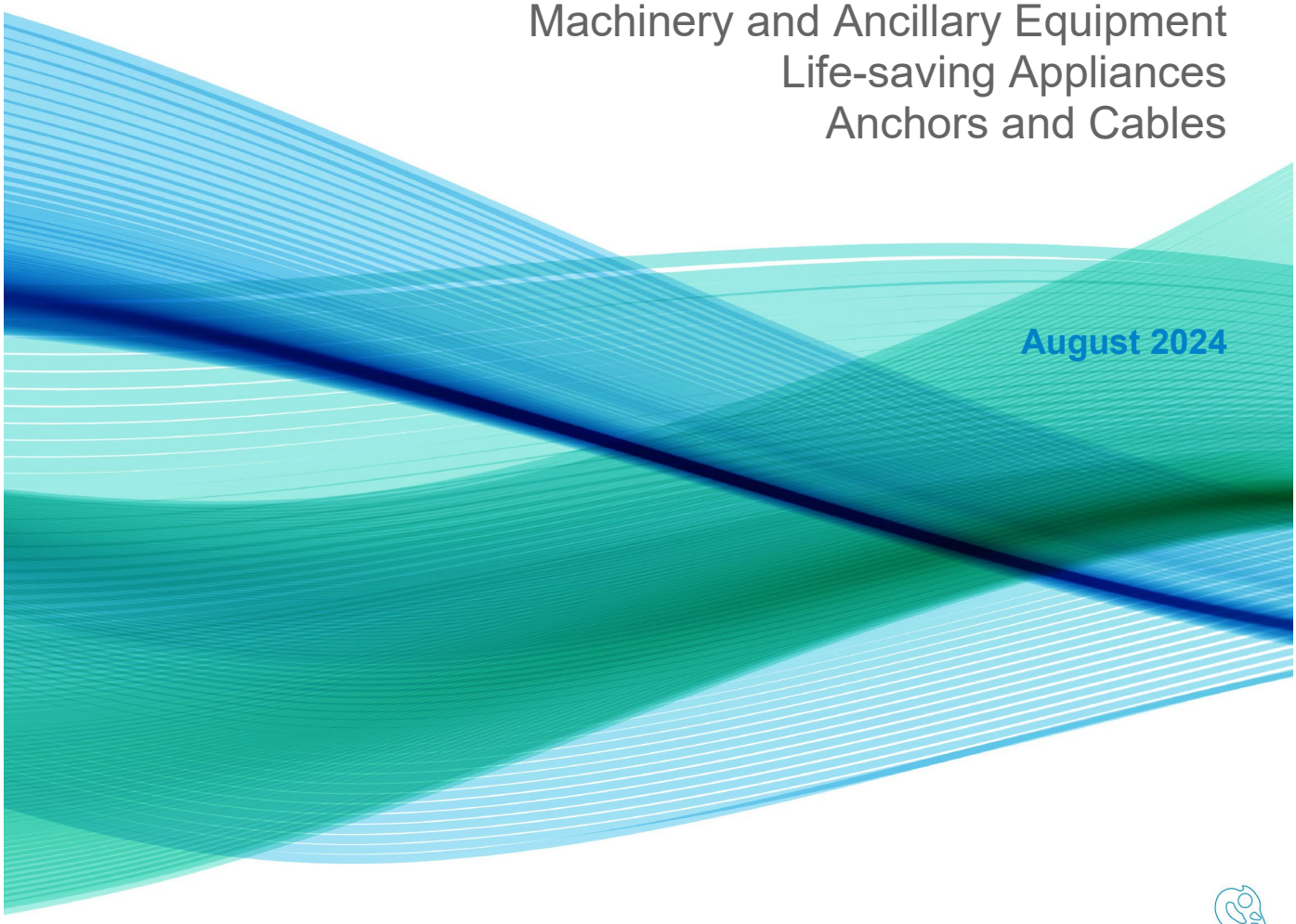
Invitation to Comment: Design, Construction and Equipment Rules Reform

Consultation Overview: Package 1

Fire Protection
Machinery and Ancillary Equipment
Life-saving Appliances
Anchors and Cables



August 2024

NOT GOVERNMENT POLICY

This document is part of a series of documents to support consultation on changes to the existing Design, Construction and Equipment rules (the DCE rules). Other documents that form part of the consultation package include:

- *Invitation to Comment* - An overview of the consultation package and summary of the proposals, including information on how to have your say on the proposals (this document).
- *Proposal summaries* - Details of the proposed changes for each of the four rule topics being consulted on: Life-saving Appliances, Fire Protection, Machinery and Ancillary Equipment, and Anchors and Cables.
- *Draft Maritime Rules and draft Maritime Transport Instruments (MTIs)* – a set of rules and MTIs for each of the four Rule topics.
- *What does this mean for me* – the main implications of the proposed changes for 14 representative vessels considered to reflect the majority of the New Zealand domestic commercial fleet.
- A template to support preparation of your submission.

These documents, and other supporting information, can be accessed at https://www.maritimenz.govt.nz/public/consultation/dce-40-series-package-1/

Contents

Note: The word 'ship' is used in the Maritime Transport Act 1994 and the proposed rules and MTIs. This term is used to refer to any kind of boat or craft and does not refer to a craft of a specific size. For the avoidance of doubt, the terms vessel, ship and boat can be used interchangeably. This document uses the term 'vessel'.

Purpose

1. Maritime New Zealand - Nō te rere moana Aotearoa (Maritime NZ) is proposing significant reform of the Maritime Rules for design, construction and equipment (the DCE Rules). These rules are sometimes referred to as "the 40-Series rules".
2. The changes to the DCE rules are being consulted on as three packages, each including four to seven proposed new Rule Parts and the associated maritime transport instruments. The proposed new rules and maritime transport instruments will come into force at the same time, after all changes have been consulted on. In total, 15 existing rule parts will be reformed through this programme.
3. This document briefly explains the reform of the DCE rules and provides an overview of the rules and maritime transport instruments included in Package 1, and information on how to provide feedback. You are invited to make a submission about the proposals for this consultation. The rule topics covered are Life-saving Appliances, Fire Protection, Machinery and Ancillary Equipment, and Anchors and Cables.
4. The consultation includes both rules and maritime transport instruments, although the rule must be made before the associated transport instrument can be made. Consulting on these together enables those affected to understand any changes to requirements and how they might be affected.
5. Maritime NZ is consulting on the rules on behalf of the Associate Minister of Transport who has the authority to make Maritime Rules. We are consulting on the maritime transport instruments on behalf of the Director of Maritime NZ, who has the power to make these instruments where they have been enabled in the rules.
6. It is intended that the proposed new rules and maritime transport instruments will be finalised in 2025, and come into force in 2026. Note that these dates are subject to analysis of submissions received during this consultation, and Ministerial agreement to any changes subsequently made in response.

About Maritime Rules and Maritime Transport Instruments

7. The authority to make maritime rules for design, construction and equipment 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)(q), 36(1)(r), 36(1)(t), 36(1)(t)(a) 36(1)(u), 36(1)(v), and 36(1)(x) of the Maritime Transport Act 1994 (MTA). The authority to make maritime transport instruments is found in section 452A of the MTA. The collection of documents that make up this consultation package are issued to fulfil formal consultation requirements under sections 444 and 452C of the MTA.
8. Maritime Rules and transport instruments are secondary legislation under the Legislation Act 2019. Under that Act, the rules and transport instruments must be presented to the House of Representatives. The House of Representatives may, by resolution, disallow any secondary legislation. The Regulations Review Committee is the select committee responsible for considering rules under that Act.

How to have your say

9. As noted above, this document is part of a package of consultation documents on the proposed changes to the maritime design, construction and equipment rules. Information on this consultation will be available on Maritime NZ's website.
10. Subject to interest, Maritime NZ will hold online information sessions on the proposals on 27 and 28 August and 24 and 25 September [times to be confirmed]. Please contact us at the email address provided below if you would like to attend a session or if you would like us to contact you to discuss any of the proposals.

11. We welcome any feedback you wish to provide. Questions about the topics we are consulting on have been included to help you focus your feedback. Answering the questions is optional. In addition, you may also wish to comment on:
    - what impacts you think the proposed rules and maritime transport instruments might have on the industry, maritime operations or maritime safety; and / or
    - whether the proposed rules and maritime transport instruments are accurate, free of error, and as clear and understandable as possible.
12. The questions we are asking are also attached as Appendix 1.
13. If you would like to provide comment on the proposals, please make a submission by completing the submission form available from our website: (https://www.maritimenz.govt.nz/public/consultation/dce-40-series-package-1/), or in any other written form, and:
    - emailing it through to us at 40.series@maritimenz.govt.nz; or
    - posting it to the Regulatory Reform Projects Team, Maritime NZ, PO Box 25620, Wellington 6140.
14. Submissions do not have to use the submission form. However, all submissions are required to be received by 5pm on Friday the 18 October 2024.

Submissions are public information

15. Please let us know 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 1982 (OIA) request, Maritime NZ will consider your confidentiality request in accordance with the grounds for withholding information set out in the OIA.
16. In addition, if you are an individual (that is your comments are made personally and not on behalf of a company or an organisation), please let us know if you have reasons that your identity should not be disclosed.
17. We will acknowledge all submissions that we receive. A summary of submissions will be published on our website.

Background and reasons for change

18. The design, construction and equipment rules set standards and obligations for the:
    - survey and certification of New Zealand vessels; and
    - design, construction and equipment requirements for New Zealand domestic commercial vessels (i.e. not international vessels, and not pleasure craft).[1]
19. There are 17 Rules Parts in the design, construction and equipment rules (also known as the 40-Series Rules). The reform project is reviewing 15 of these – we are not looking at Hovercraft (40F) and Novel ships (40G).
20. The current rules are grouped by vessel type, with each grouping or rule part covering topics such as stability, watertight and weathertight integrity, fire protection, machinery, electrical, communications equipment and life-saving appliances. This results in significant duplication, and in places there are also inconsistencies with no clear reason why. Most of the rules were introduced in 2000 or 2001 so they are generally over 20 years old.

[1] In some circumstances, some rules also apply to foreign vessels that are operating commercially in New Zealand.

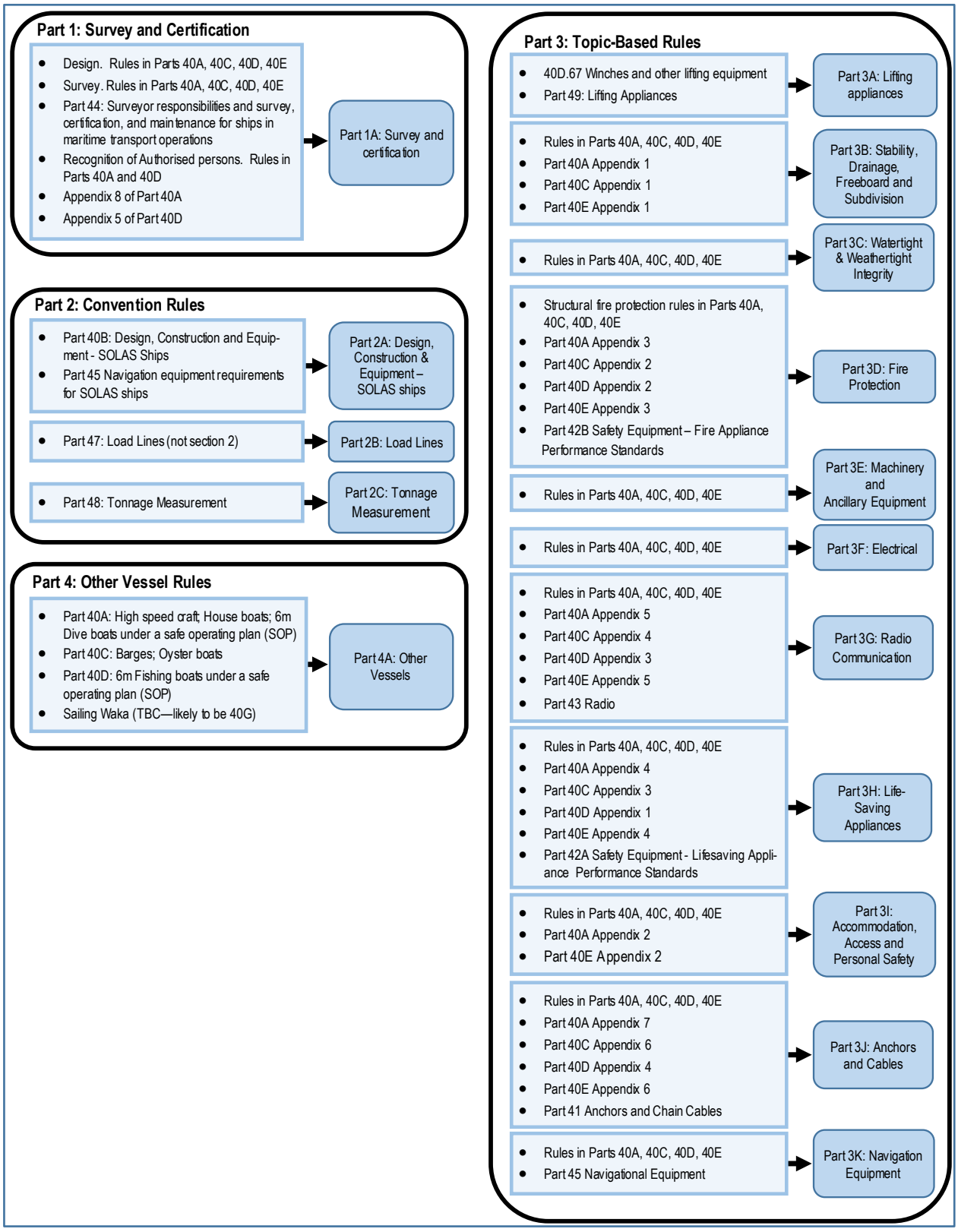
21. The reform is in response to a number of factors, including:

- Feedback from the sector that the rules have numerous technical issues, are hard to use, inconsistent and inflexible – with concerns that these issues cause uncertainty, inconvenience and delays which lead to unnecessary costs and a high volume of queries and applications for exemptions.
- Policy investigations and analysis have found that the rules are unwieldy, repetitive, inconsistent, often complex and overly prescriptive.
- Rules about a given topic are often located in multiple different places.
- Having separate rules based on vessel type is not justified – much of the content is the same or similar, and is repeated across the Rule Parts for passenger (40A), non-passenger (40C), fishing (40D) and sailing (40E) vessels.
- Over a number of years, reports by the Transport Accident Investigation Commission (TAIC) have recommended changes to standards across a number of rules topics.
- A commitment to improve regulation as part of Maritime NZ's regulatory stewardship.
- Some rules have not kept pace with sector changes and developments in technology.
- Some rules set standards that are too onerous; in other cases the safety standards for some vessels are too low.

22. The aim of the project is to revise the design, construction and equipment rules so that they:

- Are clear, easy to understand and user-friendly for those applying them.
- Set standards that are proportionate and appropriate to the risk.
- Provide a new framework for the rules which is easy to maintain and update.
- Address the issues the sector has raised about the current rules.

Figure 1: Mapping the existing design, construction and equipment rules onto the new rule structure



Assessment criteria explained

23. Criteria have been established for assessing all proposals for the Design, Construction and Equipment Rules Reform Project. The changes proposed in this consultation are assessed against the criteria described below.

- *The changes provide flexible and adaptable regulation*
  - Changes in technology, standards or knowledge can be incorporated into rules (including maritime transport instruments) in a timely manner.
  - Where appropriate, surveyors are provided with options about the evidence that may be used and/or the standards that apply.
  - Decision-making by surveyors and by Maritime NZ is supported and enhanced.
- *Rules are clearer and easier to understand and apply*
  - Unnecessary bulk and complexity is reduced.
  - Requirements in rules are consistent and predictable.
  - The arrangement of rules makes sense to users and requirements are straightforward to locate.
  - The purpose of the rules and what is required is clearly stated.
- *Maritime safety is maintained or enhanced*
  - Current safety standards are reduced where analysis indicates that they are unnecessarily onerous.
  - Current safety standards stay the same where analysis indicates they are sufficient.
  - Safety standards will be modernised where analysis indicates that this is required for safety reasons.
- *Changes are practical and economically viable*
  - The change supports the ongoing improvement of the fleet.
  - The change is technically and practically feasible.
  - Unnecessary costs are reduced.
  - The change achieves a balance between the risks of harm to people and the costs of making improvements to safety.
  - The requirements are the minimum necessary to ensure safe operation.

Summary of proposed changes that will apply to all topics

General requirements

24. General requirements statements are being introduced into all new rules. They specify requirements for each topic that are implicit in the current rules but that are often not directly stated. Sub-sections in rule parts also have general requirements that apply to that section. General requirements statements do not impose additional duties or costs.

25. The goal of general requirements is to provide direction and clarity about what the rules require. This will help surveyors to make assessments when they are surveying a vessel, and assist vessel operators by describing the outcomes that an exemption application must demonstrate. It will also help Maritime NZ by providing the basis against which an exemption application can be assessed.

26. General requirements statements address two main issues:

- Most rules are prescriptive. They do not provide a framework that allows alternatives to the prescribed rules – even if the alternative is as good as or better than the current requirement. A departure from the rules requires an exemption granted by the Director of Maritime NZ, which is time-consuming and costly.

- Most rules do not state what must be achieved. When matters are ambiguous or new methods are developed, individual surveyors and Maritime NZ staff must make decisions - for example about rule compliance or exemption applications - by deducing the intention of the rules. This slows down decision-making, adds cost and creates uncertainty.

Harmonising and consolidating requirements across vessel types

27. A guiding principle of the reform of the design, construction and equipment rules is that where practicable, rules will be harmonised and consolidated across vessel types. In most cases, the minor differences in rules from the different vessel types (passenger, non-passenger, fishing, and sailing) have been harmonised and the rules consolidated into one set. This is being done to reduce duplication and complexity, and increase consistency.

28. Harmonising and consolidating means that requirements are arranged differently in the new rules and maritime transport instruments and there are minor wording changes. However these changes generally do not impose additional duties or costs.

Requirements are based on risk

29. A risk-based approach has been used to consider whether changes in standards are required.

30. There are currently a number of examples where rules for different vessels address the same items but set different requirements. These requirements have been aligned in the proposed new rules, based on the principle that vessels of the same or similar size working in the same or similar location should meet the same requirements - unless there are specific reasons why they should not.

31. A risk-based approach means that settings have changed for some vessels. Some requirements have reduced - for example the certification of anchors and cables; electrical standards for many existing vessels; or the standards for rescue boats. Some requirements have increased - for example fire alarms or fire suppression systems on more vessels.

Grandparenting and transition arrangements

32. Harmonising and consolidating requirements does not always work without introducing changes that affect some vessels. Where this happens, the proposed new rules address the change in one of two ways – ‘grandparenting’ and ‘transition periods’.

Grandparenting

33. Grandparenting means that in some circumstances existing vessels may continue to comply with a current rule. Grandparenting is used where a change has been proposed for reasons of usability – i.e. to reduce duplication and complexity and increase consistency - and there is not a strong safety issue that means existing vessels should be upgraded to meet the new rule.

34. To support grandparenting, the current rules will remain on the Maritime NZ website after they have been revoked, so that the sector and the public can continue to access them.

Transition period

35. The general approach to harmonising and consolidating requirements will remove ‘duplicate rules’. Where the requirements are safety-related, a higher standard may apply for some vessels. These vessels may be given time in the form of a transition period to meet the new standard. The period will vary from two to five years depending on the topic and the cost and complexity of meeting the new requirements. Transition periods may also apply where new requirements have been introduced to raise safety standards, and these requirements apply to both new and existing vessels.

36. Standards in the current rules have been revised over the years, but many existing vessels are not required to meet the revised safety standards. For example, in 2004, standards in around a third of the design, construction and equipment rules increased – but only for vessels built or modified after 2004. This created a parallel rules set which added significantly to the overall complexity of the rules.

Second-hand vessels entering the fleet

37. The proposed new rules will apply to new vessels entering the fleet. A new vessel will mean a vessel that is newly built. It will also mean a second-hand vessel that is new to the New Zealand fleet – for example because it comes from another country. The current rules are not clear on this point, and this has led to confusion about which rules apply.

Fishing vessels of 24 metres or more in length

38. A proposal being considered is to treat all fishing vessels of 24 metres or more as Cape Town vessels, meaning they will be directed to the rules that apply to New Zealand Cape Town Vessels, found in Maritime Rules Part 404.

39. This would mean that when the new design, construction and equipment rules take effect, Part 404 would apply to new and existing fishing vessels of 24 metres or more in length that are certified to operate in any of the operating limits defined in Rule Part 20, including the unlimited area. New Zealand has less than 40 fishing vessels in the fleet that are 24 metres or more in length. It makes sense to treat all fishing vessels this size the same, whether or not they operate in the unlimited area.

40. The changes proposed for the set of design, construction and equipment rules could mean that they do not align with the Cape Town Rules. Both sets of rules will be checked for alignment, and if necessary, amendments to the Cape Town Rules will be proposed as part of Package 3, targeting consultation in mid-2025.

Offences and penalties

41. As part of the review of the DCE rules, Maritime NZ and the Ministry of Transport will need to do work to determine whether the offences in the MTA and the Maritime (Offences) Regulations 1998 will continue to be sufficient for compliance and enforcement purposes. Any proposed new offences and penalties will be consulted on separately.

Summary of proposed changes in Package 1 by topic

42. The main changes proposed for each of the four topics in Package 1 are summarised below.

> Note that these summaries are not intended to be comprehensive. We encourage readers interested in a particular topic to look at the proposal summary and draft rules and maritime transport instrument for that topic.

Fire Protection – Part 3D

43. The main proposals under the new Fire Protection rules and maritime transport instrument include:

- All vessels will be classified as ‘Low fire-risk’, ‘Medium fire-risk’, or ‘High fire-risk’, based on operating limits, persons on board and vessel length. Fire protection requirements increase with risk.
- High fire-risk vessels of 15 metres or more in length and Medium fire-risk vessels of 24 metres or more in length will require structural fire-resisting divisions to separate areas of major or moderate fire hazard - including areas containing electrical energy storage systems (ESS)[2] - from other areas.
- Low fire-risk vessels of more than 6 metres in length with an inboard engine of 120 kW or more will require stand-alone smoke alarms. Medium fire-risk and High fire-risk vessels will require hard wired fire detection and alarm systems.

[2] I.e. to provide power to electric propulsion machinery

- The following vessels will require a fixed fire-extinguishing system in the propulsion machinery space:
    - Medium fire-risk and High fire-risk vessels.
    - Low fire-risk vessels of more than 6 metres in length that have an engine of 120 kW or more.
    - A vessel with an inboard petrol engine.
- An ESS system of 120 kW or more will require a fixed fire-extinguishing system.
- Engine compartments and ESS system compartments that require a fixed fire-extinguishing system will need to be gastight (to contain the fixed fire-extinguishing medium).
- Requirements to carry sand, spare charges for portable fire extinguishers, manual fire pumps, and non-portable foam applicator units will be removed. Fire hoses, hydrants, mains, and pumps will not be required on vessels of less than 15 metres in length.

44. Once the new rules come into force, existing vessels will have two years to meet the new fire detection and alarm and fixed fire extinguishing requirements. High fire risk vessels of 24 metres or more will have five years to meet structural fire rating requirements.

Machinery and Ancillary Equipment – Part 3E

45. The main proposals under the new Machinery and Ancillary Equipment rules and maritime transport instrument include:

- Vent pipes fitted to non-portable fuel tanks that carry petrol must be fitted with a roll-over safety valve on vessels of less than 12 metres in length with a planing hull.
- Fibre reinforced plastic (FRP) and thermoplastic free-standing fuel tanks will be allowed.
- Engines (except outboards with a rating less than 120kW) must have a visual or audible alarm to indicate abnormal engine conditions.
- Engines that are not readily accessible must have remote manual shut down (or kill switch) located outside the engine space.
- Plastic will be allowed for use in sea water piping and bilge piping. Measures have been added to address the risk of in-flooding if the plastic pipe fails.
- Bilge level alarms will be required in fish holds and watertight spaces that are not the propulsion machinery space if seawater pipes are present.
- The requirement to have emergency power for electrically powered bilge pumps will reduce to 2, 3 or 6 hours for enclosed water limits, inshore limits and coastal limits respectively.
- Separate circuits must be used to provide power to an electrically powered submersible bilge pump and the bilge level alarm. New electric bilge pumps and related wiring must have an IP67 rating.

46. Once the new rules come into force, existing vessels will have two years to meet the fuel vent pipe roll-over safety valve and bilge level alarm requirements; and five years to install bilge level alarms and submersible electric bilge pumps on separate circuits, install engine alarms and install a means of shutting down the engine from outside the engine space.

Life-saving Appliances - Part 3H

47. The main proposals under the new Life-saving Appliances rules and maritime transport instrument include:

- Lifejackets of appropriate size will be required for all persons on board in all operating areas.
- Liferafts will be required on all vessels operating beyond inshore fishing limits. Vessels operating within inshore and inshore fishing limits will be able to apply a risk assessment to

determine whether liferafts are required, based on factors that include operating close to shore during daytime only; the presence of related vessels nearby; and whether the vessel is regularly monitored, for example by a shore base. Liferafts must be able to cater for 100 percent of persons on board. If liferafts cannot be deployed to either port or starboard sides, or centrally positioned, the total capacity will need to be 200 percent.

- The servicing intervals for both liferafts and lifejackets will be more flexible.
- More vessels operating in coastal limits will require a rescue boat. However, a more flexible approach to meeting requirements is being introduced. A vessel operating within inshore and inshore fishing limits will not require a rescue boat if it can demonstrate that it can safely recover a person from the water by alternative means. An auxiliary craft may be used as a rescue boat, and rescue boats on vessels operating within coastal limits may be launched manually. Surveyors will be able to approve the design of non-SOLAS rescue boats.
- The number of lifebuoys required will depend on the size of the vessel, expected sea conditions and distance from land. Vessels with large numbers of passengers and/or multiple decks will require more lifebuoys. Horseshoe lifebuoys may be used on a vessel of less than 15 metres that is operating within inshore and inshore fishing limits.

48. Once the new rules come into force, existing vessels will need to meet the requirement to carry lifejackets immediately, and will have two years to meet other new requirements.

Anchors and Cables – Part 3J

49. The main proposals under the new Anchors and Cables rules and maritime transport instrument include:

- Certification requirements reduce. Testing and certification of anchors and chain cables by recognised classification societies will only be required for vessels of 24 metres or more in length. Anchors and chain cables on vessels of less than 24 metres will require certificates issued by the manufacturer.
- Steel wire will be allowed to be used as anchor cable on vessels with an Equipment Number (EN) of 500 or less (which equates to a standard anchor weight of 1440 kg), provided that it meets strength and certification conditions, and is used appropriately.
- Super high holding power (SHHP) anchors will be allowed if they have been assessed and approved by an inspecting organisation (for example a recognised classification society).
- Passenger vessels less than 24 metres in length that would otherwise require two anchors will be allowed to carry a single anchor if they operate in specified locations from a wharf to a wharf.

50. It is proposed these changes will not require a transition period because they are permissive – i.e. they do not impose duties or costs. Existing vessels will be able to continue to comply with the current rules after they have been revoked, provided that their anchors and cables etc. are in good condition and the vessel does not have a major change that invalidates the basis on which the anchors and cables were determined.

What do the changes mean for my ship/vessel/boat?

51. As part of preparing this package we have tested the proposed rules and maritime transport instruments against 14 vessels that we consider represent the majority of the New Zealand domestic commercial fleet. The examples are:

Vessel	Size	Operating limit
Fishing vessel	23m	Offshore limits
Fishing vessel	18m	Inshore fishing limits
Fishing vessel	11.9m	Inshore fishing limits
Passenger vessel	27m	Coastal limits
Passenger ferry	23m	Inshore limits (a)[3]
Passenger charter vessel	19m	Coastal limits
Passenger vessel	15m	Coastal limits
Passenger sailing charter	13m	Inshore limits (a)
Passenger vessel	12m	Inshore limits (a)
Passenger vessel	5m	Inshore limits (b)[4]
Passenger vessel – SOP Dive boat	5m	Enclosed water limits / Inshore limits (b)
Marine farming vessel	23m	Inshore limits (a)
Non-passenger vessel	18m	Inshore limits (b)
Flat bottom work boat	9m	Enclosed water limits

52. The rules and maritime transport instruments in Package 1 have been applied to each example, and the results summarised in the documents called "*What does this mean for me?*" These help to illustrate what the new rules will do. You can pick a 'worked example' that is broadly similar to your own vessel to get a sense of what the proposals will mean for you and your vessel. The 14 "What does this mean for me?" worked examples are available on the website page at: https://www.maritimenz.govt.nz/public/consultation/dce-40-series-package-1/. In addition, a ' snapshot' of the proposed rules changes by vessel type, length and operating limit is included in Appendix 2.

53. Note that typical New Zealand commercial vessels are individually designed and built. The examples have been selected to cover most of the commercial fleet, but it's not possible to cover the complete range of vessels and configurations. This means that the worked examples will provide a good indication of the proposals, but cannot be relied on to ensure they will cover every proposal that might affect your vessel. A template has been provided at the website above should you wish to apply the rules to your specific vessel.

54. The domestic fleet can be considered by length or vessel type. Some statistics on the composition of the fleet are outlined below.

[3] Inshore limits (a) refers to the inshore limits set out in Part 2 of Appendix 1 of Maritime Rules Part 20

[4] This refers to any defined section of the coastal limits out to 12 nautical miles (the limit of the territorial sea) assigned to a vessel by a surveyor

Vessel type	Approx % of fleet	Approx number of vessels*
Passenger	42%	1230
Non-passenger (workboats)	35%	1070
Fishing	20%	625
Other *(sailing; barge; specified limits permits)*	3%	95
** Note the total number of vessels by type exceeds the number of vessels in the fleet (approximate 2,300 vessels) because a vessel can be recognised as multiple types*		

Length of vessel (all vessel types)	Approx % of fleet	Approx number of vessels
6m or less	20%	455
More than 6m and less than 12m	39%	900
12m or more and less than 24m	36%	835
24m or more and less than 45m	5%	130

Overall costs of the proposals

55. Cost information about the proposals in Package 1 is included below. At this stage Maritime NZ has not attempted to estimate the total cost of the proposals. There is a high degree of uncertainty around what safety equipment vessels already have, which is compounded when combined with cost estimates for each item. For the consultation stage of the process, we consider that presenting itemised costs provides a more accurate picture.

The impact of the proposals vary from vessel to vessel

56. The impact of the proposals will vary between vessels. Not all proposals apply to all vessels. Some existing vessels will incur little or no cost, and many will incur some costs. We expect that only a minority of vessels would incur costs across all proposals. We do not have data on the exact number of vessels impacted by the proposals but welcome feedback on how operators will be affected.

57. Vessel owners and operators will have two years or five years - depending on the proposal - to meet the new requirements. The exception is lifejackets, which will apply when the rules come into force. Vessels that already meet requirements will not be impacted.

58. The cost information in the following tables also includes information for two topics that are intended to be included in the Package 2 consultation – Stability and Electrical. This additional information has been included to give a fuller picture of the cost impact of all of the proposed changes.

Cost estimates: Vessels of 6 metres or less in length

Approximately 455 vessels are 6 metres or less in length. This is approximately 20% of the domestic commercial fleet.

Table 1: Vessels 6 metres or less in length. Package 1 and 2 - Main costs that could apply

Rule part	Item	Est. cost per item
Life-saving Appliances	Lifejackets *(passenger vessels)*	*$100*
Machinery	Proposals are unlikely to apply	-
Anchors & Cables	No proposals increase costs. Certification requirements reduce for most vessels.	-
Stability	Baseline Stability Information	$3,000 – $3,900
Electrical	Minimum electrical safety standards	$500 - $650
	Navigation lights alternative power (*assumes this will be a separate battery*)	$200 - $260
	Dual batteries & changeover switch	$500 - $650
Maximum estimated cost to implement all changes if required (over 2-5 years) *(Excludes lifejackets as multiple items may be required)*		**$5,400** + $100 per additional lifejacket

Cost estimates: Vessels of more than 6m in length and less than 12m

Approximately 900 vessels are more than 6m in length and less than 12m in length. This is approximately 39% of the domestic commercial fleet.

Table 2: Vessels more than 6m and less than 12m in length. Package 1 and 2 - Main costs that could apply

Rule Part	Item	Est. cost per item
Life-saving Appliances	Lifejackets *(passenger vessels)*	*$100*
	Liferafts (*size and number required will depend on the number of persons on board*)	*$3,000 - $6,000*
Fire Protection	Smoke detector / alarm (stand-alone) *(assumes less than 37 passengers)*	$150 - $195
	Fixed fire extinguishing system	$4,500 - $5,850
Machinery	Bilge level alarms	$400 - $600
	Bilge level alarms and submersible electric bilge pumps on separate circuits	$500 - $700
	Install engine alarms	$500 - $700
Anchors & Cables	No proposals increases costs. Certification requirements reduce for most vessels.	-
Stability	Baseline Stability Information	$4,500 - $5,850
	Freeboard Marking	$1,500 - $1,950
Electrical	Minimum electrical safety standards	$1,000 - $1,300
	Alternative power supply to navigation lights	$400 - $520

Rule Part	Item	Est. cost per item
	Dual batteries & changeover switch	$500 - $650
Maximum estimated cost to implement all changes if required (over 2-5 years) *(Does not include lifejackets and liferafts, as multiple items may be required depending on numbers of persons on board)*		**$18,300** + additional costs for lifejackets ($100 each) and liferafts ($3,000 - $6,000)

Cost estimates: Vessels of 12m or more in length and less than 24m

Approximately 835 vessels are 12m or more in length and less than 24m in length. This is approximately 36% of the domestic commercial fleet.

Table 3: Vessels of 12m or more and less than 24m in length. Package 1 and 2 - Main costs that could apply

Rule Part	Item	Est. cost per item
Life-saving Appliances	Lifejackets *(passenger vessels)*	*$100*
	Liferafts (*size and number required will depend on the number of persons on board*)	*$3,500 - $8,000*
	Rescue boats *(passenger vessels)*	*$20,000 - $26,000*
Fire Protection	Fire detection and alarm system (*vessels of 15 metres or more in length, or 37 or more passengers)*	$12,000 - $15,600
	Fixed fire extinguishing system *(vessels with inboard engine)*	$9,000 - $11,700
Machinery	Bilge level alarms	$400 - $600
	Bilge level alarms and submersible electric bilge pumps on separate circuits	$500 - $700
	Install engine alarms	$500 - $700
Anchors & Cables	No proposals increase costs. Certification requirements reduce for most vessels.	-
Stability	Baseline Stability Information	$6,000 – $7,800
	Freeboard Marking	$1,500 - $1,950
Electrical	Minimum electrical safety standards	$1,000 - $1,300
	Accessible switchboard for navigation lights	$1,000 - $1,300
	Dual batteries & changeover switch	$800 - $1,000
	Alternative power for navigation lights (fishing)	$400 - $520
	Emergency lighting (fishing)	$1000 - $1,300
Maximum estimated cost to implement all changes if required (over 2-5 years) *(Does not include Life-saving Appliances, as multiple items may be required, and rescue boat proposals include options)*		**$39,000** + additional costs for lifejackets ($100 each), liferafts ($3,500 - $8,000), and rescue boat ($20,000 - $26,000)

Cost estimates: Vessels of more than 24m in length and less than 45m

Approximately 130 vessels are more than 24m in length and less than 45m in length. This is approximately 6% of the domestic commercial fleet.

Table 4: Vessels more than 24m and less than 45m in length. Package 1 and 2 - Main costs that could apply

Rule Part	Item	Est. cost per item
Life-saving Appliances	Lifejackets *(passenger vessels)*	*$100*
	Liferafts (*size and number required will depend on the number of persons on board*)	*$8,000 - $50,000*
	Rescue boats *(passenger vessels)*	*$20,000 - $26,000*
Fire Protection	Fire detection and alarm system (*vessels of 15 metres or more in length, or 37 or more passengers)*	$33,000 - $43,000
	Fixed fire extinguishing system	$22,000 - $30,000
	Structural fire protection *(fishing vessels*)	*$150,000 - $195,000*
Machinery	Bilge level alarms	$400 - $600
	Bilge level alarms and submersible electric bilge pumps on separate circuits	$800 - $1,200
	Install engine alarms	$600 - $1,000
Anchors & Cables	No proposals increase costs.	-
Stability	Baseline Stability Information	$7,000 – $9,000
Electrical	Minimum electrical safety standards	$2,000 - $2,600
	Accessible switchboard for navigation lights	$1,000 - $1,300
	Items applying to fishing vessels: • Navigation light fail indicator • Emergency lighting • Navigation lights alternative power	$500 - $5,000
Maximum estimated cost to implement all changes if required (over 2-5 years) *(Excludes Life-saving Appliances, as multiple items may be required, and rescue boat proposals include options. Excludes structural fire protection, which may only apply to a few vessels - e.g. less than 15)*		**$96,000** + additional costs for lifejackets ($100-$125 each), liferafts ($8,000-$50,000), and rescue boat ($20,000 - $26,000), and structural fire protection ($150,000-$195,000)

Future consultation

59. This is the first package of design, construction and equipment rule topics to be consulted on. We expect consultation on the whole rule set to take place over 12 – 18 months, as follows:

Package 2: Consultation expected to open early 2025	• Survey and Certification • Stability, Drainage, Subdivision and Freeboard • Watertight and Weathertight Integrity • Electrical • Radiocommunications • Navigation Equipment
Package 3: Consultation expected to open mid 2025	• Accommodation, Access, and Personal Safety • Lifting Appliances • Cape Town Agreement consequential amendments • Other Ships • Convention Rule Parts – SOLAS, Tonnage, Load Line

Implementation, monitoring and review

60. Subject to the feedback received during consultation, the proposed rules and maritime transport instruments are expected to be in force in 2026. At this time the existing design, construction and equipment rules (i.e. 40-Series) will be replaced with the new design, construction and equipment rules that are being consulted on as three packages during 2024 and 2025. The intention is that all of the new rules and maritime transport instruments will take effect at the same time. There will be transition periods and grandparenting for some rules, as described in the documentation for individual topics.

61. Materials will be developed to support implementation. These will be scoped and developed during 2024 and 2025, but are expected to include updated guidance and surveyor instructions, updated delegations, and potentially the development of templates for use during survey.

62. Maritime NZ will monitor the implementation of the new rules and maritime transport instruments. It is anticipated that any issues identified will be addressed through the annual omnibus rule changes, which makes changes to a range of Maritime and Marine Protection Rules.

Appendix 1: Consultation questions

The questions we are asking as part of the Package 1 consultation are reproduced below.

Submissions can be made by completing the submission form on our website (https://www.maritimenz.govt.nz/public/consultation/dce-40-series-package-1/). You can email the form to us at 40.series@maritimenz.govt.nz, or post it to the Regulatory Reform Projects Team, Maritime NZ, PO Box 25620, Wellington 6140.

We welcome any feedback you would like to provide.

Overview Questions	
Q 1 What impacts do you think the proposed rules and maritime transport Instruments might have on the industry, maritime operations or maritime safety?	
Q 2 Are the proposed rules and maritime transport instruments accurate, free of error, and as clear and understandable as possible?	
Fire Protection Questions	
Proposal 1: Automatic fire detection and alarm systems	F 1.1 Do you agree with the proposal to require more vessels to have standalone fire detection and alarm systems?
	F 1.2 Do you agree with the proposal to require more vessels to have fixed fire detection and alarm systems?
	F 1.3 Do you agree with the proposed transition period allowing existing vessels up to two years to have fixed fire detection and alarm systems?
Proposal 2: Fixed fire extinguishing systems	F 2.1 Do you agree with the proposal to require more vessels to have fixed fire-extinguishing systems?
	F 2.2 Do you agree with the proposal to allow some vessels of less than 15 metres in length to not comply with the technical standards for fixed fire-extinguishing systems if the proposed criteria are met?
	F 2.3 Do you agree with the proposed transition period allowing existing vessels up to two years to install fixed fire extinguishing systems?
Proposal 3: Structural Fire Protection	F 3.1 Do you agree with the proposal to require more new vessels to have structural fire protection?
	F 3.2 Do you agree with the proposal to require more existing vessels to have structural fire protection?
	F 3.3 Do you agree with the proposed levels of structural fire protection?
	F 3.4 Do you have any information on what it may cost for a vessel to have structural fire protection (particularly existing vessels)?
	F 3.5 Do you agree with the proposed transition period allowing existing vessels up to five years to have structural fire protection?

Proposal 4 – Fire hose appliances	F 4.1 Do you agree with the proposal to require fewer vessels to have fire hose appliances?
	F 4.2 Do you agree with the proposed new performance standards for fire hose appliances?
Proposal 5 – Firefighters outfits and breathing devices	F 5.1 Do you agree with the proposal that new and existing vessels of 24 metres or more in length must have two firefighter outfits and two self-contained breathing apparatus?
	F 5.2 Do you agree with the proposal that all new and existing vessels of 24 metres or more in length must have two emergency escape breathing devices?
Proposal 6 – Remove requirements for vessels to have sand and non-portable fire extinguishers	F 6.1 Do you agree with the proposal that vessels no longer be required to have sand or non-portable fire extinguishers?
Machinery and Ancillary Equipment Questions	
Proposal 1 – Changes to fuel system rules	M 1.1 Do you agree with the proposed change to allow fibre reinforced plastic (FRP) and thermoplastic fixed-in-place petrol fuel tanks?
	M 1.2 Do you agree with the proposed changes to require roll-over safety valves for planing vessels less than 12 metres with petrol fuel systems?
Proposal 2 – Changes to rules for main and auxiliary machinery	M 2.1 Do you agree with the proposed changes to require engine alarms?
	M 2.2 Do you agree with the proposed change to require remote manual engine shut-down where the engine is not readily accessible?
Proposal 3 – Allowing plastic for use in sea water piping and bilge piping	M 3.1 Do you have any comments on the conditions under which plastic piping may be used?
Proposal 4 – Consolidating and harmonising rules for number, type and capacity of bilge pumps	M 4.1 Do you agree with the proposals to consolidate and harmonise the rules for the number, type and capacity of bilge pumps in the proposed new rules for Machinery and Ancillary Equipment?
	M 4.2 Do you agree with the number and capacity of bilge pumps proposed for new sailing vessels?
	M 4.3 Do you agree that the rules should specify the number of bilge pumps required and their capacity for new fishing vessels?
Proposal 5 – Requirements for additional bilge level alarms	M 5.1 Do you agree with the proposal to require additional bilge alarms in fish holds, cargo holds and watertight compartments that are separate from the machinery space?
	M 5.2 Do you agree with the proposal that an existing vessel would have 2 years from the commencement of the rules to install bilge level alarms in fish holds, cargo holds and watertight compartments if the space does not already have one?

Proposal 6 – Changes to bilge system arrangements	M 6.1 Do you agree that sealed watertight compartments in open boats of less than 12 metres should not require bilge drainage arrangements, provided the boat meets the stability rules and there is a way to check the contents of the watertight compartments?
	M 6.2 Do you agree that a vessel of 15 metres or more that proceeds beyond the coastal limits should be able to pump and drain from every space in the vessel (except the machinery space) when any one watertight compartment is flooded?
	M 6.3 Do you agree that a vessel of 24 metres or more that proceeds beyond restricted limits should have at least two bilge suctions in the machinery space, if it is fitted with a bilge main?
Proposal 7 – Changes to requirements for electrically powered bilge pumps	M 7.1 Do you agree that electric bilge pumps and bilge level alarms should be powered on separate circuits?
	M 7.2 Do you agree that electrically powered bilge pumps should have a manual override switch?
	M 7.3 Do you agree with the proposed 2 year transition period in which existing vessels would need to meet the requirements to have a manual override switch for automatic bilge pumps and the 5 year transition period in which existing vessels would need to install separate circuits to provide power to electric bilge pumps and bilge alarms?
Life-saving Appliances Questions	
Proposal 1 – Liferafts and lifejackets	L 1.1 Do you agree with the proposal to require lifejackets for all persons on board a vessel (in all operating limits)?
	L1.2 Do you agree that vessels operating in enclosed waters should comply with the above lifejacket requirement from the date the rules come into force?
	L1.3 Should there be a longer transition period (e.g. 5 years instead of the proposed 2 years) for certain lifejacket requirements, to allow time for lifejackets to be upgraded to a higher buoyancy (where applicable)?
	L1.4 Do you agree with the proposal to allow open reversible liferafts on vessels operating out to the coastal limits?
	L1.5 Should there be a requirement for buoyant apparatus for 30% of passengers on board a passenger vessel operating in inshore waters? [Note: this proposal is not currently included in the draft rule or MTI]
	L1.6 Will you need to purchase a liferaft or lifejackets to comply with the proposed new rules and MTIs?
	L1.7 Are the proposals likely to result in any additional costs or savings?
Proposal 2 – Rescue boats	L2.1 Do you agree with the proposal to allow manual launching for rescue boats out to the coastal limits?

	L2.2 Will the rescue boat design standards be suitable to cover workboats on fishing vessels or other auxiliary craft?
	L 2.3 Will you need to purchase a rescue boat to comply with the proposals?
	L2.4 Are the proposals likely to result in any additional costs or savings?
Proposal 3: Lifebuoys and Visual Signals	L 3.1 Do you agree with the proposed approach to rules for lifebuoys and visual signals?
	L 3.2 Do you agree with the proposed design standards for horseshoe lifebuoys? E.g. that they should have a minimum buoyancy of 100 Newtons?
Anchors and Cables Questions	
Proposal 1 – Reducing certification requirements for anchors, chain cables and accessories	A 1.1 Do you agree with the proposal to reduce certification requirements for vessels of less than 24 metres in length?
Proposal 2 – Allowing steel wire rope to be used as anchor cable	A 2.1 Do you agree with the conditions under which steel wire will be allowed to be used as anchor cable?
Proposal 3 – Allowing super high holding power (SHHP) anchors	A 3.1 Do you agree with the proposal to allow SHHP anchors if they have been approved by a recognised classification society or inspecting organisation?
Proposal 4 – Allowing a passenger vessel of less than 24 metres in length (that would otherwise require two anchors) to carry a single anchor	A 4.1 Do you agree with the proposal to allow a passenger vessel of less than 24 metres in length that would otherwise require two anchors to carry a single anchor if it operates in the restricted limits specified in Part 2 of Appendix 1 of Maritime Rules Part 20 and only travels from a wharf to a wharf?

Appendix 2: A 'snapshot' of the proposed changes

<table>
<tr><th colspan="3">FIRE PROTECTION – PART 3F</th></tr>
<tr><td>General approach</td><td colspan="2">Overall approach:
The current rules found in many different locations have been consolidated and harmonised into one Rule Part and one MTI.
The introduction of a risk-based approach to the Fire Protection rules is a significant change.
Requirements have been clarified but are much the same for Interior Surface Finishes and Fit-out Materials; Heating and Cooking Arrangements; Ventilation Systems; Portable Fire Extinguishers; and Fire Plans.
When a vessels needs to carry Firefighters' Outfits and Emergency Escape Breathing Devices, 2 sets will always be required. Requirements for Fire Pumps and Fire Hose Appliances have been consolidated and will reduce for most vessels.
Requirements for gasfitting work on a vessel have been clarified.
The main changes and clarifications that may have an impact on a vessel are summarised in this Table.
Existing vessels:
Existing vessels will have 2 years to meet requirements for fire detection and alarm systems. Medium and High fire-risk vessels, and some Low fire-risk vessel will also require fixed fire suppression systems. These are potentially significant changes for many vessels.
Existing vessels of 24m or more with a High fire-risk rating will have 5 years to meet structural fire protection requirements – a potentially significant change for a small number of vessels.</td></tr>
<tr><td>All vessels will need to be classified as 'Low fire risk', 'Medium fire risk', or 'High fire risk'</td><td>
<table>
<tr><th>Ship Descriptor</th><th>Enclosed limits</th><th>Restricted limits</th><th>Inshore fishing limits</th><th>Coastal limits</th><th>Offshore / Unlimited</th></tr>
<tr><td>1-36 passengers; or less than 15 m LOA</td><td>Low</td><td>Low</td><td>Low</td><td>Medium</td><td>High</td></tr>
<tr><td>37-200 passengers; or 15 m or more LOA</td><td>Medium</td><td>Medium</td><td>Medium</td><td>Medium</td><td>High</td></tr>
<tr><td>More than 200 passengers; or
24 m or more in LLL</td><td>Medium</td><td>Medium</td><td>Medium</td><td>High</td><td>High</td></tr>
<tr><td>1-36 berthed passengers</td><td>Medium</td><td>Medium</td><td>N/A</td><td>High</td><td>High</td></tr>
<tr><td>37 or more berthed passengers</td><td>High</td><td>High</td><td>N/A</td><td>High</td><td>High</td></tr>
</table>
The fire risk category is determined by length; number of day passengers carried; operating limits; and the number of berthed passengers. If a ship falls into more than one category, the higher category applies.
</td><td>Rule C2.1</td></tr>
</table>

	Vessel type	Requirements	Rule/MTI
Structural fire protection (fire-resisting divisions)	High fire-risk vessel	• A new vessel of 24m or more with a High fire-risk rating will need to meet structural fire protection requirements. • An existing vessel of 24m or more with a High fire-risk rating will have 5 years to meet structural fire protection requirements.	Rule C3.2 Schedule 1.(2)
		• A new vessel of 15m or more with a High fire-risk rating will need to meet structural fire protection requirements. • An existing vessel of 15m or more with a High fire-risk rating will not need to meet structural fire rating requirements unless it has a major alteration.	Rule C3.2
	Medium fire-risk vessel	A new vessel of 24m or more with a Medium fire-risk rating will need to meet structural fire protection requirements.	Rule C3.2
	Any vessel with an electrical energy storage (ESS) system of 120 kW or more output	A vessel with an ESS system of 120 kW or more output that is used to power main propulsion machinery will need to meet structural fire protection requirements.	Rule C3.2
LPG installations	Any gasfitting work on any vessel of any length will need to be carried out by a registered and licensed gasfitter. Gasfitting work on a vessel will need to have a gas safety certificate.		Rules B1.2 and C5.2

	Vessel type	Vessel length	Requirements	Rule/MTI
When a fire detection and fire alarm system is required	Low fire-risk vessel with an inboard engine of 120 kW or more output	More than 6m in length	Will require a stand-alone smoke detector and alarm.	Rule C7.2 Schedule 1(1) MTI 7.2
	Low fire-risk vessel with an electrical ESS of 120 kW or more output	More than 6m in length	Will require a suitable gas detection system.	
	Medium fire-risk, and High fire-risk vessel	Any length	• A fixed fire detection system will need to be installed. • An existing vessel will have 2 years to install a fixed fire detection system.	
When a fixed fire-extinguishing (FFE) system is required	Low fire-risk vessel with an inboard (non-petrol) engine of 120 kW or more	More than 6m in length	• A FFE system will need to be installed in a machinery space of Category A. • The space in which the FFE system is installed will need to be gastight. • An existing vessel will have 2 years to install a FFE system.	Rule C8.2 and C8.4 Schedule 1(1) MTI 8.2
	Medium fire-risk, and High fire-risk vessel	Any length		
	Vessel with an inboard petrol engine	Any length		

	Vessel of that contains an electrical ESS of 120 kW or more output	Any length	• A suitable FFE system will need to be installed in the space containing an electrical ESS. • The space in which the electrical ESS is installed will need to be gastight.	Rule C8.2 and C8.4
	Note: A machinery space of Category A means the propulsion machinery space, or any other engine space with an aggregate output of 375 kW or more			
	Vessel type	**Vessel length**	**Requirements**	**Rule/MTI**
When fire pumps, fire hydrants; fire mains; and fire hoses are not required	All vessel types All operating limits	Less than 15m in length.	• The new rules will not require fire hose appliances for a vessel of less than 15 m in length. • A vessel that does not require fire hose appliances will require 1 or 2 fire buckets, depending on vessel length.	Rule C12.2 MTI 12.2(1)(b) MTI 12.6
	Medium fire risk vessel with no inboard machinery space or ESS space. All operating limits.	Any length	Fire pumps and fire hose appliances will not be required.	Rule C12)(c)
When fire pumps, fire hydrants; fire mains; and fire hoses are required	Medium fire risk vessel, all operating limits	15m or more & less than 24m	1 main fire pump and 1 water jet.	MTI 12.2(1)(b)
	Medium fire-risk vessel, all operating limits	24m or more	• 1 main fire pump and 1 water jet. • 1 emergency fire pump will also be required, if the main fire pump is located in the main machinery space.	MTI 12.2(1)(b) MTI 12.2(2)(a) or (b)
	High fire-risk vessel, all operating limits	15m or more in LOA and less than 24m in LLL.		
	High fire-risk vessel, all operating limits	24m or more	• 2 main fire pumps and 2 water jets. • 1 emergency fire pump will also be required if a fire in any 1 compartment on the vessel could stop both main fire pumps from working (i.e. if both pumps are located in the same place).	Rule C12.2 MTI 12.2(1)(a). MTI 12.2(2)(c).
Items that will no longer be required under the new rules	The following items will not be carried into the new rules: • Sand carried in engine space; • Spare charges for portable fire extinguishers; • Manual fire pumps; and • Non-portable foam applicator units.			

LIFE-SAVING APPLIANCES - PART 3H			
General approach to the Life-saving Appliances Rules	**Overall approach to lifesaving appliances:** The current Life-saving Appliances rules have been consolidated and harmonised into one Rule Part and one MTI. They bring together rules for multiple different lifesaving appliances currently found in 9 different locations. The new rules are risk-based, and reflect the vessel's type of operation and proximity to rescue. Broadly speaking: • Requirements for vessels operating in restricted coastal, coastal and offshore limits and the unlimited area are much the same as the current rules, with changes and clarifications that reduce requirements for some vessels. • Requirements for different vessel types have been consolidated to the extent practicable, but requirements tend to be higher where passengers are carried, because passengers are more vulnerable if an incident occurs. • Some requirements will increase for vessels operating in the enclosed water limits, inshore limits and inshore fishing limits – particularly in regard to carrying lifejackets and liferafts. • The new rules seek to provide flexibility by providing options and trade-offs for when and how a requirement needs to be met. This is particularly the case for liferafts and rescue boats, and also for lifebuoys to a lesser extent. **Existing vessels:** An existing vessel operating in enclosed water limits will need to meet lifejacket requirements when the rules come into force. An existing vessel will need to meet most other requirements within 2 years. Line throwing appliances and survival clothing requirements (Sections 6 and 9 of the Rules) will also apply immediately. These requirements only apply to a few ships, and are not addressed in this Table.		
Liferafts			
General approach to liferafts	**Overall approach to liferafts:** The current rules applying to liferafts have been consolidated and harmonised, and simplified into one Rule Part and one MTI. Requirements for vessels operating in restricted coastal, coastal and offshore limits and the unlimited area are much the same as the current rules. The main changes will be for vessels operating in enclosed water limits, inshore limits and inshore fishing limits: Liferafts will generally **not be required** for vessels operating in enclosed water limits and inshore limits (a). However, they will be required if the vessel has one or more specified risk factors and the operator does not have arrangements in place to mitigate the risks. Liferafts will generally **be required** for vessels operating in inshore limits (b) and inshore fishing limits, unless the operations meet all the specified criteria for lowering the risks. **Existing vessels:** Existing vessels will have 2 years to meet the new requirements.		
High Risk Factors in regard to liferafts	• operating during the hours of darkness • operating south of 44 degrees south latitude	• operating in water with an average water temperature of less than 15 degrees centigrade • carrying more than 38 persons on board	MTI 7.5(8)

	Vessel length	Requirements	Rule/MTI
When a liferaft is required: **Vessel operating in enclosed water limits** ***All vessel types***	Any length	**A liferaft is not required unless the vessel has a High Risk Factor which cannot be mitigated** The mitigations are arrangements to provide for likely rescue within 30 minutes: • Communication and navigation arrangements; and • Proximity to assistance	MTI 7.5(6)
	6m or less in LOA	**A liferaft is not required unless one or more of the factors below applies** (*this provision is separate to MTI 7.5(6)*) • The vessel operates further than 2 NM of the shore, launch spot or parent vessel; or more than 5 NM from a safe haven. • The vessel operates outside of daylight hours or does not return to safety / port on the same day. • The vessel does not have arrangements that provide for likely rescue within 30 minutes, such as communication and navigation arrangements; and proximity to assistance.	MTI 7.5(9)
	12m or less LOA	**A liferaft is not required unless one or more of the factors below applies** (*this provision is separate to MTI 7.5(6)*) • The vessel carries more than 8 persons on board. • The vessel operates outside of daylight hours or does not return to safety / port on the same day. • The vessel does not have additional (specified) communications equipment and external monitoring of operations that would facilitate rescue of persons within 30 minutes of an emergency or abandon vessel incident.	MTI 7.5(10)
When a liferaft is required: **Vessel operating in inshore Limits (a)** ***All vessel types***	Any length	**A liferaft is not required unless the vessel has a High Risk Factor which cannot be mitigated** The mitigations are arrangements to provide for the immediate rescue of all persons on board by: • The vessel carries a rescue boat; or • The operator has other vessels operating nearby that are capable of rescue; or • A combination of the two.	MTI 7.5(4) and (8)
	6m or less in LOA	**A liferaft is not required unless one or more of the factors below applies** *(this provision is separate to MTI 7.5(4))* • The vessel operates further than 2 NM of the shore, launch spot or parent vessel; or more than 5 NM from a safe haven. • The vessel operates outside of daylight hours or does not return to safety / port on the same day. • The vessel does not have arrangements that provide for likely rescue within 30 minutes, such as communication and navigation arrangements; and proximity to assistance.	MTI 7.5(9)

When a liferaft is required: **Vessel operating in inshore limits (b)** ***All vessel types*** **or** **Vessel operating in inshore fishing limits** ***Fishing vessels***	12m or less LOA	**A liferaft is not required unless one or more of the factors below applies** *(this provision is separate to MTI 7.5(4))* • The vessel carries more than 8 persons on board. • The vessel operates outside of daylight hours or does not return to safety / port on the same day. • The vessel does not have additional (specified) communications equipment and external monitoring of operations that would facilitate rescue of persons within 30 minutes of an emergency or abandon vessel incident.	MTI 7.5(10)
	6m or less in LOA	**A liferaft is required unless all of the factors below apply:** • The vessel operates no more than 2 nautical miles from the shore, launch spot or parent ship or no more than 5 nautical miles from a safe haven; and • The vessel operates within daylight hours and returns to safety / port on the same day; and • The vessel has arrangements that provide for likely rescue within 30 minutes of an emergency or abandon-ship incident, such as communication and navigation arrangements; and proximity to assistance; and • Every person on board the vessel wears a 100 Newton lifejacket at all times during the course of a voyage.	MTI 7.5(9)
	12m or less LOA	**A liferaft is required unless all of the factors below apply:** • The vessel carries fewer than 8 persons on board; and • The vessel operates within daylight hours and returns to safety / port on the same day; and • The vessel has additional (specified) communications equipment and external monitoring of operations that would facilitate rescue of persons within 30 minutes of an emergency or abandon vessel incident; and • Every person on board wears a 150 Newton lifejacket at all times during the course of a voyage.	MTI 7.5(10)
When a liferaft is always required	All vessel types All vessel lengths	A life raft for all persons on board is required if a vessel is operating in restricted coastal limits; coastal limits; offshore limits; or the unlimited area	MTI 7.5(9)
Lifejacket or personal floatation device (PFD)			
General approach to lifejackets and PFDs	**Overall approach to lifejackets and PFD:** The current rules applying to lifejackets / personal floatation devices (PFD) have been consolidated and harmonised, and simplified into one Rule Part and one MTI. Most requirements in the current rules have been carried over into the new rules. The main difference is a requirement for all vessels to carry a lifejacket or PFD for all person on board. This is not currently a requirement for a passenger vessel operating in enclosed water limits. Lifejacket buoyancy requirements also increase from 71 Newtons to 100 Newtons for vessels operating in inshore limits (b) and inshore fishing limits. **Existing vessels:** An existing vessel operating in enclosed water limits will need to meet lifejacket requirements when the rules come into force. Other existing vessels will need to meet lifejackets and PFD within 2 years.		

	Vessel type	Operating limits	Vessel length	Requirements	Rule/MTI
Lifejacket or PFD	All vessel types	All lengths	All operating limits	A lifejacket or PFD will be required for all persons on board.	C5.2 MTI 5.2
Rescue boat					
General approach to rescue boats	**Overall approach to rescue boats:** The current rules applying to rescue boats have been consolidated and harmonised, and simplified into one Rule Part and one MTI. Like the current rules, the requirements for rescue boats focus on passenger vessels - which have been assessed as having a higher risk of a man overboard event - and larger vessels operating in the coastal or offshore limits or the unlimited area. The 35m threshold has been chosen to align with Australia. This threshold is used in the current rules for non-passenger vessels. Other thresholds are similar to the current rules, but may increase or decrease requirements for some vessels, depending on the specific circumstances. The alternatives to a rescue boat – lifeboats and auxiliary craft – are carried over from the current rules. The new rules will introduce the ability of operators to demonstrate the ability to recover persons from the water without needing a rescue boat. This will only apply if the vessel operates in enclosed water limits, inshore limits and inshore fishing limits. **Existing vessels:** Existing vessels will have 2 years to meet the new requirements.				
	Vessel type	**Operating limits**	**Vessel length**	**Requirements**	**Rule/MTI**
When a rescue boat will be required	All vessel types	Beyond inshore limits (a)	35m or more LOA	**Rescue boat is required.**	Rule C3.2 MTI 3.2
	Sailing vessel	Beyond the offshore limit	Any length		
	Passenger vessel	Within the coastal or offshore limits	Any length	A rescue boat is required if the vessel carries 12 passengers or more.	
	Passenger vessel	Enclosed water limits Inshore limits	15m or more LOA	A rescue boat is required if the vessel carries 99 passengers or more.	
	Passenger vessel	Enclosed water limits Inshore limits	24m or more	A rescue boat is required if the vessel carries more than 36 passengers.	
Alternatives to carrying a rescue boat (where one is required)	All vessel types	All operating limits	All lengths	The following meet the requirements for a rescue boat: • A lifeboat (that meets applicable rules); or • An auxiliary craft (that meets applicable rules).	MTI 3.6(2)
	All vessel types	Enclosed water limits, inshore limits and inshore fishing limits	All lengths	A vessel that requires a rescue boat does not need to carry one if the vessel can demonstrate safe recovery of persons from the water using alternative means.	MTI 3.6(3)

Lifebuoys

General approach to lifebuoys

Overall approach to lifebuoys:

The current rules found in multiple locations have been consolidated and harmonised into one Rule Part and one MTI. Requirements have been simplified, and are much the same as the current rules or reduce, depending on the vessel type and operating limit.

Although requirements reduce for many vessels, the surveyor will be able to require more lifebuoys in certain circumstances. Also in certain circumstances, the surveyor may allow fewer lifebuoys, or allow a horseshoe lifebuoy or a throw bag.

Number of lifebuoys required

Vessel type	Operating limits	Vessel length	Requirements	Rule/MTI
All vessel types except: - Cape town fishing vessels - SOLAS ships	Restricted Coastal Coastal limits Offshore limits Unlimited area	9m or more LOA	Must carry 4 lifebuoys	Rule C2.2. MTI 2.2
		Less than 9m LOA	Must carry 2 lifebuoys	
	Enclosed water limits Inshore limits Inshore fishing limits	15m or more LOA	Must carry 4 lifebuoys	
		9m or more & less than 15m	Must carry 2 lifebuoys	
		Less than 9m LOA	Must carry 1 lifebuoy or 1 throw bag	
Unmanned barge	Any operating limit	Any length	Must carry 2 lifebuoys	MTI 4.2(2)

When additional lifebuoys may be required

The surveyor may require up to an additional 4 lifebuoys if

- The number of decks, or the length of the vessel, means no lifebuoys are accessible within 15m on an exposed deck; or
- A lifebuoy is not easily accessible from the navigating position, where deployment from that position would be necessary.

The surveyor may require up to an additional 2 lifebuoys if persons on board a vessel are unlikely to be able to effectively access or deploy a lifebuoy.

MTI 4.6(2)
MTI 4.6(3)

When fewer lifebuoys may be allowed

All vessel types	Enclosed water limits Inshore limits Inshore fishing limits	Less than 15m LOA	**Up to 2 fewer lifebuoys if** the surveyor determines that the vessel has sufficient lifebuoys and other life-saving appliances along the length of the vessel to enable rapid deployment and optimal likelihood of rescue and retrieval of persons in distress from the water.	MTI 4.6(4)
		Less than 15m LOA	**A horseshoe lifebuoy** may be carried instead of a round lifebuoy, if the surveyor determines that this is appropriate.	MTI 4.6(5)
		Less than 9m LOA	**A throw bag** may be carried instead of a lifebuoy if the surveyor determines that this is appropriate.	MTI 4.6(6)

Visual signals (flares)

General approach to flares

Overall approach to flares:

The current rules found in multiple locations have been consolidated and harmonised into one Rule Part and one MTI.

- Requirements in offshore limits and the unlimited area stay the same or reduce, depending on the vessel type
- Requirements in the coastal limits, inshore limits and inshore fishing limits stay much the same or reduce. There are more options for the mix of flares to be carried.
- Requirements in enclosed water limits stay much the same. Exclusions for when flares are not required are carried over to the new rules, but apply to all vessel lengths, not just to vessel of 6m or less.

Existing vessels: Existing vessels will have 2 years to meet the new requirements.

Number and type of flares required

Vessel type	Operating limits	Vessel length	Requirements	Rule/MTI
All vessel types except: - Cape town fishing vessels - SOLAS ships	Enclosed water limits	All lengths	A combination of 2 rocket parachute or 2 red hand flares; and 2 hand smoke signals or 1 buoyant smoke signal. Unless any modification under MTI 2.5(2) applies.	Rule C2.2. MTI 2.2
	Inshore limits Inshore fishing limits	All lengths	A combination of 4 rocket parachute or 2 red hand flares; and 2 hand smoke signal or 1 buoyant smoke signal. Unless any modification under MTI 2.5(2) applies.	
	Coastal limits	All lengths	4 rocket parachute and 2 buoyant smoke signals or 4 rocket parachute, 1 buoyant smoke and 2 hand smoke signals.	
	Offshore limits Unlimited area	All lengths	6 rocket parachute and 2 buoyant smoke signals.	

When flares are not required

A surveyor may determine that a vessel does not need to meet requirements for visual signals if—

- The vessel is an unmanned barge; or
- The vessel is in constant sight of, and communication with, a means of immediately available assistance during the normal course of its operation; or
- The vessel operates in a river or other similar restricted waterway and there are no likely scenarios in which flares would be required.

MTI 2.5(2)

MACHINERY AND ANCILLARY EQUIPMENT – PART 3E

General approach to Machinery and Ancillary Equipment

Overall approach to Machinery and Ancillary Equipment:

The current rules will be consolidated and harmonised into one Rule Part and one MTI. This will mean some wording changes and a different format, but most current requirements are much the same. The new Machinery and Ancillary Equipment rules will apply to all vessels except Cape Town Fishing Vessels, SOLAS Ships, Novel Ships and Hovercraft. The changes are described in the Table below.

Existing vessels:

Once the new rules come into force, existing vessels will need to meet some requirements within a specified time period:

2 years: Fuel vent pipe roll-over safety valve.
Bilge level alarms.

5 years: Bilge level alarms and submersible electric bilge pumps wired on separate circuits.
Engine alarms.
A means of shutting down the engine from outside the engine space.

	Vessel type	Operating limits	Vessel length	Requirements	Rule/MTI
Fuel vent pipes will require a roll-over safety valve to be fitted	All vessels with a planing hull	All operating limits	Less than 12m LOA	• Applies to non-portable fuel tanks that carry petrol. • Existing vessels will have 2 years to meet this requirement.	Rule C3.2(5)
Fibre reinforced plastic (FRP) and thermoplastic free-standing fuel tanks will be allowed	All vessels	All operating limits	All lengths	Manufacturing standards and ventilation requirements will apply.	Rules C3.3(22)-(24)
The engine will require a visual or audible alarm to indicate abnormal engine conditions	All vessels	All operating limits	All lengths	• Will not apply to outboard engines with a rating less than 120kW. • Existing vessels will have 5 years to meet this requirement.	Rule C5.2(13); & Schedule 2(5)
Inboard engines will require a remote manual engine shut down (or kill switch)	All vessels	All operating limits	All lengths	• Will apply if engine is not readily accessible. • Existing vessels will have 5 years to meet this requirement.	Rule C5.2(10); & Schedule 2(5)
Bilge level alarms	All vessels	All operating limits	All lengths	• Will be required in fish holds, cargo spaces and other watertight spaces if seawater pipes are present. • Existing vessels have 2 years to meet this requirement.	Rule C7.4(1); & Schedule 2(5)
Electrical submersible bilge pumps and bilge level alarms will need to be on separate circuits	All vessels	All operating limits	All lengths	Existing vessels will have 5 years to meet this requirement.	Rule C7.4(3); & Schedule 2(5)

New electric bilge pumps will require an IP67 rating	All vessels	All operating limits	All lengths	Will apply when a new electric bilge pump is installed.	Rule C7.3(16) MTI 7.1(3)
Plastic sea water piping and bilge piping will be allowed	All vessels	All operating limits	Vessels of less than 24m in length	Manufacturing standards and installation conditions will apply.	Rules C6.2(5) and C7.2(15) MTI 6.2
Emergency power capacity for electrically powered bilge pumps will reduce	All vessels	Enclosed	All lengths	Battery capacity reduces from 12 hours to 2 hours.	C7.3(17)
		Inshore	All lengths	Battery capacity reduces from 12 hours to 3 hours.	
		Inshore fishing	All lengths	Battery capacity reduces from 12 hours to 3 hours.	
		Coastal	All lengths	Battery capacity reduces from 12 hours to 6 hours.	

ANCHORS AND CABLES – PART 3J

General approach to Anchors and Cables

Overall approach to Anchors and Cables:

The current rules found in 9 locations will be consolidated and harmonised into one Rule Part and one MTI. This will mean some wording changes and a different format, but most current requirements are much the same. The proposed changes reduce certification requirements for vessel of less than 24m in length, and increase options. They do not impose duties or costs.

The new Anchors and Cables rules will apply to all vessels except Cape Town Fishing Vessels, SOLAS Ships, Novel Ships and Hovercraft.

Existing vessels:

Existing vessels are not affected by change (refer the Schedule to the Rule). They will be able to continue to comply with the current rules, after they have been revoked, provided that—

- The anchors, cables, accessories etc. are in good condition; and
- The vessel does not have a major change that invalidates the basis on which the anchor weight and cable size was determined.

Vessels of 24m or more in load line length:

No significant changes are proposed for vessels of 24m or more in load line length.

	Vessel type	Operating limits	Vessel length	Requirements	Rule/MTI
Certification requirements for anchors, chain cables and accessories will reduce	All vessels	All operating limits	Less than 24m in load line length	Anchors of 75 kgs or more and chain cables and accessories of 14mm or more will require a certificate issued by the manufacturer (but not by a Classification Society).	Rule C3.1
Super high holding power (SHHP) anchors will be allowed	All vessels	All operating limits	All lengths	Must have a type approval by a recognised classification society.	MTI 3.1

Some vessels that would otherwise require two anchors will be allowed to carry a single anchor	Passenger vessel	Restricted limits specified in Part 2 of Appendix 1 of Maritime Rules Part 20	Less than 24m in length	Must travel from a wharf to a wharf – will apply to a vessel that does not stop or anchor under normal operations.	Rule 2.2
Steel wire rope will be allowed for use as anchor cable	All vessels	All operating limits	All lengths	• Will apply to vessels with an Equipment Number (EN) of 500 or less - which equates to a standard anchor weight of approximately 1440 kgs. • Each surface the steel wire rope comes into contact with (e.g. roller or pulley) must have a radius of 10 times the diameter of the steel wire rope. • Maintenance conditions apply.	Rule B1.1 MTI 2.6