WAFIC Safety Update – September 2024

(WAFIC Website: https://www.wafic.org.au/what-we-do/access-sustainability/safety-and-training-information-02/

AMSA Campaign to Promote Responsible Approach to Lifejackets (PFDs)

The Australian Maritime Safety Authority (AMSA) has spoken with members of the fishing industry many times about practical application of '*lifejacket use'* and '*personal flotation devices'* (PDFs) on fishing vessels.

In August 2023 AMSA introduced new requirements under Marine Order 504 for commercial vessel owners and operators to conduct a risk assessment and develop a procedure within their safety management system (SMS) to inform when lifejackets/PDFs should be worn by those onboard.

Follow-up inspections by AMSA in early 2024 showed room for improvement, with only 50% of owners and operators inspected complying with these new requirements.

Three fatalities occurred on commercial vessels in Australia in 2023. All fell overboard without a lifejacket/PDF *(see article below)*. More overboard incidents are currently under investigation.

AMSA launched a **'Lifejacket Safety Campaign'** on Thursday, 12th September 2024 and has provided some initial information for use by AMSA's partners (eg WAFIC) to further the reach of this important messaging.

The initial launch of this lifejacket safety campaign will focus on the following themes:

Wearing life jackets / Risk assessments / Use of lifejackets / Care of lifejackets

Industry focus groups assisted research for this campaign and indicated that survival for the sake of '**loved ones at home'** was a stronger motivation for crew to wear lifejackets/PDFs than '**just self-preservation'**.

Two videos to assist with the messaging to industry have been developed along this theme:

https://www.youtube.com/watch?v=sVx03ZmDTfU

https://www.youtube.com/watch?v=JgwrrKEwqNs

This lifejacket safety campaign is the beginning of a multi-year sustained safety initiative by AMSA to improve attitudes and safety practices around lifejacket wearing on the water.

Over the coming weeks and months, you'll see a steady stream of lifejacket safety content on AMSA's digital channels, which we would also encourage you to share and engage with.

Further information contact Steve Whitesmith, Steve.Whitesmith@amsa.gov.au, 0408 976 282.

Risk Assessments Critical for Successful Lifejacket Safety Management

AMSA has especially emphasised the need to make sure vessel operators' carryout a **risk assessment** to work out when to use lifejackets in their fishing operation.

Risk assessments help ***identify why, when and where*** lifejackets need to be worn during vessel operations. The four main issues to consider are:

- Crew tasks and weather conditions will determine an specific operation's risks.
- Different types of lifejackets may be better suited to different situations (eg .
- If lifejackets are not worn, they should be easy to access when needed.
- The right equipment and training of crew will help retrieve someone who goes overboard.

AMSA has worked with commercial fishers operating to develop examples to assist operators to update their risk assessment and develop a lifejacket wear procedure that suits their operation.

These examples have been developed for each specific fishery sectors (eg trawl, pot, net).

The details provided are for general information, and on the understanding that AMSA is not providing specific advice on a particular matter. All risk assessments and lifejacket wear procedures must be tailored to vessels, taking into consideration their specific operation.

To access the examples go to: https://www.amsa.gov.au/vessels-operators/domestic-commercial-vessels/lifejackets-fishing-vessels

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Victorian Coroners Inquiry Into Fishing Death Finds Failure to Use Lifejackets

The Victorian coroner has handed down recommendations following an inquiry into the death of a crew member in late 2021 when struck by a large wave whilst working on the open deck of commercial fishing vessel in Bass Strait and was swept off the working deck into the sea.

Despite considerable efforts by the skipper and crew the person was unable to be recovered and presumed to have drowned. It was dark and the reported weather conditions were wind strength 20 to 30 knots with 2 metre swells.

The vessel had just retrieved trawl nets for a moderate catch and the skipper called for an immediate reset of the gear. The crew member was standing on the starboard stern quarter of the vessel shovelling fish. He was facing towards the stern of the vessel where the nets are released and retrieved which was completely open to the sea with no guard rail or barrier installed to make the area secure. As the crew were sorting the previous catch and preparing for the second release of the net, the skipper was slowly manoeuvring the vessel into the best position to release the net.

Without warning a large wave, approximately 2 to 3 metres high, struck the starboard side of the vessel and washed over the working deck. The force of the wave took the crew member by surprise and washed him off the deck through the open stern where the nets are released and retrieved. He was wearing wet weather gear (overalls, a jacket and sea boots) but not wearing a Personal Flotation Device (PFD) or buoyancy vest nor did he have a strobe light or personal locator beacon (PLB) with him.

The crew member was visible approximately 30 metres from the stern of the vessel with the benefit of powerful working deck lights and they could hear his cries for help. The skipper reversed the vessel to within six metres of the stricken man but three attempts to get a life ring to him failed as he was being battered by the waves. Shortly after this last attempt the crew lost sight him in the waves.

The water temperature was between 12 - 13 degrees and medical advice was that he was unlikely to survive more than 5 hours in the water.

Investigations found several deficiencies on the vessel including:

- Stern ramp protective arrangement missing,
- Life jacket stowage not marked correctly,
- Life jacket vessel identification missing,
- Winch control stations do not have clear vision of deck area,
- Anchor windlass missing, anchor not available to be dropped immediately,
- Safe means of rapid rescue for persons overboard not located on board, and
- Satellite phone not working.

Coroner findings included:

- that without a PFD to keep him afloat, a light to indicate his location in the dark or some type of GPS tracking device, it is difficult to see how any rescue effort was going to be successful,
- the vessel's Safety Management System (SMS) was unclear on when a PFD should be worn by the crew – **there was no clear 'trigger' stated in the SMS**,
- no one on board this night was wearing any type of floatation which was deemed normal practice - crew stated it is very hard to work with the life jacket on top of wet weather gear,
- life jackets were readily available and there were lots on board. Each crew had a PDF and there are extras,
- hard to reconcile vessel practices with the stated SMS. If lifejackets are not worn, after sunset, in winds of 20 - 30 knots with wave height of 2 - 3 metres in an area of Bass Strait on the edge of the continual shelf where the water temperature is 12 degrees – **then what is the trigger**.

The Corner noted:

- that modern PFDs are much less bulky than older models and often have built in locator beacons,
- that AMSA requirements since 1 August 2023 require vessel owners *to explicitly address lifejacket wear and personal beacon requirements in their SMS's* risk assessment and written management procedures,
- that since January 2021 AMSA has required carriage of float-free emergency position-indicating radio beacons (EPIRBs) on certain types of DCVs but these are activated when in contact with water.

The Coroner recommended that AMSA (in collaboration with the seafood industry and the manufacturers of PFDs):

- review existing PFDs currently available in the market to determine suitability for use by commercial fisherman (consistent with the recommendation in the Batchelor and Bugeja report February (2003),
- if the review finds existing PFDs are not suitable for use by commercial fisherman then encourage and work with the manufacturers to design a suitable PFD that would be acceptable to commercial fishermen and compatible with the appropriate Australian Standard,
- engage with the Australia New Zealand Safe Boating Education Group and other industry stakeholders to raise awareness of and support for this work.

Research Identifies Gaps in Induction Training on Vessels

The NSW Office of Transport Safety Investigations recently commissioned research that identified a potential safety risk around the lack of effective and *'hands-on induction training of casual crew'* on domestic commercial vessels (DCVs).

Induction training that covers duties, key operations of the vessel and emergency procedures is critical for everyone's safety onboard. It's also now a legal requirement.

It was observed that crew members were not consistently receiving effective induction training in accordance with legislation to safely operate DCVs.

The findings indicated that the issue was more prevalent in smaller operators. Only 56% of crew on smaller vessels *'demonstrated competency in operating equipment'* compared to 86% of crew working on larger vessels. Challenges such as time pressure, lack of resources and staff availability were identified as potential barriers in ensuring crew were sufficiently inducted to safely operate smaller DCVs.

Only 8% reported they received no induction or only a basic safety message. 70% of respondents agreed that hands-on practice with demonstrations would be beneficial for trainees to learn emergency drills and procedures. Other improvement areas include longer training periods and ongoing instruction from experienced crew/masters.

Copy of report: https://www.otsi.nsw.gov.au/domestic-commercial-vessel-dcv-induction-research

Induction training for new crew members is mandatory under Australian marine safety national law. The updated AMSA Marine Order 504 requires the DCV owners and operators to ensure their safety management systems include the following:

- Induction training for new crew members
- Life-saving equipment training
- Provisions to undertake regular drills for their existing emergency procedures, including how often these drills need to take place, and how they will determine the competency and capability of crew participating in these drills.

Updated MO504: https://www.amsa.gov.au/marine-order-504-safety-changes/training-and-drills?utm_source=amsa-update&utm_medium=email&utm_campaign=MO504#msdynttrid=ooGQOwNCFXTmbYOFN93A7YcQM4zaMmOez2iWfW5BQ7Q

Mandatory to Have Lifejacket Written Procedures and Crew Training

From 1 August 2023, if you own or operate a fishing vessel you will need to address lifejacket wear requirements in your safety management system's risk (SMS) and have written procedures.

Vessel owners are also required to consider the management of lifejackets to ensure that they are readily available if needed.

It does not mean lifejackets are mandatory to wear at all times – but does mean your vessel SMS must set out when lifejackets should be worn (eg wind and sea conditions).

Making sure that when to wear a lifejacket is built into your risk assessment and safety management system are new requirements which will be in force from 1 August 2023 via a new *Marine Order 504 (Certificates of operation and operation requirements)*.

The new Marine Order 504 follows extensive consultation with industry in recent years to improve operational safety and increase lifejacket wearing on domestic commercial vessels, after dozens of preventable fatalities over a 10-year period.

For full information go to: https://www.amsa.gov.au/marine-order-504-safety-changes/lifejacket-wearing?utm_source=amsa-update&utm_medium=email&utm_campaign=MO504#msdynttrid=cxo5pizPpUQLblZV46GHRdqucd7atIMUdo40FN-0XmE

AMSA Review of Marine Order 504 (Operational Requirements).

AMSA has recently released the feedback from the public consultation process which concluded end July 2024.

For more information on the proposed Phase 2 changes to MO504 and to view the draft marine order, please visit the following link: https://www.amsa.gov.au/smsconsultation

The main points from consultation were as follows:

1. There was strong support for the proposed amendments to simplify SMS requirements for smaller, less complex vessels and operations. Some submissions questioned why the simplified SMS eligibility criteria is limited to vessels less than 7.5m and suggested it should be expanded. *AMSA plans to proceed with the simplified SMS amendments.*

2. Several submissions were in favour of the proposed change to include a fatigue risk management plan in the vessel's SMS. *AMSA plans to proceed with the proposed change regulations to include a fatigue risk management plan in the vessel's SMS.*

3. A number of submissions were in favour of the proposed change to include a drug and alcohol policy in the vessel's SMS. Some submissions noted that their support was based on owners and operators being given the flexibility to tailor this policy to their specific operations and circumstances, including any decision to undertake or not undertake drug and alcohol testing. *AMSA plans to proceed with the proposed change to require a drug and alcohol policy to be included in the vessel's SMS.*

4. Submissions indicated support for the proposed changes addressing operational risks to vessel stability, in particular the requirement for the owner to keep a record of modifications affecting vessel stability with the vessel's SMS. *AMSA plans to proceed with the proposed changes.*

5. Feedback indicated support for amending the certificate of operation renewal criteria to allow certificate of operation renewals for selected low-risk changes. Many submissions welcomed any changes aimed at reducing administrative burden, particularly for smaller, less complex vessels and operations criteria. *AMSA plans to proceed with amending the certificate of operation renewal.*

6. A number of submissions did not support the requirement for a mandatory back-up arrangement for the vessel's logbook. Feedback indicated that this would be impractical for paper-based logbooks. *AMSA will not progress with the proposed change.*

Where to from Here?

AMSA will now work with the parliamentary drafting team to finalise the Marine Order 504 by end 2024 for implementation in July 2025.

Guidance material will be developed in conjunction with industry to assist with the transition.

(See WAFIC submission: https://www.wafic.org.au/wp-content/uploads/2024/07/WAFIC-Submission-Final-MO504-Part-2-Review-July-2024.pdf)

Hours of Rest – Consultation

AMSA sought separate consultation on a proposal to require all masters and crew to have a mandatory 10 hours' rest in every 24 hours.

Main points raised from consultation:

1. A number of submissions advocated for the rest periods to be **continuous** (10 hours rest provided as one break) opposed to **cumulative** (the 10 hours rest provided through multiple shorter breaks). *Mainly fishing industry supporting cumulative.*

2. A number of the submissions suggested that 10 hours of rest in each 24-hour period is still not sufficient to address the risk of fatigue. **Suggesting increase to 12 hours continuous.**

3. A number of submissions received did not support the hours of rest proposal highlighting the difficulties faced by certain sectors of the DCV industry, such as commercial fishing, in applying a one-size-fits-all approach to fatigue management. the nature of their operations is incompatible with a prescriptive 10 hours of rest in a 24-hour period due to the need for operational flexibility and need to respond to external factors when they arise. These submissions advocated for fatigue management to be considered **on a case-by-case basis.**

4. The fishing industry was concerned about current rest periods and how masters and crew usually use this time to travel to and from the port or between fishing grounds.

5. Many submissions advocated for a 'right to disconnect' during rest periods.

AMSA will further consider all the feedback received on the hours of rest proposal to inform future policy decisions, however, no changes to hours of rest will be made as part of this review process.

Marine Safety Incidents – August 2024

To see all incidents reports go to: https://www.amsa.gov.au/vessels-operators/incident-reporting/2024-monthly-domestic-commercial-vessel-incident-reports?utm_source=amsa-update&utm_medium=email&utm_campaign=monthly-marine-incidents#msdynttrid=Z7gjhSXOebAKgx__Wne-EiYnlPERx4lvT0GjcbhwOCk

AMSA has also summarised various incidents and outlined findings and recommendations to provide other vessel owners and operators with the opportunity to learn from marine safety incidents that have taken place.

Go to: https://www.amsa.gov.au/marine-incident-reporting/monthly-safety-lessons-domestic

To submit an incident report to AMSA go to: https://www.amsa.gov.au/form19

AMSA 2024/25 Regulatory Review Program

AMSA prepares this program annually and it contains details of planned and completed changes to the regulatory instruments.

Publishing a regulatory program makes it easier for business and the community to take part in the development of the regulatory instruments, such as marine orders and the National Standard for Commercial Vessels.

The regulatory program contains information on consultation on legislative or other action planned during the current financial year that could lead to changes in regulatory instruments.
Go to: https://www.amsa.gov.au/annual-regulatory-program-2024-25

What to Expect from an AMSA Operational Monitoring Exercise

Owners or operators of domestic commercial vessels in Australia may be asked by AMSA marine safety inspectors to participate in an 'operational monitoring exercise'.

AMSA has produced a video to explain how this will work: https://youtu.be/eoHX_BFRgVw

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Austral Fisheries Achieves International Standard for Crew Management

Austral Fisheries has been certified under the *Fairness, Integrity, Safety and Health (FISH) Standard for Crew* as an organisation that meets internationally recognised best practice for ensuring decent working conditions for fishers.

The Standard provides a voluntary, independent and accredited third-party certification program for labour practices on vessels in wild-capture fisheries around the globe. The Standard was developed to assure seafood buyers that the fish they are buying and selling is harvested by crews that are recruited and hired ethically, treated with respect on the vessel, paid properly and have processes to address grievances.

Austral Chief Operating Officer, Lesley Leyland said, "I would like to express my appreciation to everyone involved in this audit. A special thank you goes out to the Southern Fleet for their valuable support in achieving this certification. This certification not only reassures our suppliers

and buyers but also helps our peers and the wider Austral team to understand that the values in our business are consistently aligned."

Austral Chief Executive Officer, David Carter added "I have no doubt that this third party endorsement of the good work that we are doing with our crews is contemporary best practice and will serve us well."

New AMSA CEO Announced

Ms Kaylene Dale is the new Chief Executive Officer of the Australian Maritime Safety Authority (AMSA), starting on 1 October 2024.

Ms Dale brings extensive experience in Commonwealth regulatory settings and with the maritime sector including working with AMSA's search and rescue functions as part of her role at the Australian Border Force – most recently as the Deputy Commissioner for strategy and capability.

Ms Dale replaces retiring CEO Mr Kinley who, over the last decade, oversaw a number of achievements in Australian maritime safety including delivering Australia's single regulatory framework for the national maritime safety system for domestic commercial vessels.

AMSA National Compliance Plan 2024-25

The AMSA National Compliance Plan outlines the compliance areas in which AMSA will focus their efforts during 2024-25. (see https://www.amsa.gov.au/national-compliance-plan-2024-25)

AMSA outlines these priorities in advance to allow industry the opportunity to review their operations to ensure compliance with relevant legislation prior to inspection.

AMSA applies an intelligence-led, risk-based approach that underpins compliance activities and allows for better collaboration. The compliance program is informed by safety data and trends to ensure AMSA's focus and to encourage voluntary compliance and continuous improvement.

AMSA will achieve this Plan using formal inspections and direct communication.

1. Safe working practices – Reduce injury to crew - expected to focus on changes to safety management system provisions, including simpler systems for smaller vessels, covering the following**:**

- Fatigue management
- Dangerous goods
- Emergency plans
- Simplified SMS
- Stability risks

2. Persons overboard, fatalities – building on the focused inspection campaign on lifejacket wear requirements conducted in the 2nd half of 2023 and introduced formally as part of the phase 1 regulation changes to Marine Order 504. The 2023 campaign showed that 46% of the inspected vessels could not identify when lifejackets must be worn and 44% did not identify when to wear a lifejacket other than in an emergency**.**

3. Poorly implemented safety management systems – how a vessel is operated represents a concerning proportion of serious and very serious marine incidents. A major contributing factor to these incidents is the poor implementation by operators of their vessel Safety Management System

(SMS), including the risk assessment process, safety procedures to mitigate risk and crew training in those safety procedures and emergency drills.

4. Garbage – awareness and compliance with pollution prevention (garbage) requirements *(MARPOL Annex V)*. This includes placard display, garbage management plans, garbage record books, discharge rules and procedures. The 2024-25 focus will be on MARPOL Annex V and the prevention of pollution by garbage from domestic commercial vessels.
https://www.amsa.gov.au/about/regulations-and-standards/012022-marpol-annex-v-garbage-discharges

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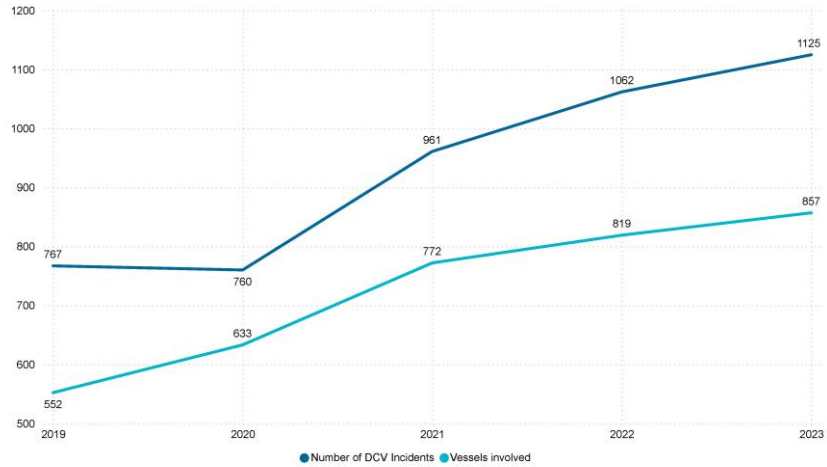
AMSA Domestic Commercial Vessels Marine Incidents Annual Report – 2023

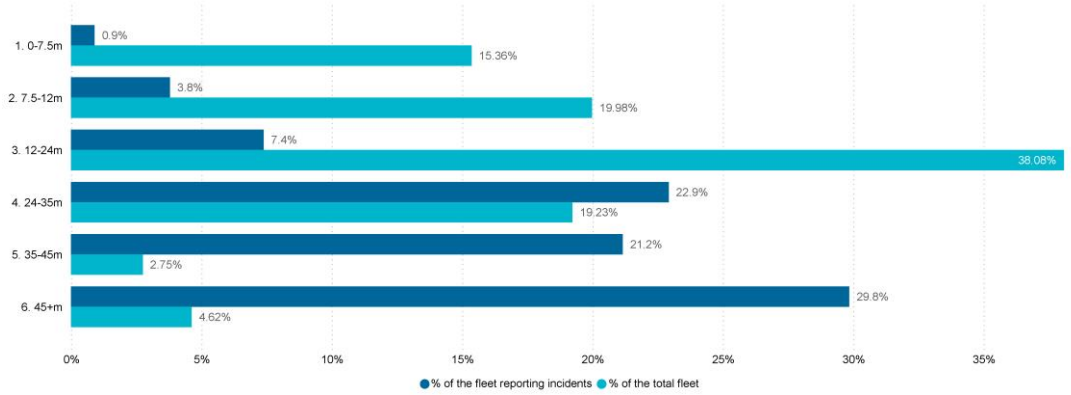
The AMSA push for increased reporting of marine incidents has seen a further rise in 2023.

AMSA received a total of 1125 marine incident reports involving 857 DCVs in 2023 - an increase of 5.9% from 2022 (1062 reports). There has been a 46.3% increase in the number of incident reports from DCVs since 2019.

The three most frequently occurring consequences to DCVs in 2023 were contact with something other than a vessel (180 incidents), collisions (125 incidents), and groundings (104 incidents). Unfortunately fishing vessels reported 40.7% of serious incidents. This rate is 15.8% higher than the average rate of serious incidents reported across all vessel classes.

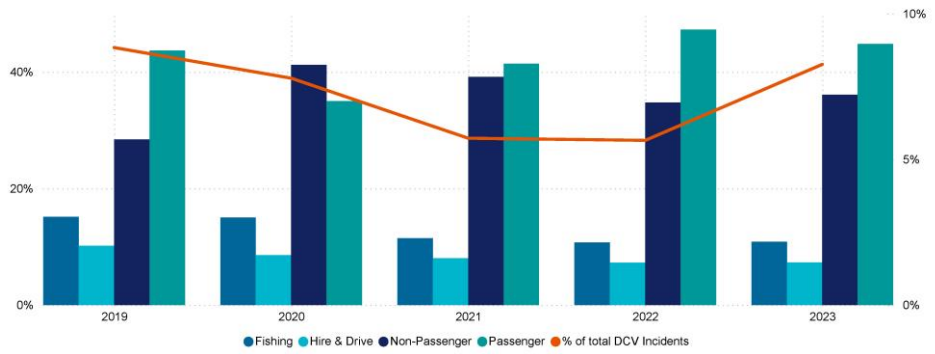


Smaller vessels, such as those under 12m in length, make up only 4.7% of reported incidents, despite representing 35.3% of the DCV fleet.

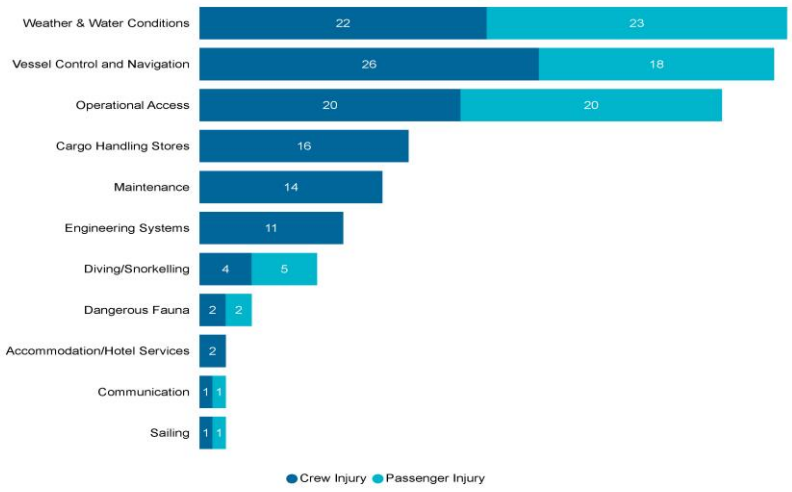


Between 2019 and 2023, there were 13 operational-related fatalities on DCVs (9 crew and 2 passengers). Seven (63.6%) of these occurred on fishing vessels with the most fatalities (6) occurring in Queensland.

The total number of serious injuries reported to AMSA increased from 5.6% in 2022 to 8.3% in 2023 (Figure 9). In 2023, 44.8% of serious injury incidents were reported by passenger operations, 36.1% were reported by non-passenger operations, 7.3% were reported by hire and drive operations, and 10.8% were reported by fishing operations.



In 2023, most crew injuries were associated with the control and navigation of the vessel (26 incidents) followed by weather and water conditions (22 incidents) and operational access (19%). Passenger injuries were associated with weather and water conditions (23 incidents), operational access (20 incidents) and vessel control and navigation (18 incidents). AMSA has made a calculated approximation of 66,000 crew engaged on domestic commercial vessels.



Safety management system deficiencies comprise most of the internal organisational issues, at 64.4% (204), followed by people management at 21.5% (68). Poor, lack of or ineffective risk assessments continue to present a major area of concern and remains a focus of AMSA's National Compliance Plan. Most safety management system issues are associated with shortfalls in the risk assessment (36.8%) and safety procedures (35.3%).

Copy of full report: https://www.amsa.gov.au/marine-incident-annual-report-2023/marine-incident-annual-report-2023-domestic-commercial-vessels

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What Happens During an AMSA Vessel Inspection?

Marine inspectors perform inspections on behalf of AMSA - both planned and unscheduled checking as to whether the vessel meets requirements to ensure safety of persons, the vessel and the environment. https://www.youtube.com/watch?v=8lvhY-ebv80

The marine safety inspector aims to complete the inspection in a timely manner with minimal disruption to your operation as can reasonably be expected. To assist, a vessel owner should be ready with:

- A safe means of access that allows 3 points of contact while boarding and disembarking,
- Your vessel safety management system and evidence to show how you have implemented that SMS on your vessel,
- All relevant documentation readily available, including your Certificate of Operation, Certificate of Survey, your master and crew tickets and any exemptions relevant to your vessel.
- All required firefighting, lifesaving and on-board equipment is on-board and working - if not, then at least marked appropriately and demonstrate plans are in place to repair/replace the equipment.

Before the start of an inspection, the marine safety inspector will give you a letter indicating that your vessel will be inspected and clearly explain the scope of the inspection and any equipment that may need to be operationally tested. While on your vessel, they will check for compliance against legislated requirements and may use a checklist to inspect areas or items such as documentation and certificates, your safety management system, safety equipment and the overall condition of the vessel. During the inspection, marine safety inspectors may take notes, photographs or videos as necessary.

You will be provided with a report at the time of inspection or be sent a copy within 5 business days and this is a record of the inspection containing details of the inspector's findings and recommendations. To ensure the consistency, transparency, accountability, impartiality and

fairness in decision-making, all decisions and the reasoning behind these decisions will be explained at the end of the inspection.

If non-compliance was found during inspection, the marine safety inspector may use a range of actions to address them depending on the circumstances. Actions are proportionate with the associated risk identified and include (in order of severity):

- engagement and education
- advice and warnings
- direction notices
- improvement notices
- prohibition notices
- detention

Should you have feedback or concerns relating to the conduct of an inspection, the letter given at the start of the inspection provides information on how to contact AMSA.

Roadmap: Emerging Technologies in Domestic Commercial Vessels

AMSA is developing a *Roadmap for emerging technologies in Domestic Commercial Vessels* and the work being undertaken on the regulation of emerging technologies in DCVs.

The roadmap covers regulation, guidance, standards, construction, in-service inspection, and seafarer competency.

AMSA noted that initial work is focused on amending the existing Novel Vessel Policy statement to consider proposals for alternate means of safety assurance to meet the requirement of holding a Class certificate from an registered training organisation.

AMSA noted future work will focus on specific regulatory treatments for different vessel technologies, including large battery installations (house and propulsion), autonomous vessel certification and alternative fuels.

Out of Water Survey Requirements

AMSA has noticed there is some confusion about what items must be surveyed as part of a periodic 'out of water' survey.

The confusion stems from the out of water survey items section at the bottom of *Table 9 in Chapter 4 of National Law - Marine Surveyors Accreditation Guidance Manual (SAGM) Part 2.*

The out of water survey items section is not an exhaustive list of items that must be surveyed as part of a periodic out of water survey. The whole of Table 9 must be considered when conducting a periodic out of water survey and any item with a tick next to it must be surveyed.

When you conduct a survey for an OWAT code, ensure all applicable items in Table 9 are examined, verified, tested or trialled, and documented on your reports.

Go to *Marine Surveyors Accreditation Guidance Manual* : https://www.amsa.gov.au/vessels-operators/domestic-commercial-vessels/marine-surveyors-manual-parts-1-and-2

Reducing Risk of Electrical Faults and Fires

Since 2021, electrical installations and test records have been in the top 5 issues found by AMSA inspections.

The risk of electrical fire has increased as electrical systems have become more common on vessels and more complex. Issues commonly involve:

- battery terminal covers
- wiring
- fittings.

Navigation lights, engine starting circuits, energy storage systems, audio, video, Wi-Fi, satellite navigation and communications are now all driven by electrical systems.

Batteries have played a part in several serious vessel fires. Some of these fires have been catastrophic, resulting in the loss of a vessel and the lives of people on board.

AMSA offers safety management system guidance on how to address the risk of fires from batteries, portable device charging and wiring.

Be aware of the common electrical hazards to look out for and implement best practices to ensure a safer boating experience.

You should include management arrangements for the risk of fire from batteries, portable device charging and electrical installations in your safety management system.

Go to: https://www.amsa.gov.au/vessels-operators/reducing-risk-electrical-faults-and-fires?utm_source=amsa-update&utm_medium=email&utm_campaign=electrical-safety#msdynttrid=IHo0gdw2TwmX5z6mec_DSk3hdBQ_E03GiT31HjPSl6A

Lithium-ion Battery System in Thermal Runaway Explosion Onboard DCV.

An explosion occurred on a charter fishing vessel whilst berthed. The investigation identified that the ignition source was a lithium-ion battery that was not holding charge connected to a battery charger in a way that bypassed the battery management safety system. The vessel was beyond repair following the explosion.

The vessel owner reported previously having issues with the lithium-based battery system attached to the pot winch on board. The electrician was working on the vessel and fitting the

new charger temporarily to the system to be left to charge overnight. The electrician stated they left the vessel at approximately 7.30 pm and set the charger shortly before departure.

Safety Message
Vessel owners/operators should develop and implement a procedure for their safety management system (SMS) for onboard charging of electronic devices and battery systems.

This should consider the risk of a thermal runaway, including venting of toxic and flammable gases and compounds.

When a lithium-ion battery enters thermal runaway there is an intense release of heat and toxic gases; some of which are also explosive[1]. These types of thermal runaway events can also lead to fires that are extremely difficult to extinguish.

Lithium-ion batteries are required to be installed in accordance with the National Standard for Commercial Vessels Sub-section C5B Electrical. It is essential that lithium-ion battery installations include an approved battery management system to avoid potential overcharging events. Ventilation air flows must also be in accordance with manufacturer's specification.

Go to: https://www.amsa.gov.au/vessels-operators/incident-reporting/safety-lessons-marine-incident-investigation-amsa-report-no27?utm_source=amsa-update&utm_medium=email&utm_campaign=monthly-marine-incidents#msdynttrid=rYJncGSe_NloR5JCY2DgD6RvqK70einDVBbO6fUEZYg

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Seafood Careers – Online Platform Available

The seafood industry offers a wide variety of roles across different sectors and locations for those interested in joining the seafood industry for the first time, and multiple opportunities for career progression or trying something new for people with experience and already working in seafood.

Seafood Careers is a central information hub for the Australian seafood industry showcasing the huge variety of employment opportunities and training available.

The site has been created by employees for employees and seeks to connect people with rewarding roles, contributing to sustainable long term food security.

Hosted by Seafood Industry Australia the site seeks your photos and videos of your team out and about on the job. ***Seafood Careers*** is also looking to link up every employment position description on the website with video interviews of real people in industry doing those same roles.

You can send us a short interview of you or your co-workers talking through what your day looks like! Use the link below to upload your videos. If you need some ideas on what to chat about in your video, check out the interview guide, and let your creative juices flow.

You can upload image and videos here. There are already a couple of examples for you to watch for inspiration.

Go to: https://seafoodcareers.com.au

Planned Maintenance - Important for Safe Operations – Mandatory Requirement.

Planned maintenance is essential on domestic commercial vessels. Good maintenance work in port or at anchor can help avoid breakdowns and getting into hazardous situations at sea. Recent incidents have demonstrated the potentially serious consequences of a lack of effective maintenance that can pose serious risks to the safe and operation of vessels.

Analysis of 117 incident investigations since 2020 found that maintenance problems were a factor in 28% of incidents, including **half (50%) of very serious incidents** and 27% of serious incidents.

Under the National Law for Domestic Commercial Vessels, Marine Order 504 sets out:

- The vessel ***must have*** a Safety Management System (SMS).
- The owner of a vessel ***must ensure*** that a system of regular programmed inspection and maintenance appropriate for the vessel, its machinery and its equipment is developed, maintained and implemented.
- The SMS ***must include*** arrangements for recording details of each inspection and correcting each deficiency identified by an inspection. The record may be kept in the logbook.
- The vessel ***must be inspected*** sufficiently to determine if the vessel, its machinery and its equipment complies with the maintenance and operation requirements that apply to it. This requirement does not prevent inspections being made for compliance with voluntary maintenance guidelines.
- The vessel ***must be serviced*** taking into account the manufacturer's specifications and requirements.

Under Marine Order 503, it is a condition of a Certificate of Survey that a certificate of currency relating to equipment ***must be*** carried on the vessel ***must be kept current***.

How to Apply for a Periodic Survey Extension

Marine Order 503 allows for periodic surveys to be conducted within the three months before or after the due date. A vessel can continue to be operated without seeking any extensions during this six-month period. *(Example – if a vessel is due for periodic survey on 1st October, the vessel can be surveyed between 1st July and 1st January).*

If the survey can't be completed within the six-month window provided by Marine Order 503, an extension can be requested as follows:

Exemption 6 – this exemption can only be used to apply for an extension for up to 90 days after the period provided by Marine Order 503 *(Example – A vessel's six-month window runs from 1st July until 1st January – exemption 6 can only be used to apply for an extension until 1st April).*

Exemption 7 - this exemption can be used to apply for an extension for a periodic survey by using the 'another temporary use' option (Division 2). This would allow for an application to be made outside the timeframes provided for in both Marine Order 503 and Exemption 6. (*Example – A vessel's six-month window runs from 1st July until 1st January and the period for an exemption 6 application has passed (1st April). If you need to apply for a further extension to complete the periodic survey, an exemption 7 application is required).*

Go to: https://www.amsa.gov.au/marine-order-503-certificates-survey-national-law

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Sea Service – What You Need to Do to Record Your Efforts

Sea service is a requirement for most certificates of competency in Australia.

You must complete a specified amount of sea service time on a vessel in support of your application. The time and skills needed for your sea service can be recorded in a several ways:

- a task book
- sea service form
- letter from the vessel operator, or,
- a declaration.

Proof of identity is required when applying for a certificate of competency or seafarer's service book.

A task book helps you record sea time and the practical training and experience on board a vessel. The AMSA approved task book has practical tasks that you must carry out on board a vessel. Completing the task book will let you reduce the amount of sea service you need to do up to as much as 50%.

Each task performed and recorded in the task book must be witnessed and signed off by a supervisor or qualified person who is connected with the vessel's operation. This can be a master, engineer, owner or operations manager, depending on the seafarer's current certificate level and the certificate they are working towards. It must be someone in a supervisory role.

Note: If you can't get a supervisor, vessel operator, owner, master or chief engineer to issue you a letter or sign your sea service record, you can submit an AMSA 771 form along with a Commonwealth statutory declaration stating why you were unable to get your sea service record signed, and that the information on the form is valid and correct.

You are responsible for the safe keeping of your task book throughout your training. You will need to submit your task book to a registered training organisation and final assessor if your training course or certificate requires you to.

AMSA will not accept task books issued by other organisations or AMSA task books issued prior to 2017.

You do not have to complete your task book for the issue of your certificate of competency.

Task book info: https://www.amsa.gov.au/qualifications-training/sea-service-and-task-books/how-australian-seafarers-use-task-books

Sea service info: https://www.amsa.gov.au/qualifications-training/sea-service-and-task-books/qualifying-near-coastal-sea-service

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Safety Management System – You Must Have One – By Law!

All domestic commercial vessels must have a safety management system (SMS).

This SMS will demonstrate and document how your vessel meets the '**mandatory'** general safety duties.

Your vessel's SMS should be based on a risk assessment of your operations. It should describe how safety, maintenance and operation is managed on your vessel.

A safety management system is not just a document – you must put it into practice, Train your employees, do practical emergency drills and document that you have done so.

The owner, operator, master, and crew of each vessel must be involved in developing and reviewing the risk assessment.

AMSA has a range of tools and resources to help you develop and assess the health of your safety management system *(clicks links underlined)*:

- *Guidelines for a safety management system* - this guide provides information, checklists and templates that can guide you through developing or revising your own SMS.
- *How to develop a safety management system* - an online step by step guide through the process of developing your SMS.
- *Templates for a safety management system* - useful templates are available for you to download.
- *Risk management in the national system* - a practical guide on identifying hazards, conducting a risk assessment, implementing control measures and reviewing risks as part of your safety management system.
- *Emergency procedures flipchart* - ideas for developing and writing emergency procedures.
- *Crewing guidelines* - appropriate crewing must be determined by the owner as a part of their general safety duties and should be documented as a part of the vessels SMS.
- *Fishing for safety video* - watch this 16 minute video for easy to understand steps, real-world stories and experiences of why an effective SMS is essential.
- *Planned maintenance* - learn about the importance of maintenance plans and what to include in yours.
