



Industry Skills
Australia

Jobs and
Skills
Councils

An Australian Government Initiative

Maritime Industry



2025
Draft
Workforce
Plan



About ISA

Industry Skills Australia (ISA) has been established as the Jobs and Skills Council (JSC) for the Transport and Logistics industry sectors, which includes Aviation, Maritime, Rail, Transport and Logistics, and the emerging sectors of Omnichannel Logistics and Distribution, and Air and Space Transport and Logistics.

Owned and led by industry, our JSC is committed to building a world-class supply chain workforce to increase productivity, create better jobs and build opportunities for individuals.

We will do this through:

- leveraging our more than 30-year history with the transport and logistics industry,
- undertaking research and data analysis to inform workforce planning,
- advocating for a workforce development approach in tackling industry skills issues, and
- developing priority training package products.

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Acknowledgements

Industry Skills Australia Limited acknowledges and thanks representatives of the industry that provided their assistance in developing the Maritime Industry Draft 2025 Workforce Plan with funding from the Department of Employment and Workplace Relations under the Jobs and Skills Council Program. ISA also acknowledges the Traditional Custodians of Country throughout Australia.



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DRAFT FOR CONSULTATION

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About the Workforce Plan

Purpose

Workforce Planning is the strategic centrepiece for Jobs and Skills Councils to inform and establish each of their other functions. The Workforce Plan serves as a guide to identifying the contemporary drivers and challenges within Australia's Transport and Logistics industry and developing forward-thinking actions to address those challenges. Drawing upon a rich blend of data sources, including industry reports, stakeholder consultation and the direction from our Strategic Workforce Planning Committee, it outlines the current obstacles impeding the industry's progress and proposes practical actions to overcome these hurdles.

The Workforce Plan begins the groundwork for ongoing evaluation and strategy refinement. It aims not only to diagnose current challenges but also to anticipate future trends and opportunities. This proactive approach ensures that the Australian Transport and Logistics industry remains agile and responsive to changing conditions.

A crucial aspect of this document is its collaborative nature, emphasising the value of stakeholder input. By incorporating diverse perspectives from industry experts, policy makers, and practitioners, the strategies presented are both robust and attuned to the real-world dynamics of the Transport and Logistics industry.

The Workforce Plan will be used to further engage with stakeholders, with the feedback received incorporated into future iterations of the Plan. As the Workforce Plan is updated each year, it will seek to better understand current, emerging and future workforce challenges and opportunities, including skills gaps and shortages for all industries within Industry Skills Australia's remit, including small, niche and regional sectors and to develop appropriate strategies and advice for addressing diagnosed challenges. This also includes working with Jobs and Skills Australia to better understand the outlook for employment for each industry sector.

The Draft 2025 Workforce Plan is not just a snapshot of the present, but a roadmap for the future, guiding stakeholders in collectively navigating and shaping the evolving landscape of Australia's Transport and Logistics industry.

JSC Obligations

In 2023, the Australian Government established ten (10) Jobs and Skills Councils to address the many workforce planning and skills development challenges facing Australia, and to ensure that our national skills system meets the rapidly evolving needs of industry, individual employers, and the workforce.

Jobs and Skills Councils have four formal roles:

1

Industry Stewardship which involves gathering industry intelligence to reliably represent the views and needs of industry back to the Vocational Education and Training system and its decision-makers

2

Workforce Planning which enables industry to identify its workforce development issues and design high-impact solutions, which are then captured in the national Workforce Plan for the industry

3

Training Product Development which focusses on improving the quality, speed to market and responsiveness of training products to employer and workforce needs

4

Implementation, promotion and monitoring which is a broad role that involves supporting training providers, promoting careers, and monitoring how well the system is meeting the needs of industry and learners

Jobs and Skills Councils are funded by the Australian Government (Department of Employment and Workplace Relations) but work collaboratively with a wide range of bodies.

Approach to Consultation

The Transport and Logistics industry is extremely diverse, comprising businesses ranging from complex national and global companies through to a wealth of small one and two person businesses. Over 99% of enterprises within our coverage are small business.

ISA recognises the difficulties in reaching such a diverse stakeholder base and continues to expand its sectoral and regional engagement footprint each year.

Not all stakeholder groups engage in the workforce planning process. As part of our user-centred approach, we will continue to evolve our approach to stakeholder groups determining the level and method of involvement that best suits their respective needs. If and when a stakeholder's focus shifts, we will adjust our engagement with them accordingly.

Consultation and engagement with different groups of stakeholders inform ongoing development of our Workforce Plans. This includes deepening our understanding of key workforce drivers and challenges, expanding our breadth and depth of data sources, filling evidence gaps, validating and providing context to workforce data, and developing effective actions/strategies to address workforce drivers and challenges.

The following key elements will form part of our consultation and engagement approach.

Industry Skills Australia Committees

ISA uses a range of mechanisms and specialised committees and taskforces to provide input and advice into the Workforce Plans.

Strategic Workforce Planning Committees

The Strategic Workforce Planning Committees (SWPCs) are responsible for setting the strategic development of the Workforce Plans, with a focus on identifying, forecasting and responding to workforce challenges, opportunities and emerging skills needs. They shape and prioritise actions through their advice. The SWPCs comprise of industry champions from each major industry to ensure coverage and leadership, and includes geographic, sub-sector and business scale.

Our Strategic Workforce Planning Committee, comprising representatives of industry and employee associations form a key structure for the collection and validation of industry intelligence and strategic guidance.

Industry Advisory Council

ISA's Industry Advisory Council (IAC) provides advice on leading trends from adjacent industries/client industries

(for example, online retail and its transformation of logistics). The IAC is comprised of senior supply chain executives and industry leaders from a range of related sectors and organisations where supply chain effectiveness is core business or a key contributor to productivity.

It operates as a dynamic advisory mechanism to the Board and SWPCs by providing world-class business intelligence and strategic insights from across the economy.

Technology Futures Taskforce

ISA's Technology Futures Taskforce (TFT) provides advice from experts in the innovation and technology sector specialising in supply chain technologies, with activities focusing on identification of technologies likely to automate skills and job roles and trigger structural change in the workforce.

The TFT is an advisory mechanism to the Board and SWPCs by providing intelligence and insights on technology impacts for our sectors.

JSC Engagement

ISA continues to proactively engage and collaborate with the other Jobs and Skills Councils on shared workforce planning and skills development priorities. We also consult and advise when ISA-led workforce planning strategies will impact on another JSC's scope of work and stakeholders.

Industry Engagement

ISA has broadened its stakeholder engagement activities significantly in the last 12 months to include specific focus on regional, sub-sector and executive leadership.

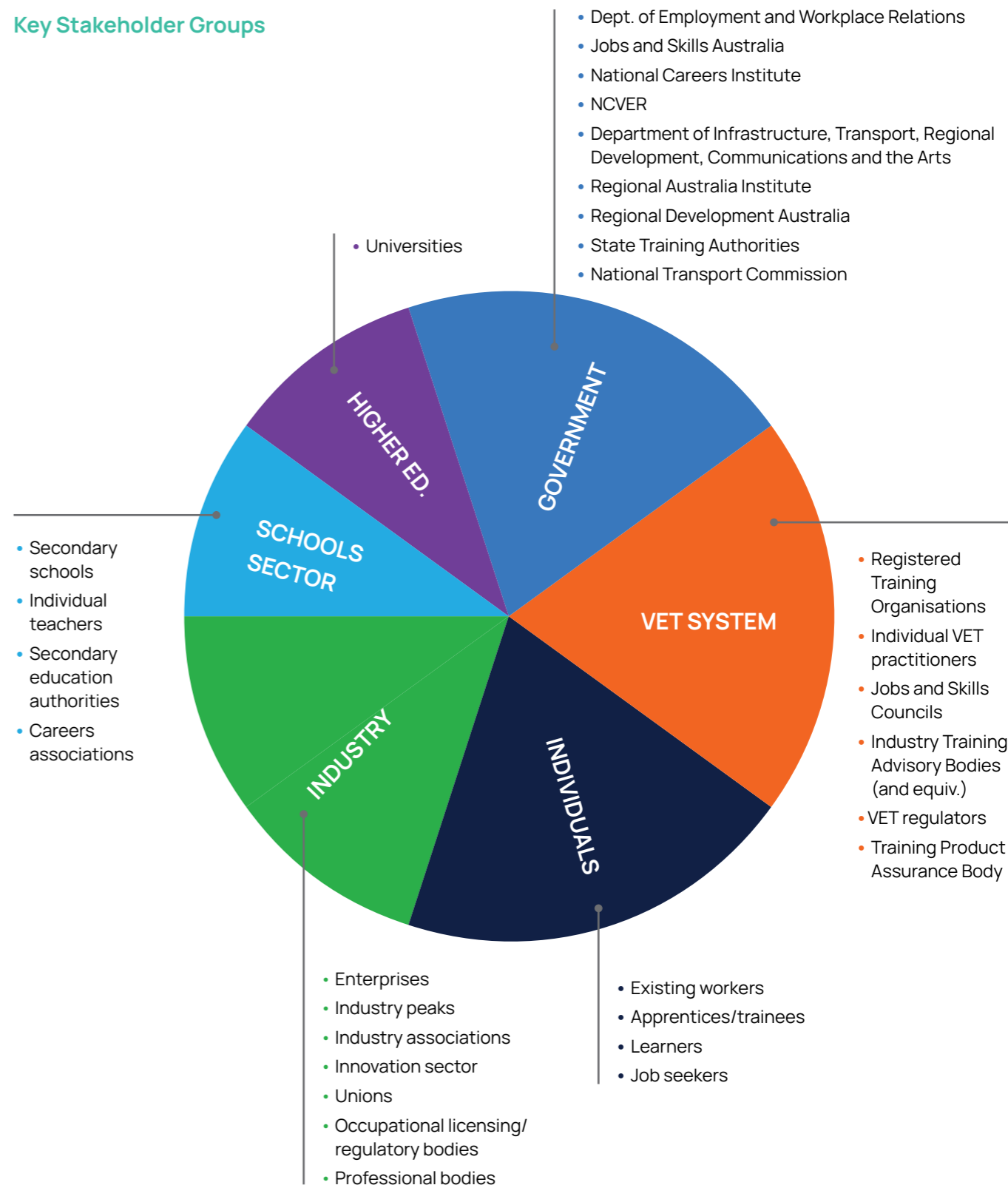
Our activities include regional, and metro engagement held right around Australia and engage with employers, key supply chain stakeholders, local chambers of commerce, Regional Development Australia and Local Jobs and Skills organisations.

Supply Chain Leader Summit

Our 2024 Supply Chain Leaders' Summit brought over 150 participants to Parliament House, including industry leaders, union representatives, parliamentarians and government officials, to explore the current and future workforce planning and development challenges facing Australia's supply chain sectors.

With many critical issues common across aviation, maritime, rail, transport and logistics, this event provides valuable input into our activities and workforce plans.






Key Stakeholder Groups





WORKFORCE PLAN CYCLE (2025)

DRAFT FOR CONSULTATION


PROCESS & INDICATIVE TIMING	 Intelligence Curation & Drafting October - December 2024	 INITIAL CONSULTATION February 2025	 DRAFTING & CONSULTATION Feb 2025 - April 2025	 SIGN OFF, SUBMISSION & PUBLICATION April- August 2025	 IMPLEMENTATION & MONITORING April 2025 onwards
KEY STEPS	<ul style="list-style-type: none"> Thematic analysis of industry engagement activity Undertake further research and targeted consultation where required Refresh & review baseline data, previous year's trends, and new qualitative reports Consolidate input from SWPC, other ISA committees and key stakeholders 	<ul style="list-style-type: none"> Prepare Summary Papers on Key Challenges and Drivers for initial stakeholder input Confirm Key Challenges and Drivers with key stakeholders Analyse and respond to survey feedback and industry representations Undertake further research/ consultation as required 	<ul style="list-style-type: none"> Prepare first draft of the Workforce Plan, including proposed actions Release draft Workforce Plan on ISA website for public consultation SWPC provides input and advice on proposed actions and priorities Moderate, consolidate and analyse feedback with guidance from SWPC Update Workforce Plan based on feedback 	<ul style="list-style-type: none"> SWPC recommends final Workforce Plan Submit Workforce Plan to DEWR Prepare and submit proposed actions Publish and promote Workforce Plan and activities/projects on ISA website Initiate comprehensive Communications Strategy 	<ul style="list-style-type: none"> Undertake promotion, build collaboration across stakeholders to deliver Workforce Plan priorities Implement approved actions Monitor and evaluate activity/ project progress/outcomes Engage stakeholders to monitor the responsiveness of the national skills system
WHO WE CONSULT	<ul style="list-style-type: none"> Strategic Workforce Planning Committee Industry VET System Schools Sector Higher Education Individuals 	<ul style="list-style-type: none"> Strategic Workforce Planning Committee Governments Industry 	<ul style="list-style-type: none"> Strategic Workforce Planning Committee Governments Industry VET System Schools Sector Higher Education Individuals 	<ul style="list-style-type: none"> Strategic Workforce Planning Committee Governments 	<ul style="list-style-type: none"> Industry VET System Schools Sector Higher Education Governments
HOW WE CONSULT	<ul style="list-style-type: none"> Meetings Webinars Emails Metro Roundtables Supply Chain Leader's Summit 	<ul style="list-style-type: none"> Internal meetings and input from SWPC Internal meetings Surveys 	<ul style="list-style-type: none"> ISA website Webinar Email and social media Regional Roundtable 	<ul style="list-style-type: none"> ISA website Webinar Email and social media Meetings Conference presentations 	<ul style="list-style-type: none"> ISA website Webinar Surveys Conference presentations Meetings

Industry Overview


The Maritime industry is crucial to the operation of the Australian economy, enabling the movement of passengers and freight around the country and providing Australian businesses with access to international markets. In 2024, the Maritime industry generated an estimated annual revenue of \$10.1 billion and added \$3.8 billion to the Australian economy.¹

The Maritime workforce comprises near 28,000² (Figure 1) people employed across three major subsectors: passenger and freight transport, tourism, and support services³ with women making up 9.4% of workers in operational roles (Figure 2).⁴


The Maritime workforce can be categorised into five occupational areas:




Navigation - commanding and navigating vessels.




Engineering - maintaining marine systems, equipment, operation and maintenance of machinery and ships engines.



Deck Operations - performing duties and functions on a vessel and/or assisting with deck or engine work.



Support Operations - performing duties and functions to support vessel operations.



Autonomous Operations - working or supervising Autonomous Maritime Systems operations in Near Coastal waters.

The industry includes seafarers who work on commercial and non-commercial vessels and personnel who are required to be certified by the Australian Maritime Safety Authority (AMSA).

Seafarers who work on domestic commercial vessels are required to hold Near Coastal AMSA certification. Seafarers who work on Australian or International vessels in Australian waters are required to hold STCW (Standards of Training, Certification and Watchkeeping) AMSA certification. To achieve AMSA certification seafarers are required to complete an approved course of study and qualifying sea time.

¹ IBISWorld Industry Wizard (2024)

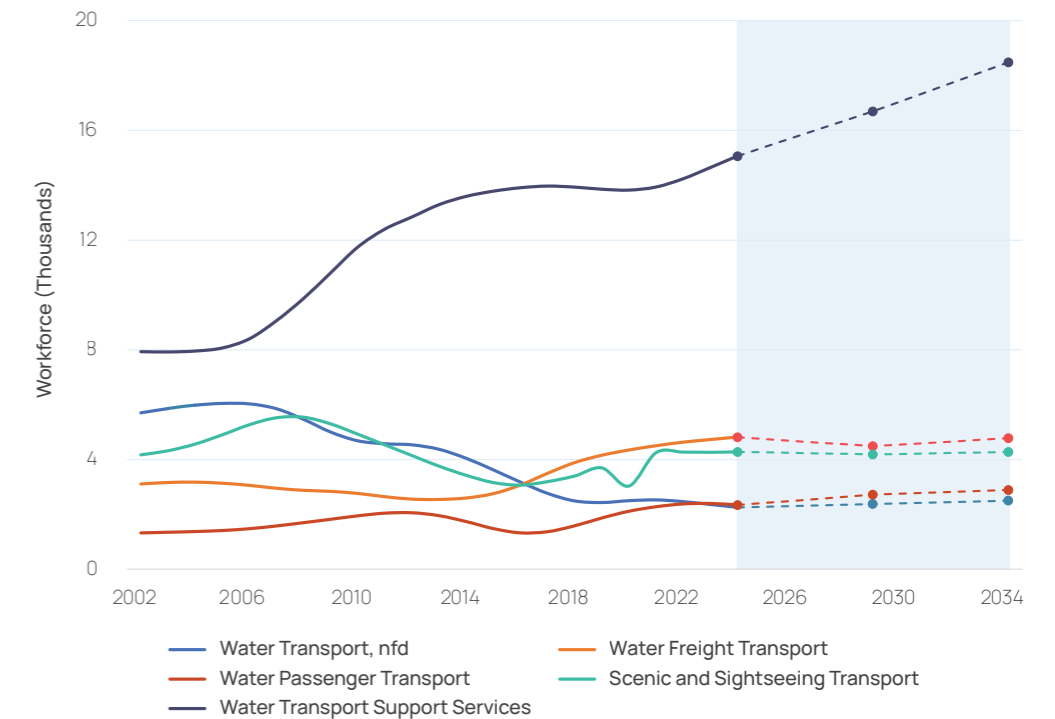
² Australian Bureau of Statistics, Labour force survey: Detailed, November 2024, Jobs and Skills Australia (JSA) trend data

³ NOTE: This figure is likely to be a significant underestimate of the true sea-going workforce, since maritime certificates are required in many related industries, such as oil and gas, defence, fishing and other sectors that are not captured here. The Australian Maritime Safety Authority has indicated that approximately 30 thousand certificate holding seafarers in November 2023 (comprising 29,039 near coastal seafarers and 3,778 STCW, with some holding both).

⁴ Australian Bureau of Statistics, Detailed Labour Force Survey, EQ08 - Employed persons by Industry group of main job, November 2024 (annual average of original data)



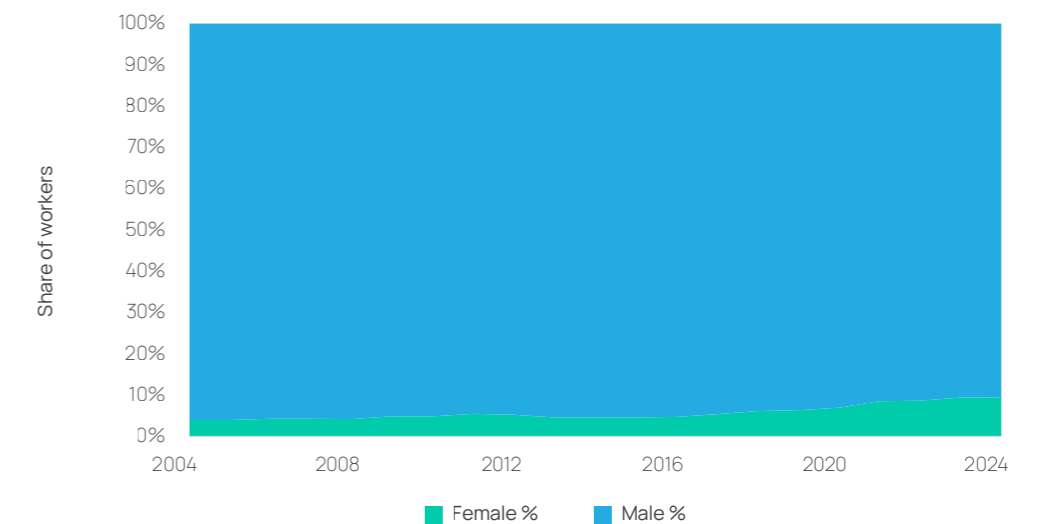
Figure 1: Maritime Industry Workforce, 2002 - 2034



Source: JSA Labour Force Trending (Nov 2024), JSA Employment Projections (2024 to 2034)

MARITIME WORKFORCE
projected to grow

Figure 2: Female Employment Share 2004 - 2024



Source: ABS, LFS, EQ08 2024, 4 - quarter average, 4 - year rolling average

WE HAVE
low female participation



MARITIME BUSINESS NO.

3108

38 with 200+ employees

162 with 20-199 employees

2,908 with 0-19 employees

AUSTRALIA'S INTERNATIONAL TRADE CARRIED BY SEA



MORE THAN 99%

TOP 4 SECTORS BY WORKFORCE NO.

Water Transport Support Services



15064

Water Freight Transport



4816

Scenic and Sightseeing Transport¹



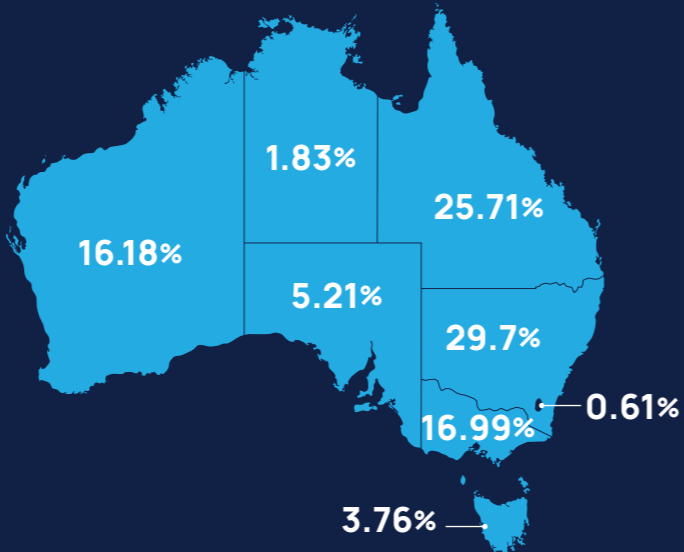
4281

Water Passenger Transport



2341

BUSINESS DISTRIBUTION BY STATE %



MARITIME INDUSTRY ESTIMATED ANNUAL REVENUE \$B 2025

10.0716

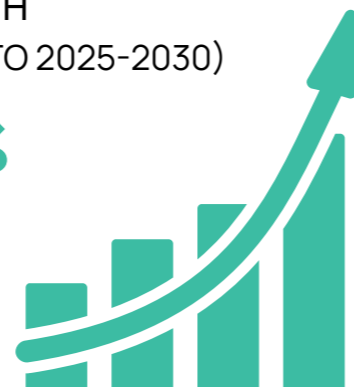


GDP CONTRIBUTION \$B 2024

3.76

DOMESTIC FREIGHT TASK GROWTH (PROJECTED TO 2025-2030)

1.50%



AVERAGE AGE

45



WORKFORCE[†]

27,902K



7% Female



1.7% Aboriginal & Torres Strait Islander



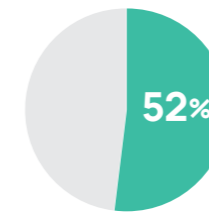
0.6% With a disability



REGISTERED TRAINING ORGANISATIONS (RTO)

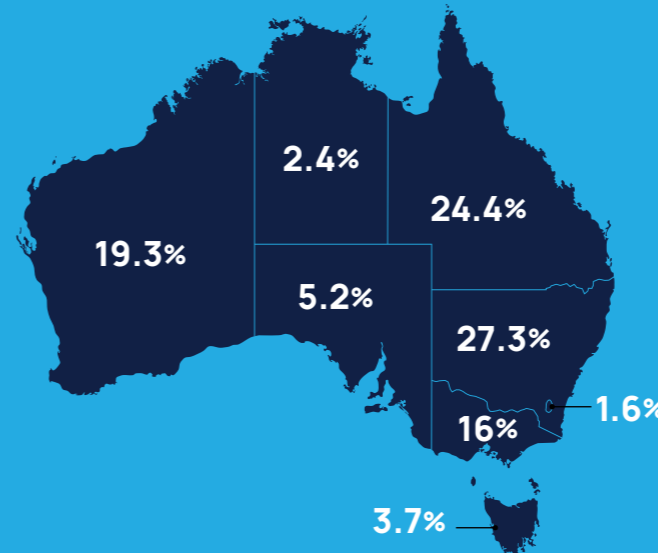
65

WORKERS WITH VOCATIONAL EDUCATION

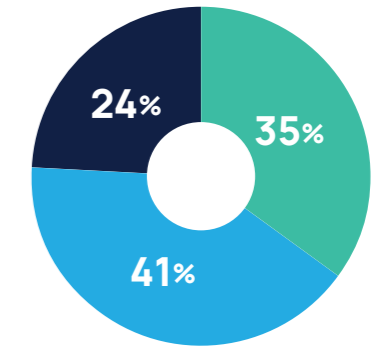


52%

WORKFORCE DISTRIBUTION



RESIDENTIAL DISTRIBUTION OF WORKERS



Major cities 35% Regional 41% Remote 24%

TOP 5 OCCUPATIONS

1	Ship's Master	3576
2	Deck Hand	2473
3	Ship's Engineer	1877
4	Ship's Officer	521
5	Marine Surveyor	483

WORKFORCE NEARING RETIREMENT (AGED 56-66)

18.5%



QUALIFICATION ENROLMENTS 2023

7349



Occupational shortages are being reported across all transport industries

Key Challenges and Drivers

A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry

Employers, industry associations and unions all report the Australian Maritime industry is experiencing unprecedented demand for skilled professionals, with a significant gap between the demand for seafarers and the current workforce supply. The workforce shortage is being driven by growing demand for sea transportation to support domestic supply chains for emerging energy industries and offshore oil and gas decommissioning.⁵ The industry has reported that an increase in demand for trans-shipment operations, defence support, crewing requirements for government owned vessels and shipbuilding also contribute to increased workforce demand. ISA's 2025 survey results highlighted that Maritime workforce development challenges are both immediate and long term.

Ongoing shortages of Engineers, Masters, Officers and Deck Hands are impacting the industry

The gap between the demand for Australian seafarers and the availability of qualified workers poses a serious challenge for the industry. As shown in **Table 1**, all maritime occupations are currently in shortage in at least one state/territory in Australia. Ship's Engineers and Masters were in shortage nationwide in 2024, suggesting that maritime professionals are in critically low supply across the country.

Table 1: Maritime occupations in shortage by state/territory

Occupation title	2021	2022	2023	2024
Deck Hand	NT	NSW, NT	NSW, NT, QLD	NT, QLD, SA
Marine Surveyor		VIC, WA		WA
Marine Transport Professionals nec		VIC		NSW, WA
Ship's Engineer	NT	NT, VIC, WA	AUST	AUST
Ship's Master	NT	NT, VIC, WA	NT, QLD	AUST
Ship's Officer		VIC, WA	NSW	NSW, WA

Source: Occupational Shortage List (14 February 2025)
AUST: All States and Territories

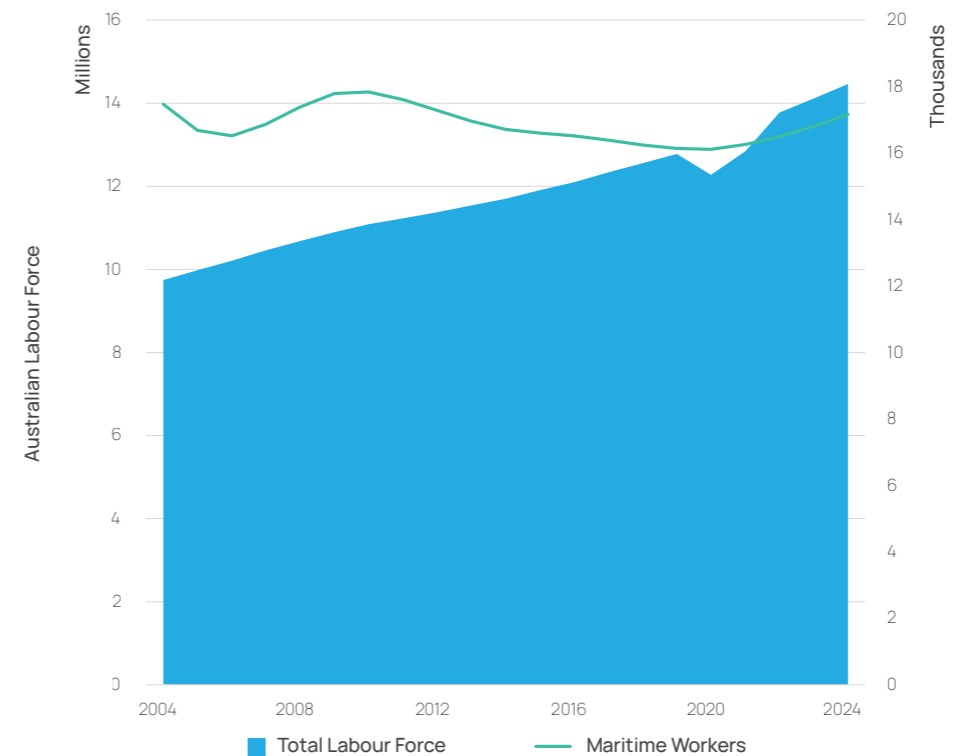
⁵ Department of Industry, Science and Resources. (2024). [Australia's Offshore Resources Decommissioning Roadmap](#)



Industry stakeholders report that occupational shortages are exacerbated by difficulties in attracting and retaining workers. ISA's 2025 survey results highlighted that attraction is particularly challenging in regional areas and the decline in Australian-flagged shipping makes it harder to attract new workers and support occupational mobility because there is no assurance that the industry can sustain their maritime careers. In addition to the shortages outlined in **Table 1**, employers have identified a significant lack of Electro Technical Officers and raised concerns about workforce capacity to meet the demands of new projects and initiatives.

The long-term workforce trends further underscore these challenges. JSA data (**Figure 3**) shows that while Australia's overall labour force has grown by nearly half (48.5%) over the past 20 years, the number of workers in maritime roles has barely changed. Indicators show the demand for maritime workers, as represented by online job ads (**Figure 4**), reached a peak in 2022 and has since fallen back 19% in 2024⁶, suggesting some volatility in employer demand and hiring activity.

Figure 3: Maritime Workers vs Total Labour Force, 2004-2024



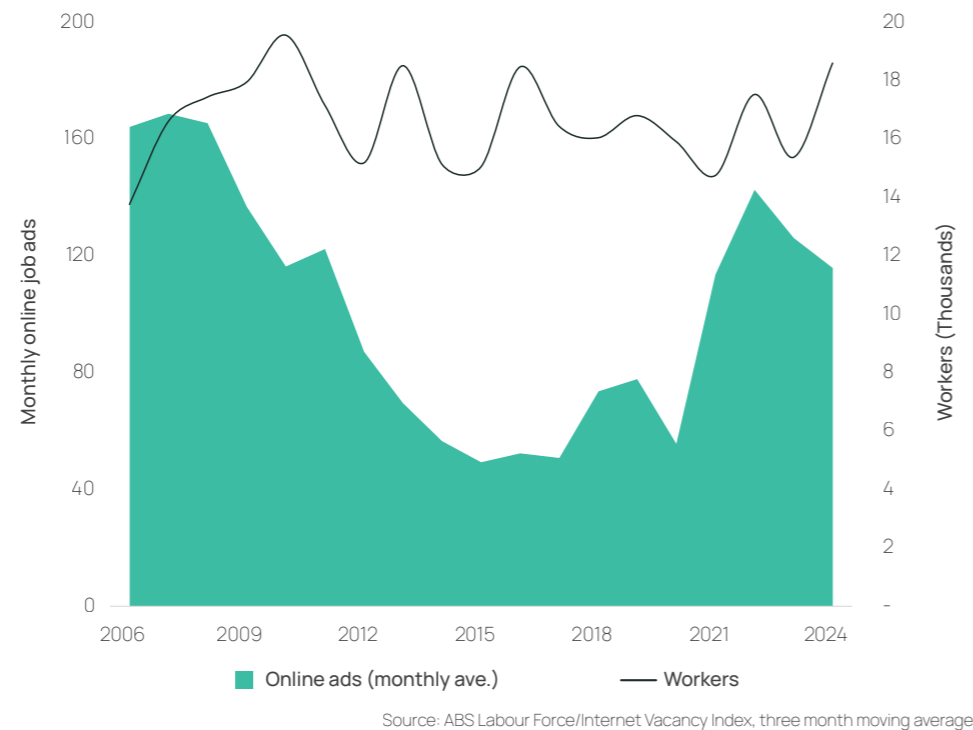
MARITIME WORKFORCE NUMBERS HAVE *remained steady* OVER 20 YEARS

⁶ Australian Bureau of Statistics. [Job vacancies](#), February 2025

While historical growth among maritime workers has been flat, Jobs and Skills Australia (JSA) Employment Projections report a 3.7% increase in maritime workers to 2029 and 8.9% to May 2034. However, this growth remains well below the total labour force average of 13.6% over the same period.⁷ While these projections signal a turnaround in maritime employment, it remains uncertain whether this growth will be sufficient to meet the demands of new projects and initiatives. ISA 2025 survey highlighted that with the right policy settings like the training levy, reforms to the Coastal Trading Act and support for initiatives such as Strategic Fleet and offshore wind, would support maritime careers.

ISA's 2025 survey results indicated that adjacent maritime sectors such as seafood, fishing and boatbuilding are competing for workers and are experiencing impacts on productivity, fleet size, sustainability and operations.

Figure 4: Maritime Workers and Online Job Ads, 2006 - 2024



demand fluctuates
FOR MARITIME WORKERS

Emerging green energy sectors and expanding Maritime industries will increase demand for skilled workers

Industry stakeholders predict that the shortage of skilled maritime workers will also be felt in emerging green energy sectors. The development of offshore renewable energy and transmission infrastructure is a pivotal part of the transition to renewable energy and the Maritime industry is integral to this development.⁸

Six initial licences for offshore wind projects were granted by the Australian Government in May 2024, with feasibility licences for 12 projects for the Gippsland Offshore Wind Zone also granted.⁹ While the scale of these infrastructure projects is dependent on Government approvals, maritime workers will be required to support construction, operations and maintenance phases.

Maritime workers will also be required for the decommissioning of offshore oil and gas facilities as Australia's offshore oil and gas industry matures, and Australia moves to reduce its emissions and reliance on fossil fuels.¹⁰ The first deepwater decommissioning project in Australian waters, Northern Endeavour, is underway.¹¹

⁷ Jobs and Skills Australia. [Employment projections produced May 2024 to May 2034](#)
⁸ Victorian Government. Energy, Environment and Climate Action. [Offshore wind energy](#)
⁹ Offshore Wind. (2024). [Australia Approves Twelve Offshore Wind Projects, Set to Generate 25 GW Capacity](#)
¹⁰ Australian Academy of Technological Sciences and Engineering. (2024). [Offshore oil and gas decommissioning](#)
¹¹ Department of Industry, Science and Resources. (2024). [An update on decommissioning the Northern Endeavour](#)

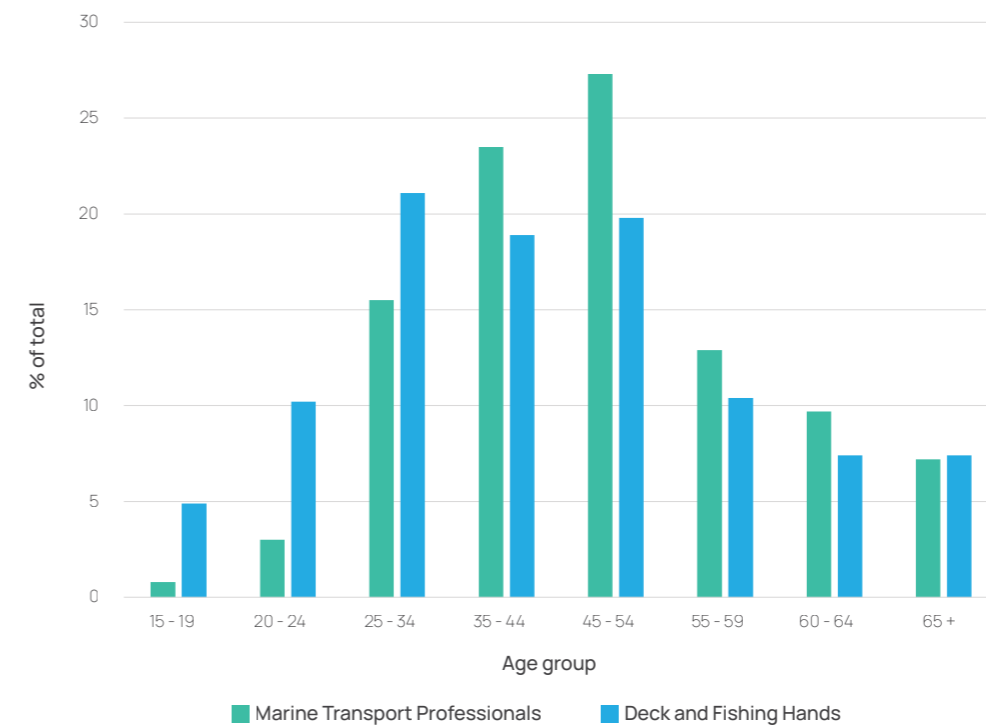
This type of activity will be an increasingly important component of the offshore industry with decommissioning activity over the next 30 years estimated to cost more than A\$60 billion.¹² The involvement of seafarers in these projects will vary depending on their scope and complexity¹³ but it is anticipated that seafarers will be required for the provision of essential vessel operations and support services.

The Strategic Fleet Taskforce advocated for a fleet of 12 vessels requiring an estimated 432 STCW qualified seafarers. Recognising that existing workforce shortages will need to be addressed to crew the proposed fleet, the Taskforce recommended taking a proactive approach to workforce development.

The industry is grappling with an ageing workforce and high turnover rates

The industry is challenged by an ageing workforce and difficulties in retaining workers.¹⁴ As shown in (Figure 5), maritime workers tend to be older than the national average, with a disproportionate share above 45 years old, and relatively few in the youngest age groups. Industry stakeholders report that qualified seafarers are leaving the industry or moving into higher-paid jobs in adjacent sectors of the maritime industry.

Figure 5: Maritime Workers Age Profile



WE HAVE A *maritime professionals ageing workforce*



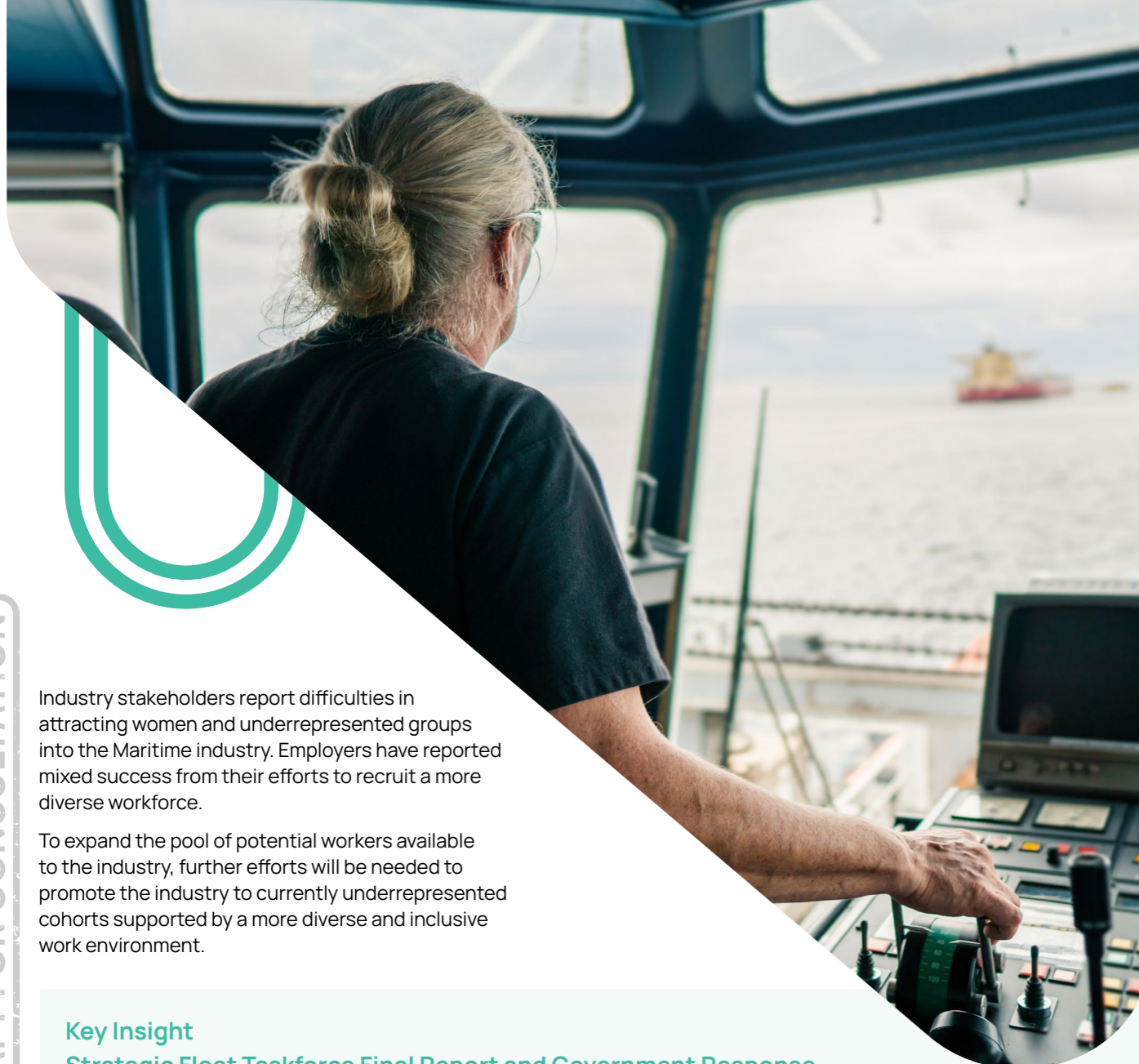
¹² Wood Mackenzie. (2020). [Australia-Oil-and-Gas-Industry-Outlook-Report.pdf](#)
¹³ ACCR. (2023). [Offshore oil and gas asset decommissioning](#)
¹⁴ Inpex. (2024). [Maritime workforce position paper](#)

B. Maritime training faces barriers from high costs, limited course availability, and trainer shortages

The costs associated with training and certification can be a significant barrier for many aspiring seafarers due to the need to comply with international standards and regulatory requirements.¹⁵

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) sets the standards of competence for seafarers internationally.¹⁶ Australia is a signatory to the convention and the Australian Maritime Safety Authority (AMSA) is responsible for ensuring Australian compliance with the standards of the STCW. In this role, AMSA approves and evaluates RTOs that provide training and assessment that leads to STCW certification.¹⁷

To gain an AMSA certificate of competency, seafarers must undertake an AMSA approved course and/or complete an AMSA mandated practical assessment.¹⁸ Approved training courses for STCW occupations include qualifications and Skill Sets from the Maritime Training Package.



Industry stakeholders report difficulties in attracting women and underrepresented groups into the Maritime industry. Employers have reported mixed success from their efforts to recruit a more diverse workforce.

To expand the pool of potential workers available to the industry, further efforts will be needed to promote the industry to currently underrepresented cohorts supported by a more diverse and inclusive work environment.

Key Insight Strategic Fleet Taskforce Final Report and Government Response

To advise on the establishment of a Strategic Fleet, the Australian Government appointed a Strategic Fleet Taskforce in 2022. The Taskforce released its final report in November 2023 and made 16 recommendations to guide the development of a Strategic Fleet. In a formal response, the Australian Government has agreed, in full or in principle, to 12 recommendations and committed to further exploring the remaining 4 recommendations.

The Strategic Fleet Taskforce advocated for a fleet of 12 vessels requiring an estimated 432 STCW qualified seafarers. Recommendations 9, 11 and 13 of the final report apply to skills and workforce development activities. The workforce challenges and drivers in this Plan are reflected in the Taskforce Report with several issues requiring support from the National Skills System, Jobs and Skills Australia, Industry Skills Australia, Commonwealth and state agencies and the maritime industry.

Proposed Actions:

- [Maritime skills pipeline](#)
- [Revalidation and RCC model](#)
- [Occupational pathways for defence](#)
- [Occupational mobility](#)
- [Simulation](#)

Actions Underway:

- [Marine Order 505 - Phase One Training Package Products](#)
- [Vessel Traffic Services](#)
- [National Maritime Skills Network](#)
- [Improving Maritime Career Information](#)
- [Co-ordination of Sea Time](#)
- [VET Workforce Project](#)
- [Maritime Supply and Demand](#)

Future Research and Consultation:

- [Decommissioning and offshore wind](#)
- [Skilled migration](#)

¹⁵ MIAL. (2025). [Government investment a welcome boost for strategic maritime skills](#)

¹⁶ Safety Culture. (2023). [STCW for seafarers: What you need to know](#)

¹⁷ AMSA. [Evaluations—STCW certificate of competency/proficiency and short courses—MT04](#)

¹⁸ AMSA. [AMSA mandated practical assessments](#)

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Maritime training is hindered by the need for substantial investments, a lack of trainers, and regulatory pressures

RTOs need significant investment to develop and maintain specialised maritime training programs. Approved training organisations are required to demonstrate that they can meet International Maritime Organisation (IMO) and/or AMSA requirements relevant to their training and assessment system. This can include requirements relating to methods of delivery, assessment instruments,¹⁹ Recognition of Prior Learning (RPL) processes,²⁰ industry certification for assessors,²¹ equipment, and the use of simulators.²² As a result, there is a high cost for RTOs to register, develop and maintain training courses that deliver highly specialised and technical job skills that meet STCW requirements.

Industry stakeholders have highlighted a shortage of qualified trainers across the maritime industry, reflecting broader shortages of Vocational Education Teachers' consistently reported across all States and Territories over the past three years (Table 3). The shortage impacts RTO capacity to deliver training and is a barrier to creating a skills pipeline for the maritime workforce. With industry looking to the national skills system for support to develop the maritime workforce, increasing the support of trainers with current skills in new and emerging technologies will be critical.

Table 2: Vocational Education Teacher Shortages by State/ Territory

State/Territory	2021	2022	2023	2024
Australian Capital Territory	No Shortage	Shortage	Shortage	Shortage
New South Wales	No Shortage	Shortage	Shortage	Shortage
Northern Territory	Shortage	Shortage	Shortage	Shortage
Queensland	No Shortage	Shortage	Shortage	Shortage
South Australia	No Shortage	Shortage	Shortage	Shortage
Tasmania	No Shortage	Shortage	Shortage	Shortage
Victoria	No Shortage	Shortage	Shortage	Shortage
Western Australia	No Shortage	Shortage	Shortage	Shortage

Source: Occupational Shortage List (14 February 2025)



Government funding supports VET enrolments, but course availability is limited

Although government funding supports VET enrolments in Maritime courses, the availability of courses through Fee-Free TAFE and VET traineeships is limited. Despite significant shortages for all maritime occupations across Australia (Table 1), only New South Wales is offering a wide range of funded traineeships for the Maritime industry (Table 3). Only one VET traineeship relating to STCW is currently available for the Maritime industry; the Certificate III in Maritime Operations (Integrated Rating), offered exclusively in Western Australia²³.

Table 3: Funded maritime traineeships by state and territory

State/Territory	ACT	NSW	NT	QLD	SA	TAS	WA	Certification
MAR10424 Cert I in Maritime Ops (Coxswain Grade 2 NC)						X		NC
MAR20324 Cert II in Maritime Ops (Coxswain Grade 1 NC)		X	X	X			X	NC
MAR20424 Cert II in Maritime Ops (MED Grade 3 NC)		X					X	NC
MAR30122 Cert III in Marina Ops		X						N/A
MAR30220 Cert III in Maritime Ops (Integrated Rating)							X	STCW
MAR30824 Cert III in Maritime Ops (MED Grade 2 NC)		X			X	X	X	NC
MAR30924 Cert III in Maritime Ops	X	X		X	X	X		NC
MAR40224 Cert IV in Maritime Ops (MED Grade 1 NC)		X						NC
MAR40324 Cert IV in Maritime Ops (Master up to 45 m NC)		X				X		NC
MAR50120 Dip of Marine Engineering		X						STCW, NC
MAR50320 Dip of Maritime Ops		X						STCW, NC
Total	1	9	1	2	2	4	4	

Source: Various state/territory price list websites

Given the strong relationship between the achievement of AMSA certification and employment outcomes, there is a sound argument for ensuring that all potential industry entrants can access training. Employers have reported and the ISA 2025 survey results confirmed the challenges of developing a national workforce when funding priorities do not have a national approach.

²³ Department of Training and Workforce Development. (2025, January). [Eligible traineeship list 2025 \(version 1\)](#). Jobs and Skills WA

¹⁹ AMSA. [STCW Training and assessment, quality standards and use of simulators—MT02](#)

²⁰ AMSA. [STCW recognition of prior learning policy—MT03](#)

²¹ AMSA. [Lecturer qualifications required for STCW course delivery—MT07](#)

²² AMSA. [STCW Training and assessment, quality standards and use of simulators—MT02](#)

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DRAFT FOR CONSULTATION

Government and industry stakeholders must work together to explore fair and equitable funding models that will make training viable for training providers and cost effective for seafarers.

RTOs struggle to maintain cost-effective courses due to low enrolments

Low enrolments in maritime courses restrict RTOs' ability to achieve economies of scale to deliver cost-effective courses. Thin markets and uncertain viability can result in a lack of delivery in specific skill areas and/or geographic regions. **Figure 6** highlights that several jurisdictions—particularly South Australia and the Northern Territory—have few or no approved STCW training providers. As a result, prospective students often have to travel interstate, increasing costs and compounding the challenges already faced by RTOs.

Figure 6: Approved STCW Training Providers by Jurisdiction



Source: AMSA, Approved training courses, March 2025

WE HAVE
few STCW training providers

The Maritime industry is feeling the flow on impacts of low enrolment. Industry have reported impacts on training delivery of STCW and Near Coastal qualifications including limited numbers of approved STCW training providers, limited delivery locations and course/ training intakes as well as costs for employers and seafarers.

Resolving the cost of training delivery to achieve AMSA certified qualifications is considered critical and was identified by the Strategic Fleet Taskforce as a barrier to building and maintaining a certified workforce for the Strategic Fleet.²⁴

Actions Underway:

- National Maritime Skills Network
- VET Workforce Project

Future Research and Consultation:

- Improving regional training delivery
- Strategic Fleet Taskforce Final Report 2023
- Trainer and Assessor shortages

²⁴ Department of Infrastructure. (2023). [Strategic fleet taskforce – Final report](#)

C. The limited availability of training berths is a major barrier to completing qualifying sea time

Seafarers must complete a specified amount of qualifying sea service, or 'sea time', on a vessel to be eligible for AMSA certification.²⁵ Without completing the required sea time, seafarers are unable to be AMSA certified and are unable to work in the industry.²⁶ Sea time requirements stipulate the length of time, the duties to be completed and the type of vessel on which that sea service needs to be completed for each grade of certificate. Near coastal sea time requirements are aligned with national standards while sea time requirements for international certificates are aligned with international STCW requirements.²⁷



²⁵ AMSA. [Sea service and task books](#)

²⁶ AMSA. [Guidance—international certificates](#)

²⁷ AMSA. [Qualifying near coastal sea service](#)

The lack of training berths limits opportunities to meet certification requirements

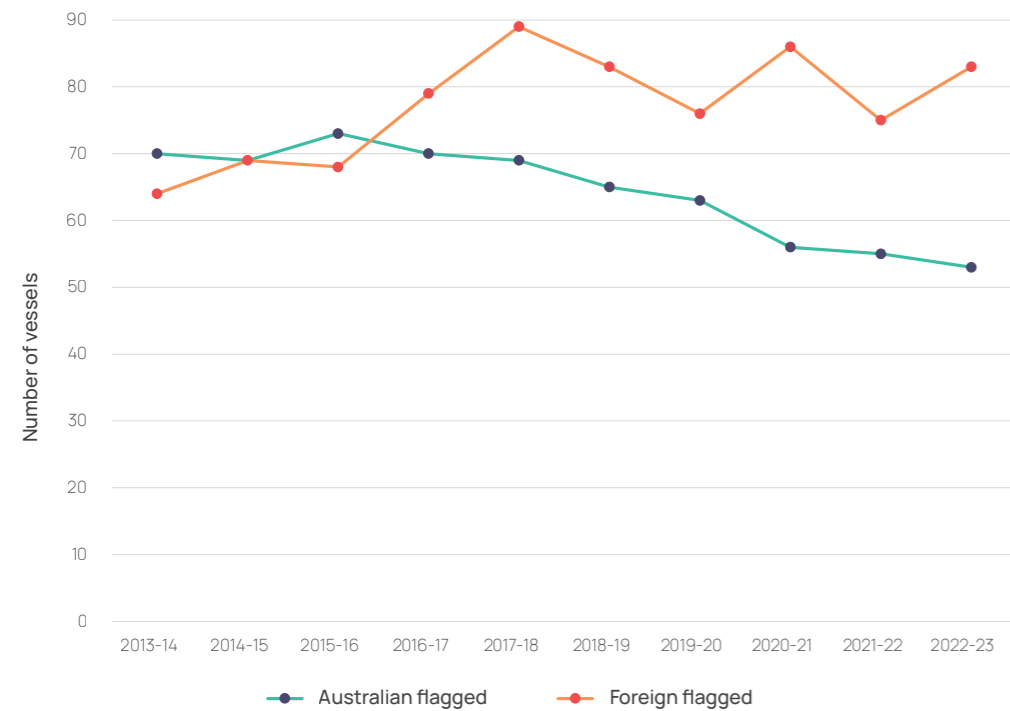
To complete the required sea time, prospective seafarers need access to training berths on suitable vessels.²⁸ However, access to training berths has proved to be a major barrier for people undertaking maritime training. Stakeholders in the Domestic Commercial Vessel (DVC) sector have also reported difficulties accessing berths to complete sea time requirements.

The Strategic Fleet Taskforce identified the lack of access to training berths on vessels as a major challenge to growing the maritime workforce.²⁹ The Taskforce's final report proposed measures to reduce these barriers, such as mandated training berths and cadetship programs.

The decline in Australian-flagged vessels reduces sea time opportunities for new entrants

The reduction in the number of Australian flagged vessels (Figure 7) has meant that fewer training berths are available for seafarers to complete the sea time they need to achieve VET qualifications and AMSA certification.

Figure 7: Australian trading fleet by registration status



Source: BITRE, Shipping—Yearbook 2024, Table 9.8a

WE HAVE
*declining
numbers of
Australian
flagged vessels*

Lack of coordination limits effective access to training berths

A lack of coordination across industry and training providers has meant that available training berths are not effectively accessed and used.³⁰ Industry have suggested that better coordination could improve the ability of prospective seafarers to fulfil the sea time requirements of their certification.

Actions Underway:

- Co-ordination of Sea Time

²⁸ Department of Infrastructure. (2023). [Strategic fleet taskforce – Final report](#)
²⁹ Department of Infrastructure. (2023). [Strategic fleet taskforce – Final report](#), Pg. 60
³⁰ Department of Infrastructure. (2023). [Strategic fleet taskforce – Final report](#)

MEGATREND

Decarbonisation is driving demand for new skills across all transport industries

D. The industry faces complex challenges in adapting to decarbonisation and new technologies

The Maritime industry is facing complex challenges as it navigates decarbonisation efforts and new technologies. Change is being driven by evolving international regulations, transition to cleaner fuels and the introduction of automation technologies.³¹ The recent Australian government initiatives such as Future Made in Australia shows the significance of achieving net zero.³²

Seafarers will need to be reskilled and upskilled in the safety requirements, operation and maintenance of new systems, including autonomous systems and alternative fuels, while also being trained in safety measures to protect the community, passengers and marine life.³³

New International Maritime Organisation (IMO) regulations will drive the adoption of cleaner fuels and technologies

In 2023, the IMO Green House Gas Strategy set an ambitious target to reduce net emissions to zero by 2050³⁴. The IMO has adopted measures to urgently reduce greenhouse gas emissions from international shipping, promoting cleaner fuels, such as liquefied natural gas (LNG), biofuels and new, low-carbon and zero-carbon fuels, and technologies. In response, industry has been exploring innovative ways to reduce its carbon footprint. Several new technologies and alternative fuel technologies have been developed and are currently being trialled.³⁵

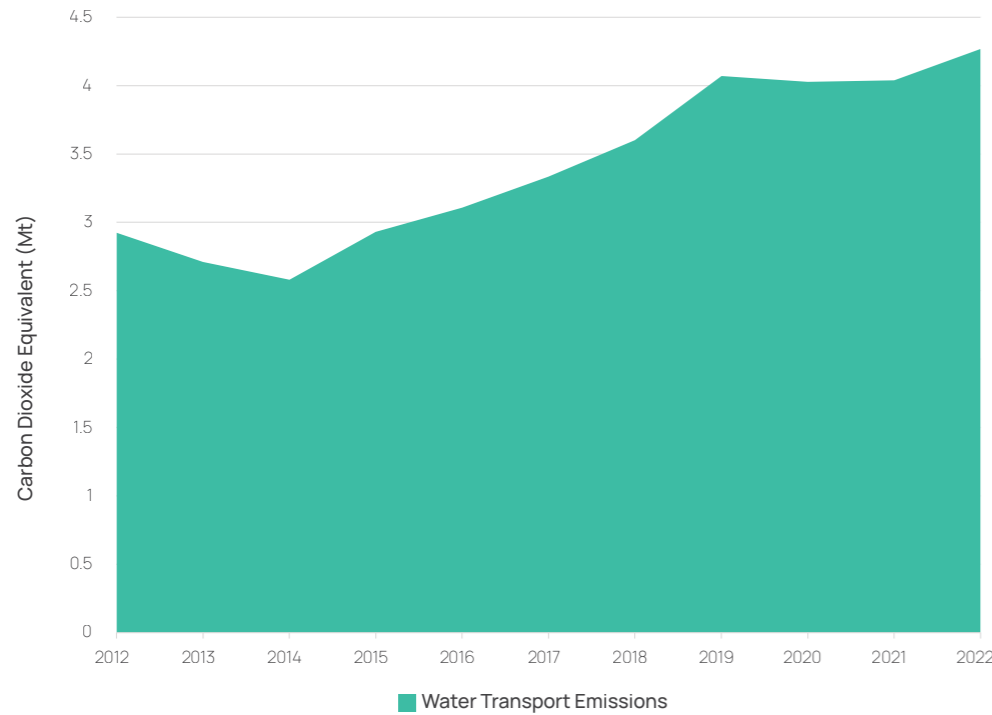
Globally binding technical measures from this policy will come into force in 2027³⁶. These will also have a significant impact on the Maritime industry by driving shipping's energy transition and accelerating the adoption of new fuels and technologies.

³¹ Maritime Executive. (2025). [Charting key regulatory change across maritime law in 2025 and beyond](#)
³² Department of Infrastructure, Transport, Regional Development, Communications and the Arts. [Media release - Low-carbon liquid fuels of the Future Made in Australia](#) released on March 2025
³³ Maritime Just Transition Taskforce. (2022). [Mapping a Maritime Just Transition for Seafarers](#)
³⁴ International Maritime Organization. (2023). [2023 IMO Strategy on Reduction of GHG Emissions from Ships - Annex 15, Resolution MEPC.337\(80\)](#)
³⁵ Department of Infrastructure, Transport, Regional Development, Communications and the Arts. (2023). [MERNAP Issues Paper: Energy Sources and Technologies](#)
³⁶ IMO. (2023). [Comprehensive impact assessment of the basket of IMO mid-term measures](#)



However, in Australia, emissions from maritime transport have instead increased by 1.3 Mt (megatonnes), or 46% in the 10 years to 2022, as shown in **Figure 8**. Rather than declining in line with global targets, emissions have been moving in the opposite direction, making the challenge of reaching net zero more complex.

Figure 8: CO₂ equivalent emissions in maritime transport



Source: DCCEEW 2025, National inventory by economic sector, Water Transport

WE HAVE
increasing emissions

Preparing domestic seafarers for decarbonisation is complex due to evolving technologies and skills demands

Decarbonising DCVs is particularly challenging due to uncertainty around the adoption of new technologies. This presents difficulties in assessing the skills needed for the future.

The Australian government's Maritime Emissions Reduction National Action Plan (MERNAP)³⁷ also acknowledges that training seafarers for a cleaner future is a challenge that needs to be addressed.

Growing automation and digitalisation in Maritime operations demands new competencies

There is a level of uncertainty among industry stakeholders about the uptake and viability of new technologies, and the timeframes for commercialisation and implementation. However, it is expected that increasing automation and digitalisation in maritime operations will have implications for seafarer skills and training.

Maritime stakeholders and ISA's Industry Advisory Group (IAG) have highlighted the role of the national skills system in workforce development and skills transition to support the implementation of automation and digitalisation.

³⁷ Department of Infrastructure, Transport, Regional Development, Communications and the Arts. (2024). [MERNAP Issues Paper: Skills and Training](#)



The shift to new technologies and alternative fuels demands updated skill requirements and strong safety measures

The maritime workforce will need specialist knowledge and skills to address safety challenges and hazards associated with alternative fuels. Certification and training to ensure safety standards and regulatory compliance will need to reflect the new technologies and alternative fuels that are adopted, such as hydrogen, ammonia, methanol and battery electric systems.³⁸ An immediate pathway for implementing new skill requirements is not yet clear due to the need for regulatory direction from the IMO and the slow uptake of the new technologies in Australia.³⁹ ISA's 2025 survey results highlighted that uncertainty around which fuels and technologies will be adopted is challenging for the maritime regulator and training providers to skill and upskill maritime workers.

Employers are reporting that the decarbonisation skills gap will impact the capacity of the industry to implement carbon reduction solutions effectively and possibly raises safety issues.

³⁸ Green Voyage. [Alternative marine fuels: Regulatory mapping](#)

³⁹ Maritime Just Transition Taskforce. (2022). [Mapping a Maritime Just Transition for Seafarers](#)

⁴⁰ International Transport Worker's Federation. (2023). [Training seafarers for a decarbonized future](#)

Industry are reporting that the IMO needs to establish training standards for workers operating on vessels requiring STCW certification and have highlighted the importance of IMO member project such as the Baseline Training Framework for Seafarers in Decarbonisation.⁴⁰ ISA's 2025 survey results indicate decarbonisation skills requirements for workers operating on domestic commercial vessels should be addressed now.

ISA will conduct further research and consultation on decarbonisation policy, the outcomes of Baseline Training Framework for Seafarers in Decarbonisation and initiatives to identify skills and training implications for Australian seafarers.

Proposed Action:

- [Digital Skills](#)
- [Autonomous Maritime Systems](#)

Future Research and Consultation:

- [Decarbonisation](#)

E. Upskilling trainers and assessors to effectively implement updated Maritime Training Package products in response to regulatory change

Marine Order 505

The maritime regulation known as Marine Order 505 (Certificates of competency – National Law) for domestic commercial vessels came into effect on 1 January 2023,⁴¹ following industry consultation over a two-year period.

This resulted in changes to AMSA Certificates of competency and updates to maritime qualifications for Near Coastal job roles to reflect the MO505 licensing and regulatory requirements.⁴²

The quality of graduate outcomes in the Near Coastal sector is a concern

Employers have raised concerns about the quality of graduates who complete qualifications which align with low complexity tickets to work in the Near Coastal sector.

To support registered training organisations, ISA, AMSA and key stakeholders will:

- establish a community of practice through the National Maritime Skills Network and work with AMSA approved providers to align their training and assessment system with MO505 requirements.
- develop guidelines for AMSA approved providers to support RTO's and learners understanding of transition arrangements from National Standards for Commercial Vessels to MO505.

Proposed Actions:

- [Marine Order 505 - Phase Two RTO Capability](#)

Actions Underway:

- [Autonomous Maritime Systems](#)
- [Marine Order 505 - Phase One Training Package Products](#)

⁴¹ AMSA. [Changes to domestic certificates of competency from 1 January 2023 – new Marine Order 505](#)

⁴² AMSA. (2023). [The new Marine Order 505 – Guidelines on the changes to the certificates of competency and exemptions](#)



Proposed Actions

The 2025 Workforce Plan identifies the following proposed actions developed in consultation with industry to address the sector-specific and cross-sector issues.

Table 4: Proposed actions to address challenges and drivers.

Maritime skills pipeline		
Labour Market Dynamics	Proposed Action/Strategy	Key Stakeholders
<p>Key Challenge/Driver A. <u>Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <ul style="list-style-type: none"> • Shortage of trained and skilled seafarers • Establishment of Strategic Fleet requires Australian crew. • Long lead times to train and certify Australian seafarers. <p>Symptom</p> <ul style="list-style-type: none"> • Occupational shortage • Industry competition for skilled workers as Australia embarks on multiple initiatives that will demand maritime workers. 	<p>Activity: Develop and validate a Maritime Skills Pipeline Model</p> <p>ISA will work with key industry stakeholders to scope, design and validate an agreed skills pipeline model for the Australian maritime industry to underpin the implementation and coordination of initiatives to build the maritime workforce by:</p> <ul style="list-style-type: none"> • identifying and reviewing the effectiveness of current approaches used to attract, skill and retain the maritime workforce. • reviewing state and national reports into the maritime industry (including Strategic Fleet Taskforce Final Report, WA Shipping and Supply Chain Taskforce Report, QLD Maritime Jobs Taskforce, Freight Victoria Career Analysis) • consulting with key stakeholders to scope and confirm user requirements (employer, worker/union, state training authorities, schools, VET, and higher education providers) • designing the draft maritime industry skills pipeline model in consultation with key stakeholders • validating the model and underpinning elements for each stage with broader industry. <p>Impact: Establishes an agreed framework for mapping existing and planned initiatives to build the maritime workforce and drives collaboration and co-ordination between the national skills system (jurisdictions and agencies), key industry stakeholders and regulators to optimise investment and minimise duplication of effort.</p> <ul style="list-style-type: none"> • Supports Recommendation 9, 11 and 13 of the Strategic Fleet Taskforce Final Report. • Underpins ISA proposed actions to address occupational shortages and develop a sustainable maritime workforce <p>Anticipated timing: 2025</p>	<ul style="list-style-type: none"> • Governments • State and federal agencies • Maritime Strategic Workforce Planning Committee • AMSA (Regulator) • Ship owners and operator association (MIAL) • Unions (MUA, AMOU, AIMPE) • Associations focused on near coastal certification (AMPTO & ACVOA)

Revalidation and RCC model

Labour Market Dynamics	Proposed Action/Strategy	Key Stakeholders
<p>Key Challenge/Driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <ul style="list-style-type: none"> Shortage of trained and skilled seafarers Establishment of Strategic Fleet requires Australian crew. Long lead times to train and certify Australian seafarers. <p>Symptom</p> <ul style="list-style-type: none"> Occupational shortage Highly regulated industry which limits inter and intra occupational mobility. Low levels of recognition of prior learning (Total VET Students and Courses 2018-2022). 	<p>Activity: Develop a VET model to improve RPL outcomes and support AMSA revalidation and recognition of current competency for Australia's Maritime workforce.</p> <p>ISA will work with key maritime stakeholders to develop, pilot and evaluate an agreed VET model to support revalidation and recognition of current competency (RCC) for Australian seafarers by:</p> <ul style="list-style-type: none"> identifying the critical features and underpinning elements that underpin an accessible, robust, and efficient model for revalidation and RCC of seafarers and which meets AMSA regulatory requirements. designing a series of possible revalidation and RCC models for consideration, refinement, and agreement by key stakeholders piloting and evaluating an agreed model for revalidation and RCC with partially qualified seafarers in collaboration with key stakeholders (occupations in shortage) developing a tool to assist trainers and assessors with RCC rolling out the agreed model through a National Maritime Skills Network <p>Impact: Increase the supply of Australian seafarers in response to existing occupational shortages and to meet the crewing needs of the Strategic Fleet.</p> <ul style="list-style-type: none"> Supports Recommendation 9.5 of the Strategic Fleet Taskforce Final Report. Supports the development of crew for the broader maritime industry including Near Coastal and maritime onshore job roles. <p>Anticipated timing: 2025 - 2027</p>	<ul style="list-style-type: none"> Maritime Strategic Workforce Planning Committee Maritime enterprises AMSA (Regulator) Ship owners and operator association (MIAL) Unions (MUA, AMOU, AIMPE) State and federal agencies National Maritime Skills Network RTOs and higher education providers State and territory industry advisory bodies National Maritime Skills Network

Occupational pathways for defence

Labour Market Dynamics	Proposed Action/Strategy	Key Stakeholders
<p>Key challenge/driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <ul style="list-style-type: none"> Shortage of trained and skilled seafarers. Defence readiness requires reduced involvement in responses to climate change disasters and humanitarian concerns. <p>Symptom</p> <ul style="list-style-type: none"> Occupational shortage No pathway for Navy to transition into the maritime industry for inter occupations 	<p>Activity: Develop a recognition of prior learning model to support transition from Naval occupations into civilian maritime occupations.</p> <p>ISA will work with key stakeholders to map, design, and promote an RPL model to establish formal recognition and training pathways from Naval occupations into civilian maritime occupations by:</p> <ul style="list-style-type: none"> working with AMSA to identify key Naval occupations which are most aligned with key skill shortages in officers and deck in civilian maritime. mapping key Naval occupations and aligning them to nationally recognised training package products. scoping any identified gaps in training pathways needed to support transition. validating outcomes with key maritime and Navy stakeholders designing an RPL model focussed on Naval occupations most closely aligned with key skill shortages. working with the National Career Institute and National Maritime Skills Network to promote Naval-to-civilian maritime transition pathways and RPL process. <p>Impact: Accelerates the supply of Australian seafarers in response to existing occupational shortages and to meet the crewing needs of the Strategic Fleet by:</p> <ul style="list-style-type: none"> contributing to the development of the Strategic Fleet workforce in a timely manner (given the long lead-times required for STCW certification) optimising Government's significant investment in training of Navy personnel increasing career transition opportunities from Navy into civilian employment increasing cross-industry collaboration. <p>Supports Recommendation 13a of the Strategic Fleet Taskforce Final Report.</p> <p>Anticipated timing: 2025 - 2026</p>	<ul style="list-style-type: none"> Maritime Strategic Workforce Planning Committee Maritime enterprises AMSA (Regulator) Ship owners and operator association (MIAL) Unions (MUA, AMOU, AIMPE) State and federal agencies National Maritime Skills Network RTOs and higher education providers State and territory industry advisory bodies National Maritime Skills Network

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Occupational mobility

Labour Market Dynamics	Proposed Action/Strategy	Key Stakeholders
<p>Key Challenge/Driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <ul style="list-style-type: none"> Shortage of trained and skilled seafarers Establishment of Strategic Fleet requires Australian crew. Long lead times to train and certify Australian seafarers. <p>Symptom</p> <ul style="list-style-type: none"> Occupational shortage Highly regulated industry which limits easy inter and intra occupational mobility. Low levels of recognition of prior learning (Total VET Students and Courses 2018-2022). Lack of visibility and understanding of maritime career pathways. 	<p>Activity: Develop occupational mobility pathways for Australia's maritime workforce.</p> <p>ISA will work with key maritime stakeholders to identify, formally recognise and promote skills that are portable between maritime occupations by:</p> <ul style="list-style-type: none"> identifying the formal learning pathways needed to support occupational mobility (credit, credit transfer, recognition of prior learning, recognition of current competency, micro-credentials, dual certification). identifying any gaps in existing training and assessment and the scope for future development developing training products and bridging programs. promoting maritime careers and the pathways into and within the industry. working with the National Careers Institute to ensure occupational pathways are reflected in their resources. <p>Impact: Accelerates the supply of Australian seafarers in response to existing occupational shortages by:</p> <ul style="list-style-type: none"> formal recognition of portable skills supporting the establishment of crew for the Strategic Fleet supporting the development of crew for the broader maritime industry including Near Coastal and maritime onshore job roles. increasing the mobility of skilled maritime labour enabling upskilling of the existing maritime workforce. <p>Supports Recommendation 9.1 of the Strategic Fleet Taskforce Final Report.</p> <p>Anticipated timing: 2025 - 2026</p>	<ul style="list-style-type: none"> Maritime Strategic Workforce Planning Committee Maritime enterprises AMSA (Regulator) Ship owners and operator association (MIAL) Unions (MUA, AMOU, AIMPE) State and federal agencies National Maritime Skills Network RTOs and higher education providers State and territory industry advisory bodies Association focused on near coastal certification (AMPTO & ACVOA) National Career Institute Seafood Industry Australia National Maritime Skills Network

Simulation

Labour Market Dynamics	Proposed Action/Strategy	Key Stakeholders
<p>Key Challenge/Driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <ul style="list-style-type: none"> Shortage of trained and skilled seafarers. Establishment of Strategic Fleet requires Australian crew. Long lead times to train and certify Australian seafarers. <p>Symptom</p> <ul style="list-style-type: none"> Occupational shortage Highly regulated industry which requires training providers to meet stringent delivery and assessment requirements. Challenges faced by employers and students to meet certification requirements. 	<p>Activity: Develop a model that utilises technology (simulation) to develop real-world experience and seafaring capabilities which meets AMSA and IMO requirements.</p> <p>ISA will work with key maritime stakeholders and AMSA to scope, develop and validate a training model that utilises simulation to support the achievement of AMSA certification by:</p> <ul style="list-style-type: none"> working with AMSA and industry to benchmark and validate simulation requirements for the use of simulation in training. working with AMSA to validate the use of simulation training to support training providers to meet STCW simulator training requirements. identifying simulation requirements for nationally endorsed maritime training package qualifications and units of competency scoping requirements for new and updated training package products to support the use of simulation. developing a tool to assist training providers to deliver and assess simulated requirements in accordance with industry and regulatory requirements. using simulation to promote maritime career pathways to school leavers and career changers in an engaging and safe manner. <p>Impact: Supporting the supply of Australian seafarers in response to existing occupational shortages by:</p> <ul style="list-style-type: none"> Supporting AMSA revalidation and recognition of current competencies for partially qualified stakeholders Reducing the cost of training which is a recognised barrier for employers and seafarers. Utilising technology to lift the quality and currency of delivery and assessment. <p>Phase One – In response to stakeholder feedback ISA will work with key maritime stakeholders and AMSA to scope out the parameters of the project to identify the licensing and regulatory requirements relevant to the use of simulation and simulators in training assessment for STCW and Near Coastal job roles.</p> <p>Anticipated timing: 2025 – 2026 (Phase one)</p>	<ul style="list-style-type: none"> Maritime Strategic Workforce Planning Committee Maritime enterprises AMSA (Regulator) Ship owners and operator association (MIAL) Unions (MUA, AMOU, AIMPE) State and federal agencies National Maritime Skills Network RTOs and higher education providers State and territory industry advisory bodies National Maritime Skills Network (Project 2)

Marine Order 505 – Phase Two RTO Capability

Labour Market Dynamics	Proposed Action/Strategy	Key Stakeholders
<p>Key challenge/driver <u>E. Upskilling Trainers and Assessors to Effectively Implement Updated Maritime Training Package Products in Response to Regulatory Change.</u></p> <ul style="list-style-type: none"> • Training Package • Skills and training implications for Australian maritime seafarers. <p>Symptom</p> <ul style="list-style-type: none"> • Graduates from the training system have insufficient / inappropriate skills for their occupations (due regulation changes) 	<p>Activity: To work with key industry stakeholders to support the implementation of updated training package products which reflect new Marine Order 505 licensing and regulatory requirements:</p> <ul style="list-style-type: none"> • develop guidance materials for learners and students to support implementation. • identify career and learning pathways for MO505 job roles. <p>Anticipated timing: 2025 – 2026</p>	<ul style="list-style-type: none"> • Australian Maritime Safety Authority • Unions (MUA, AMOU, AIMPE) • Maritime enterprises (Near Coastal) • Associations focused on near coastal certification and ship owners and operator • Stakeholders who have experience and expertise in near coastal vessels and operations.

Labour Market Dynamics	Proposed Action/Strategy	Key Stakeholders
<p>Key challenge/driver <u>D. The industry faces complex challenges in adapting to decarbonisation and new technologies</u></p> <p>Symptom: Skills Shortage</p>	<p>Activity: Analyse and review DigComp for use in Australian VET sector. Develop tools for use and undertake a review of occupations in using tools.</p> <p>Components:</p> <ul style="list-style-type: none"> • Analyse and review DigComp for use in Australian VET sector • Develop tools like the Australian Digital Capability Framework's Digital Occupational Profile which can inform Training Product Design, training delivery and support a systematic approach to the analysis of skills supply and demand. • Undertake a review of occupations in using tools/ templates • Undertake further DOP work on more occupations in our industries. • Coordinate a strategic review across our training packages with respect to the impact of digital transformation using the ESCO to compare to Australian Digital Skills from the completed DOPs. <p>Impact:</p> <ul style="list-style-type: none"> • Training qualifications and units that facilitate improved training and assessment of transferrable digital skills that match industry requirements. • Impact of training product development/maintenance work provides maximum benefit for industry, whilst minimising the impact of training product churn for RTOs <p>Anticipated Timing: 2025 - 2027</p>	<ul style="list-style-type: none"> • Industry leaders • Industry peaks • JSCs • Australian Rail Association • National Transport Commission

Actions Underway

The following provides an update on ongoing actions aimed at addressing the challenges identified in the 2024 Workforce Plan, many of which remain relevant in 2025.

Marine Order 505 – Phase One Training Package Products

Labour Market Dynamics	Project Details	Key Stakeholders
<p>Key Challenge/Driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <ul style="list-style-type: none"> • Training Package • Skills and training implications for Australian maritime seafarers. <p>Symptom Graduates from the training system have insufficient / inappropriate skills for their occupations (due to regulation changes)</p>	<p>Summary: Work with key industry stakeholders to update qualifications to reflect new Marine Order 505 licensing and regulatory requirements.</p> <p>Impact:</p> <ul style="list-style-type: none"> • update qualifications to align with new MO505 licensing and regulatory information. • develop a new qualification for Coxswain Grade 3 • develop guidance materials for learners and students to support implementation by updating the CVIG (Phase one) <p>Phase One has been completed. For further details visit the ISA Website.</p>	<ul style="list-style-type: none"> • Australian Maritime Safety Authority • Unions (MUA, AMOU, AIMPE) • Maritime enterprises (Near Coastal) • Associations focused on near coastal certification and ship owners and operator • Stakeholders who have experience and expertise in near coastal vessels and operations.

Vessel Traffic Services

Labour Market Dynamics	Project Details	Key Stakeholders
<p>Key Challenge/Driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <p>Symptom Graduates from the training system have insufficient / inappropriate skills for their occupations (due regulation changes)</p>	<p>Summary: Work with key industry stakeholders to delete training package products.</p> <p>Impact:</p> <ul style="list-style-type: none"> • Delete MAR30022 Certificate III in Vessel Traffic Services from Training Package • Update Maritime Companion Volume Implementation Guide to reflect changes. <p>Project completed. For further details visit the ISA Website.</p>	<ul style="list-style-type: none"> • Australian Maritime Safety Authority • Unions (MUA, AMOU, AIMPE) • Operators of Vessel Traffic Services • Jobs and Skills Council - Skills Insight

National Maritime Skills Network		
Labour Market Dynamics	Project Details	Key Stakeholders
<p>Key Challenge/Driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u> <u>B. Maritime training faces barriers from high costs, limited course availability, and trainer shortages</u></p> <ul style="list-style-type: none"> Shortage of trained and skilled seafarers Establishment of Strategic Fleet requires Australian crew. Long lead times to train and certify Australian seafarers. <p>Symptom</p> <ul style="list-style-type: none"> Occupational shortage <ul style="list-style-type: none"> Thin training market Highly regulated industry which requires training providers to meet stringent delivery and assessment requirements. 	<p>Summary: Pilot an industry-driven National Maritime Skills Network for the maritime industry.</p> <p>ISA will scope, design, and facilitate a pilot of an industry-driven National Maritime Skills Network model that underpins skills development for the Strategic Fleet workforce whilst also supporting skill needs of the broader maritime industry.</p> <p>Impact: Showcase how the National Maritime Skills Network model can successfully deliver high quality, industry-driven training to a thin market, that is heavily regulated.</p> <ul style="list-style-type: none"> Supports Recommendation 9, 11 and 13 of Strategic Fleet Taskforce Final Report. Underpins ISA proposed actions to address occupational shortages and develop a sustainable maritime workforce <p>Project has commenced For further details visit the ISA Website.</p>	<ul style="list-style-type: none"> Maritime Strategic Workforce Planning Committee RTOs and higher education providers Government Maritime enterprises AMSA (Regulator) Ship owners and operator association (MIAL) Unions (MUA, AMOU, AIMPE) State and federal agencies

Improving Maritime Career Information		
Labour Market Dynamics	Project Details	Key Stakeholders
<p>Key Challenge/Driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <ul style="list-style-type: none"> Shortage of trained and skilled seafarers Establishment of Strategic Fleet requires Australian crew Poor awareness of maritime careers, opportunities, and entry points <p>Symptom</p> <ul style="list-style-type: none"> Occupational shortage <ul style="list-style-type: none"> Highly regulated industry which limits easy inter and intra occupational mobility. Lack of visibility and understanding of maritime career pathways. 	<p>Summary: Develop and promote Strategic Fleet career and learning pathway information to learners, existing workers, careers advisors, training providers industry organisations and unions.</p> <p>Impact: Supports Recommendations of the Strategic Fleet Taskforce Final Report.</p> <p>Project has commenced For further details visit the ISA Website.</p>	<ul style="list-style-type: none"> Maritime Strategic Workforce Planning Committee Unions (MUA, AMOU, AIMPE) Ship owners and operator association (MIAL) AMSA (Regulator) Maritime enterprises (STCW and Near Coastal) National Career Institute Career Industry Council of Australia Year13 National Maritime Skills Network

Co-ordination of Sea Time		
Labour Market Dynamics	Project Details	Key Stakeholders
<p>Key Challenge/Driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u> <u>C. The limited availability of training berths is a major barrier to completing qualifying sea time</u></p> <ul style="list-style-type: none"> Shortage of trained and skilled seafarers Establishment of Strategic Fleet requires Australian crew. Long lead times to train and certify Australian seafarers. <p>Symptom</p> <ul style="list-style-type: none"> Occupational shortage <ul style="list-style-type: none"> Reduction in Australian fleet has reduced capacity to meet sea time requirements. Highly regulated industry which requires training providers to meet stringent delivery and assessment requirements. 	<p>Impact: Establishes an agreed model for effective co-ordination of sea time requirements which will:</p> <ul style="list-style-type: none"> support establishment of the Strategic Fleet support the development of crew for the broader maritime industry including Near Coastal and maritime onshore job roles. meet critical and immediate occupational shortages address the ongoing requirements of cadets and trainees. <p>Supports Recommendation 9.4 of the Strategic Fleet Taskforce Final Report.</p> <p>Project has commenced For further details visit the ISA Website.</p>	<ul style="list-style-type: none"> Unions (MUA, AMOU, AIMPE) Ship owners and operator association (MIAL) AMSA (Regulator) Maritime enterprises (STCW) Group Training Organisations (METL) VET experts who have experience and expertise in existing approaches (yet to be identified) Stakeholders who have experience and expertise in innovative sea time models to be identified and existing approaches to be identified.

VET Workforce Project

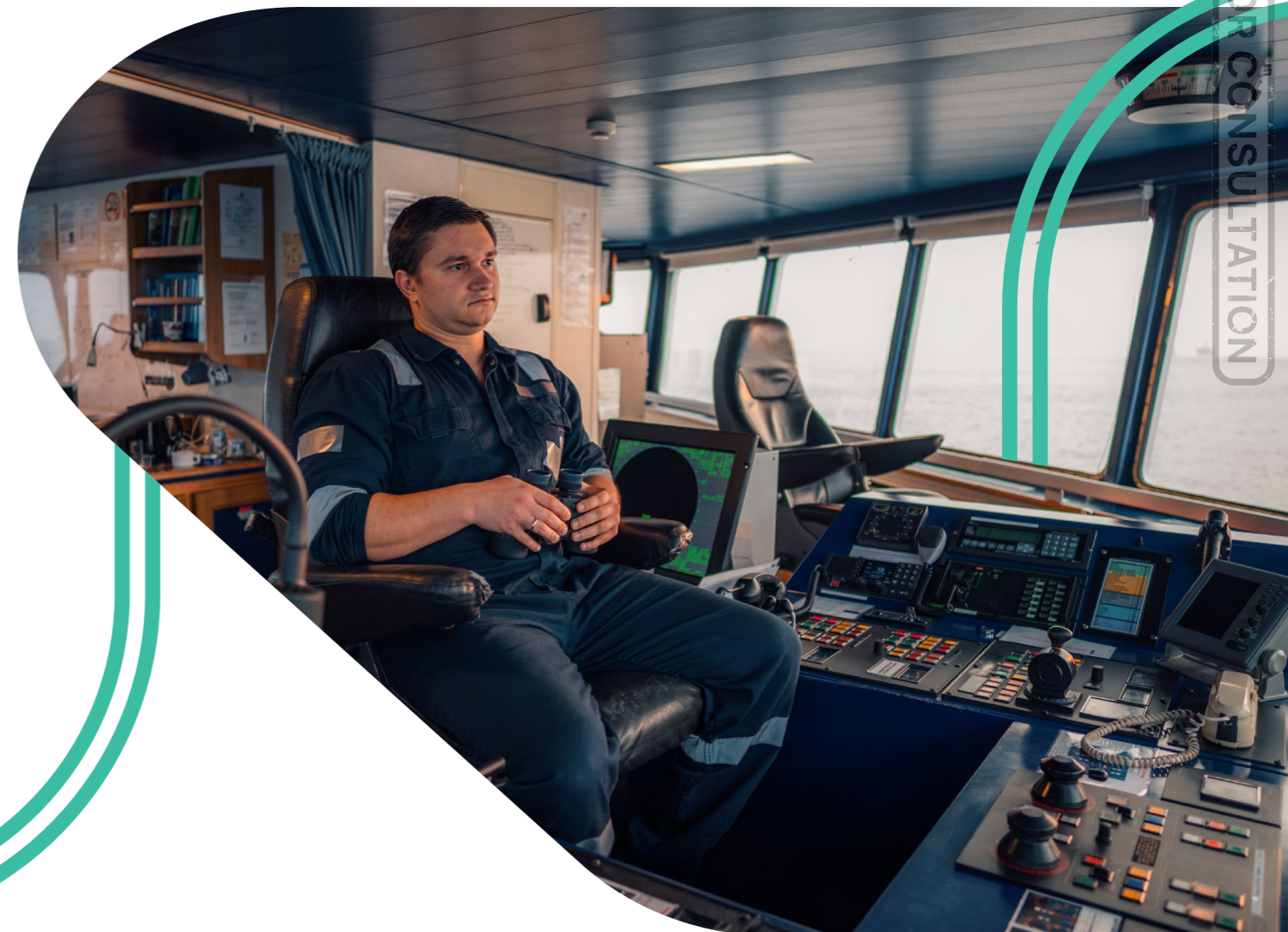
Labour Market Dynamics	Project Details	Key Stakeholders
<p>Key Challenge/Driver <u>B. Maritime training faces barriers from high costs, limited course availability, and trainer shortages</u></p> <p>Symptom Occupational shortage</p>	<p>Summary: The VET Workforce Project is a Commonwealth funded initiative being led by the ten Job and Skills Councils with the aim to build and support a secure and sustainable VET workforce.</p> <p>The Australian Government, in collaboration with Jobs and Skills Australia has developed a VET Workforce Blueprint (the Blueprint) to support a high quality and sustainable workforce. The VET Workforce Blueprint has been developed in collaboration with states and territories to provide a roadmap to grow, support and sustain the VET workforce.</p> <p>To continue and further support the work VET Workforce Blueprint, Industry Skills Australia is undertaking a project that will concentrate on vocational education providers in the transport sectors (Aviation, Maritime, Rail and Transport and Logistics) to complement and contribute to the opportunities and actions included in the Blueprint.</p> <p>Impact: ISA will deliver a workforce study comprising the following components:</p> <ul style="list-style-type: none"> • Understanding the VET Workforce • VET workforce roles and needs • VET workforce pathways and pipelines • Future and emerging VET Workforce Issues <p>For further details visit the ISA Website.</p>	<ul style="list-style-type: none"> • Training regulators • Australian Education Union • State/territory training authorities • State/territory industry advisory bodies • Industry enterprises • Industry peak bodies/ associations • Jobs and Skills Australia • Department of Employment and Workplace Relations

Autonomous Maritime Systems

Labour Market Dynamics	Project Details	Key Stakeholders
<p>Key challenge/driver <u>D. The industry faces complex challenges in adapting to decarbonisation and new technologies</u></p> <ul style="list-style-type: none"> • Training Package <ul style="list-style-type: none"> • Skills and training implications for Australian maritime seafarers. <p>Symptom Graduates from the training system have insufficient / inappropriate skills for their occupations (due regulation changes)</p>	<p>Summary: Work with key industry stakeholders to update qualifications for new and emerging job roles including Autonomous Underwater Vehicles (AUV) and Autonomous Surface Vessels (ASV) operations.</p> <p>Impact: Industry relevant qualifications</p> <p>For further details visit the ISA Website.</p>	<ul style="list-style-type: none"> • Maritime enterprises • AMSA (Regulator) • Stakeholders who have experience and expertise in AUV and ASV operators and technicians.

Maritime Supply and Demand

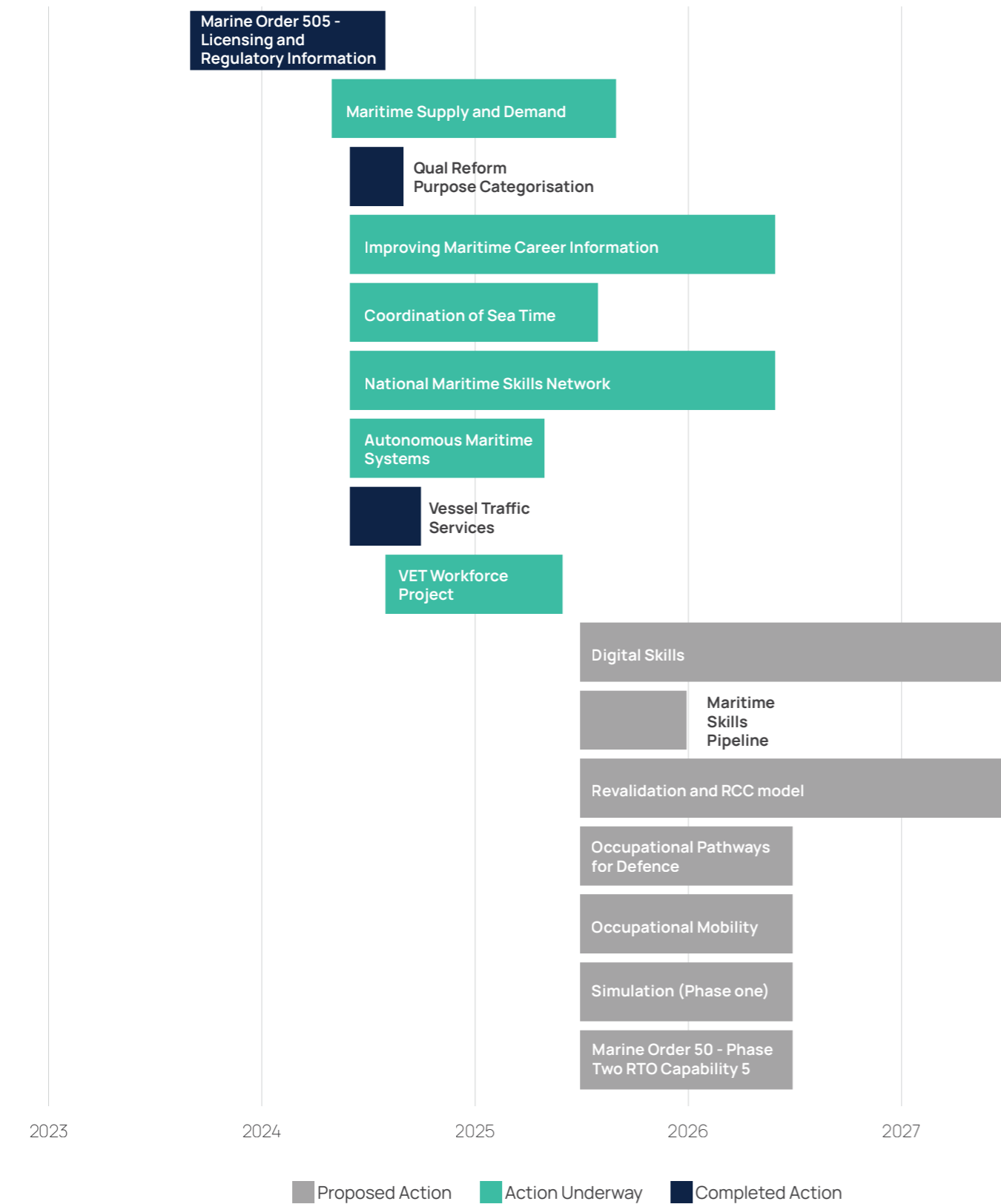
Labour Market Dynamics	Project Details	Key Stakeholders
<p>Key challenge/driver <u>A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry</u></p> <p>Symptom Occupational shortage</p>	<p>Summary: To build a definitive data set and modelling of future workforce supply and demand scenarios over the next 5-10 years in collaboration with Jobs and Skills Australia (JSA). This project will underpin the establishment of a skilled workforce for the Strategic Fleet as committed to by the Australian Government and will also provide the necessary evidence base for industry to plan and work with the national skills system to build a sustainable pipeline of skilled workers.</p> <p>Impact: Industry validated evidence base for the sector.</p> <p>For further details visit the ISA Website.</p>	<ul style="list-style-type: none"> • Industry stakeholders • Maritime Strategic Workforce Planning Committee • Jobs and Skills Australia (JSA) • Department of Employment and Workplace Relations (DEWR) • Australian Maritime Safety Authority (AMSA) • State Training Authorities



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Timeline of Activities



Future Research and Consultation

Additional engagement, research and consultation activity has been identified to assist in the development of future strategies or initiatives to inform the 2026 Workforce Plan. These focus areas cover the key themes associated with the challenges and drivers and are not an exhaustive list as industry may raise additional issues as we work with them in 2025:

A. Skilled workforce shortages pose a major challenge for Australia's Maritime industry

Decommissioning and offshore wind

Conduct further research on decommissioning to identify skills and workforce development implications.

Increasing industry diversity

Identify barriers to maritime workforce participation for under-represented cohorts. Engage with industry and relevant support organisations to determine potential strategies to assist in connection to employment.

Skilled migration

In consultation with industry stakeholders, we will investigate the current temporary and permanent skilled work visas, including the recent transition from the Temporary Skill Shortage (TSS) visa to the new Skills in Demand (SID) visa, reviewing how they are meeting the needs of the workforce and addressing shortages

B. Maritime training faces barriers from high costs, limited course availability, and trainer shortages

Improving regional training delivery

Engage with the National Maritime Skills Network and regional stakeholders to explore and develop strategies to support student cohorts in regional areas.

Strategic Fleet Taskforce Final Report 2023

To identify skills and training implications of recommendations from Strategic Fleet Taskforce Final Report 2023.

Trainer and Assessor shortages

To identify skills and knowledge requirements for trainers and assessors ISA will continue to:

- review and monitor implementation of the Credential Policy and the revised Standards for RTO's and impact on industry participation in the delivery of training, assessment and validation of assessments.
- work with the National Maritime Skills Network to determine the impact of:
 - skills shortages on their capacity to support the supply of qualified seafarers and provide trainers and educators who have skills currency in new and emerging technologies, and
 - a thin training market on training delivery and skills supply

D. The industry faces complex challenges in adapting to decarbonisation and new technologies

Decarbonisation

Conduct further research and consultation on decarbonisation policy and initiatives to identify the skills and training implications for Australian seafarers and determine the scope of any required training products.

To identify skills and training implications ISA will continue to monitor and review:

- outcomes of IMO member projects including Baseline Training Framework for Seafarers in Decarbonisation.
- skills development requirements outlined in Maritime Emissions Reduction National Action Plan (MERNAP) 2023-2024.
- expansion of the Strategic Fleet to address specific skill and training requirements for seafarers in response to decarbonisation initiatives.
- outcomes from ISA Industry Advisory Committee, ISA Technology Future Taskforce and the Jobs and Skills Councils' CEO Forum.

To support skills development and training implications we will work with key maritime stakeholders and JSC's to:

- develop training products to meet specialised training requirements in collaboration with other JSC's including any required responses to alternative fuels, alternative fuels, autonomous shipping, digitalisation to meet industry needs.
- monitor and review the challenges faced by the maritime industry where skills development relies on competent and knowledgeable trainers who are in short-supply across the maritime sector.
- monitor and review skills requirements for offshore wind and decommissioning.

High levels of engagement and cross-collaboration will be required between AMSA, industry, and RTOs to develop training products that address these needs.

ISA will continue to provide input and advice into key government initiatives where relevant.



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