



COMPANION VOLUME IMPLEMENTATION GUIDE

MAR Maritime Training Package

Release 12.0

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ABOUT INDUSTRY SKILLS AUSTRALIA

Industry Skills Australia (ISA) has been appointed as the Jobs and Skills Council for the nation's Maritime, Transport and Logistics, Rail and Aviation industries and the emerging sectors of Omnichannel Logistics and Distribution, and Air and Space Transport and Logistics.

Jobs and Skills Councils have **four (4) broad roles**:

1. **Industry Stewardship** which involves gathering industry intelligence to reliably represent the views and needs of industry back to the VET 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 Committee's 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 involves supporting training providers, promoting careers and monitoring how well the system is meeting the needs of industry and learners.

Jobs and Skills Councils replace and subsume the work of previous Industry Reference Committees, Skills Service Organisations and Skills Organisations.

ISA was established in early 2023, 28 years after its predecessor TDT Australia was established as a National Training Advisory Body in 1995. Following reforms to Australia's vocational training system, we became the Transport and Logistics Industry Skills Council in 2005 and Industry Skills Australia (Skills Service Organisation) in 2016

More information about ISA can be found at www.industryskillsaustralia.org.au.

Overview Information

This Companion Volume Implementation Guide (CVIG) is designed to assist assessors, trainers, Registered Training Organisations (RTOs) and enterprises in delivering the MAR Maritime Training Package. It provides advice about the structure of the Training Package, its key features and useful links to more detailed information on a range of related topics.

Version control and modification history

Training Packages are dynamic documents and are amended periodically to reflect the latest industry practices. Training Packages are version controlled and so it is essential that the latest release is always used.

In the version control and modification history table below, the latest information is provided first.

Release Number	Release Date	Comments
12.0	30 July 2025	One Major Updated Qualification MAR31225 Certificate III in Autonomous Maritime Systems Two Updated Skill Sets MARSS00049 Autonomous Underwater Vehicles (AUV) Technician Skill Set MARSS00050 Autonomous Surface Vessels (ASV) Technician Skill Set Six Major Updated Units of Competency MARF061 Apply knowledge of Autonomous Underwater Vehicles (AUV) technical management MARF062 Apply knowledge of Autonomous Surface Vessels (ASV) technical management MARH040 Apply knowledge of core Autonomous Underwater Vehicles (AUV) operations MARH041 Apply knowledge of core Autonomous Surface Vessels (ASV) operations MARH042 Conduct advanced Autonomous Underwater Vehicles (AUV) operations MARH043 Conduct advanced Autonomous Surface Vessels (ASV) operations
11.0	14 November 2024	Nine Major Updated Qualifications MAR10224 Certificate I in Maritime Operations (General Purpose Hand Near Coastal) MAR10424 Certificate I in Maritime Operations (Coxswain Grade 2 Near Coastal) MAR20324 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal) MAR20424 Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal) MAR30324 Certificate III in Maritime Operations (Marine Cookery) MAR30824 Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal) MAR30924 Certificate III in Maritime Operations MAR40224 Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal) MAR40324 Certificate IV in Maritime Operations (Master up to 45 metres Near Coastal) Four Minor Qualifications Updated MAR30122 Certificate III in Marina Operations MAR50120 Diploma of Marine Engineering MAR50320 Diploma of Maritime Operations

Release Number	Release Date	Comments
		MAR60220 Advanced Diploma of Maritime Operations (Master Unlimited) One Qualifications superseded MAR31021 Certificate III in Maritime Operations (Master Inland Waters) – merged with MAR30924 Certificate III in Maritime Operations One Qualifications deleted MAR30022 Certificate III in Vessel Traffic Services Three Updated Skill Sets MARSS00004 Marine Emergency Care, Craft and Communication Skill Set MARSS00008 Shipboard Safety Skill Set MARSS00037 Compass Adjuster Limited Skill Set One New Skill Set MARSS00048 Coxswains Grade 3 Skill Set Eighty-one Updated Units of Competency MARA017 Maintain seaworthiness of the ship (ship stability) MARA022 Manage loading, discharging and stowing of cargo MARA024 Manage vessel stability MARA025 Monitor, loading, unloading, securing and stowage of cargo MARB027 Perform basic servicing and maintenance of main propulsion unit and auxiliary systems MARB028 Service marine internal combustion engines and propulsion and auxiliary systems MARB029 Perform routine maintenance on a vessel up to 24 metres MARB031 Maintain marine internal combustion engines, propulsion plant and auxiliary systems MARB032 Undertake basic maintenance of electrical systems MARB034 Carry out basic welding, brazing, cutting and machining operations on a coastal vessel MARB039 Maintain and repair shipboard machinery and equipment MARB041 Manage refuelling MARB047 Undertake maintenance of 240 to 440 voltage alternating current electrical systems MARB048 Undertake maintenance of machinery, machinery systems and structural components

Release Number	Release Date	Comments
		MARB052 Apply knowledge of the principles of magnetic compass adjusting MARB053 Assist with routine maintenance on a commercial vessel MARB060 Slip or dock a vessel and maintain hull on a vessel up to 100 metres MARB061 Plan and supervise routine maintenance on a vessel up to 100 metres MARC033 Complete engine room tasks MARC034 Maintain hull out of water MARC035 Operate and maintain extra low and low voltage electrical systems and equipment MARC036 Operate deck machinery MARC037 Operate inboard and outboard motors MARC038 Operate main propulsion unit and auxiliary systems MARC039 Operate marine internal combustion engines, and propulsion and auxiliary systems MARC040 Manage fuel systems MARC041 Operate and monitor marine internal combustion engines, propulsion plant and auxiliary systems MARC042 Operate electrical systems MARC043 Transmit and receive information by marine radio MARC044 Transmit and receive information by marine VHF radio MARC046 Employ tools, equipment and materials in a shipboard context MARC047 Manage a propulsion unit using appropriate engine systems and support services MARC048 Monitor and manage vessel operations MARC049 Operate 240 to 440 voltage alternating current electrical systems MARC050 Operate auxiliary machinery systems up to 1500 kW MARC053 Operate marine internal combustion engines and associated systems up to 1500 kW MARC054 Operate propulsion transmission systems up to 1500 kW MARC059 Transmit and receive information by marine VHF radio within Australian Territorial Waters MARC064 Operate deck machinery and steering gear on a vessel up to 100 metres MARD004 Manage business and administration on vessels limited by tonnage or near coastal operations MARD005 Manage operations and maintenance on vessels limited by tonnage or near coastal operations

Release Number	Release Date	Comments
		MARF028 Follow procedures to minimise and fight fires on board a vessel MARF029 Meet work health and safety requirements MARF030 Survive at sea using survival craft MARF031 Apply leadership and team working capability MARF037 Follow vessel security procedures (security awareness training) MARF041 Observe personal safety and social responsibility (PSSR) MARF044 Prevent, control and fight fires on board a vessel (advanced firefighting) MARF046 Survive at sea in the event of vessel abandonment and personal survival techniques (PST) MARF047 Monitor compliance with legislative requirements MARF060 Apply basic survival skills in the event of vessel abandonment MARG007 Manage a small crew MARG009 Manage an engine room and small engineering team in emergencies MARG012 Work as part of a crew on a commercial vessel MARH013 Plan and navigate a passage for a vessel up to 12 metres MARH014 Apply weather information when navigating inland waters as Master MARH017 Use wheelhouse equipment for safe navigation MARH018 Apply command navigation procedures on vessels limited by tonnage or near coastal operations MARH019 Forecast weather and oceanographic conditions MARH022 Plan and conduct a passage and determine position MARH023 Use of electronic chart display and information system (ECDIS) to maintain the safety of navigation MARH024 Use of radar and other bridge equipment to maintain safety of navigation MARH036 Manage and maintain a navigational watch on board vessels up to 100 metres MARH037 Plan and navigate a passage for a vessel up to 100 metres MARI003 Comply with regulations to ensure safe operation of a vessel up to 12 metres MARI006 Observe regulations to ensure safe operation of a vessel up to 100 metres MARJ006 Follow environmental work practices MARJ007 Monitor environmental management on a vessel MARJ008 Ensure compliance with pollution prevention requirements

Release Number	Release Date	Comments
		MARK007 Handle a vessel up to 12 metres MARK008 Manoeuvre a vessel up to 24 metres within Near Coastal waters MARK011 Manoeuvre the ship MARK013 Manoeuvre a vessel up to 100 metres MARL046 Carry out engineering calculations MARL053 Demonstrate advanced knowledge of ship operations and maintenance MARN008 Apply seamanship skills aboard a vessel up to 12 metres MARN009 Perform seamanship operations on board a vessel up to 24 metres MARN016 Apply general purpose hand skills aboard a commercial vessel MARN020 Manage seaworthiness of a vessel up to 100 metres MARO009 Maintain a safe navigational watch MARO012 Transmit and receive information by visual signalling One New Unit of Competency MARN019 Command and manage a voyage on a vessel up to 45 metres (Near coastal) Six Deleted Units of Competency MARC063 Operate Vessel Traffic Services (VTS) equipment MARF051 Apply communication, coordination and interactions for VTS provision MARF052 Apply nautical knowledge MARF053 Apply personal attributes MARF056 Provide Vessel Traffic Services MARI005 Respond to emergency situations
10.0	20 December 2022	Qualification One (1) new qualification: MAR31222 Certificate III in Autonomous Maritime Systems Units of Competency Eight (8) new units of competency: MARF058 Apply knowledge of Autonomous Underwater Vehicles (AUV) technical management MARF059 Apply knowledge of Autonomous Surface Vessels (ASV) technical management MARH030 Apply knowledge of core Autonomous Underwater Vehicles (AUV) operations MARH031 Apply knowledge of core Autonomous Surface Vessels (ASV) operations

Release Number	Release Date	Comments
		MARH032 Conduct advanced Autonomous Underwater Vehicles (AUV) operations MARH033 Conduct advanced Autonomous Surface Vessels (ASV) operations MARH034 Demonstrate fundamental knowledge of Autonomous Maritime System (AMS) operations MARH035 Demonstrate fundamental knowledge of Autonomous Maritime Systems (AMS) Skill Set Three (3) new Skill Sets: MARSS00045 Autonomous Maritime System (AMS) Fundamentals Skill Set MARSS00046 Autonomous Underwater Vehicle (AUV) Technician Skill Set MARSS00047 Autonomous Surface Vessels (ASV) Technician Skill Set Updates – SSO Maintenance (Minor Release) Qualifications Three (3) qualifications: MAR10220 Certificate I in Maritime Operations (General Purpose Hand Near Coastal) MAR40320 Certificate IV in Maritime Operations (Master up to 45 metres Near Coastal) MAR50320 Diploma of Maritime Operations Units of Competency MARL057 Demonstrate basic knowledge of marine diesel engines and systems minor word changes in Performance Evidence
9.0	22 July 2022	Qualification One (1) revised qualification: MAR30122 Certificate III in Marina Operations One (1) new qualification: MAR30022 Certificate III in Vessel Traffic Services Units of Competency Seven (7) revised units of competency: MARB057 Perform routine tasks in a marina MARB058 Refuel a vessel MARB056 Maintain marina infrastructure MARB059 Undertake basic boatyard operations MARF054 Apply safe work practices in a marina MARF055 Classify marina infrastructure, vessels and staffing structure MARF027 Respond to marina emergencies Six (6) new units of competency: MARC063 Operate Vessel Traffic Services (VTS) equipment MARF053 Apply personal attributes

Release Number	Release Date	Comments
		MARF051 Apply communication, coordination and interactions for VTS provision MARF056 Provide Vessel Traffic Services MARF052 Apply nautical knowledge MARI005 Respond to emergency situations
8.0	15 October 2021	Qualification One (1) revised qualification: MAR20121 Certificate II in Maritime Operations (Linesperson) Skill Sets Three (3) new Skill Sets MARSS00042 Dredging Familiarisation Skill Set MARSS00043 Engine Watch Rating Skill Set MARSS00044 Navigational Watch Rating Skill Set Units of Competency One (1) new units of competency: MARN018 Contribute to basic marine dredging operations Seven (7) revised units of competency: MARB054 Apply marine terminology and port procedures MARB055 Maintain mooring equipment MARC061 Conduct mooring operations using mechanical equipment MARC062 Perform mooring operations MARE003 Communicate during mooring operations MARF049 Follow port and terminal security procedures MARF050 Follow work health and safety, and emergency procedures during mooring operations Updated - SSO Maintenance MAR20321 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal) MAR20421 Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal) MAR30120 Certificate III in Marina Operations MAR30220 Certificate III in Maritime Operations (Integrated Rating) MAR30821 Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal) MAR30921 Certificate III in Maritime Operations (Master up to 24 metres Near Coastal) MAR31021 Certificate III in Maritime Operations (Master Inland Waters) MAR40121 Certificate IV in Maritime Operations (Chief Integrated Rating) MARSS00020 Able Seafarer - Deck Skill Set MARSS00033 Safety Training Certification Skill Set
7.1	13 May 2021	Qualification One (1) deleted qualification

Release Number	Release Date	Comments
		MAR30118 Certificate III in Maritime Operations (Marine Engine Driver Steam) Units of Competency Four (4) deleted new units of competency MARB015 Maintain firefighting appliances MARC023 Operate and maintain a boiler MARC024 Operate and maintain a steam engine up to 750 kW and steam auxiliary equipment MARC025 Operate and maintain engines for auxiliary systems other than steam auxiliary systems Updated - SSO Maintenance MARL053 Demonstrate advanced knowledge of ship operation and maintenance Performance criteria for Element 11 and 12 re-numbered
7.0	25 January 2021	Qualifications One revised (1) qualification: MAR10220 Certificate I in Maritime Operations (General Purpose Hand Near Coastal) Skill Sets Seven (7) new skill sets: MARSS00035 Assist Marine Towage Operations Skill Set MARSS00036 Basic Operations for Dynamic Positioning Skill Set MARSS00037 Compass Adjuster Limited Skill Set MARSS00038 Compass Adjuster Unlimited Skill Set MARSS00039 Dynamic Positioning Operator Skill Set MARSS00040 Perform Marine Towage Operations Skill Set MARSS00041 Plan Marine Towage Operations Skill Set Units of Competency Ten (10) new units of competency: MARB050 Adjust a magnetic compass MARB051 Apply elements of magnetic compass adjusting MARB052 Apply knowledge of the principles of magnetic compass adjusting MARF048 Plan marine towage operations MARH025 Apply knowledge of dynamic positioning fundamentals MARH026 Apply knowledge of dynamic positioning operations MARH027 Apply knowledge of dynamic positioning systems MARH028 Conduct dynamic positioning operations MARH029 Perform marine towage operations MARN017 Assist with marine towage operations Three (3) revised units of competency: MARB053 Assist with routine maintenance on a commercial vessel MARG012 Work as part of a crew on a commercial vessel MARN016 Apply general purpose hand skills aboard a commercial vessel

Release Number	Release Date	Comments
		Imported Units Qualifications in MAR Maritime Training Package have been updated to include the most current imported Units of Competency
6.0	27 October 2020	Qualifications Eleven (11) revised qualifications: MAR10120 Certificate I in Maritime Operations (General Purpose Hand Near Coastal) MAR30120 Certificate III in Marina Operations MAR30220 Certificate III in Maritime Operations (Integrated Rating) MAR30320 Certificate III in Maritime Operations (Marine Cookery) MAR40120 Certificate IV in Maritime Operations (Chief Integrated Rating) MAR40220 Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal) MAR40320 Certificate IV in Maritime Operations (Master up to 35 metres Near Coastal) MAR50120 Diploma of Marine Engineering MAR50220 Diploma of Maritime Operations MAR60120 Advanced Diploma of Marine Engineering Class 1 MAR60220 Advanced Diploma of Maritime Operations (Master Unlimited) Qualifications - SSO Maintenance The below qualifications were updated due to Release 6.0 unit recoding: MAR20120 Certificate II in Maritime Operations (Linesperson) Skills Sets Fifteen (15) new Skill Sets: MARSS00020 Able Seafarer - Deck Skill Set MARSS00021 Able Seafarer - Engine Skill Set MARSS00022 Advanced Chemical Tanker Cargo Operations Skill Set MARSS00023 Advanced Liquefied Gas Tanker Cargo Operations Skill Set MARSS00024 Advanced Oil Tanker Cargo Operations Skill Set MARSS00025 Advanced Operations for Ships in Polar Waters Skill Set MARSS00026 Advanced Gas and Low-Flashpoint Fuels Skill Set MARSS00027 Basic Ship Operations in Polar Waters Skill Set MARSS00028 Basic Gas and Low-Flashpoint Fuels Skill Set MARSS00029 Chief Integrated Skill Set MARSS00030 Global Maritime Distress Signal Radio Operators Skill Set MARSS00031 Marine Engineering Workshop Skills Equivalent Skill Set

Release Number	Release Date	Comments
		MARSS00032 Operate Roll-On and Roll-Off Equipment Skill Set MARSS00033 Safety Training Certification Skill Set MARSS00034 Ship Security Officer Skill Set Twelve (12) revised Skill Sets: MARSS00004 Marine Emergency Care, Craft and Communication Skill Set MARSS00006 Marine Engineering Class 3 Near Coastal Shipboard Safety Skill Set MARSS00008 Shipboard Safety Skill Set MARSS00009 Australian Territorial Waters VHF Radio Operator's Skill Set MARSS00012 Fast Rescue Craft Operations Skill Set MARSS00013 Cargo Handling Skill Set MARSS00014 Anchor Handling and Cargo Operations Skill Set MARSS00015 Marine Dogging and Rigging Skill Set MARSS00016 Tanker Familiarisation Skill Set MARSS00017 Coxswains Grade 1 Skill Set MARSS00018 Marine Dogging Skill Set MARSS00019 Marine Rigging Skill Set Units of Competency Fifteen (15) new Units of Competency: MARA011 Contribute to basic operations of ships in polar waters MARA014 Contribute to basic operation of a ship subject to IGF Code MARA018 Manage advanced chemical tanker cargo operations MARA019 Manage advanced liquefied gas tanker cargo operations MARA020 Manage advanced oil tanker cargo operations MARA021 Manage advanced operations of a ship subject to IGF Code MARB037 Maintain and repair bridge navigation equipment and ship communication systems MARB040 Maintain control and safety systems hotel and equipment MARB044 Operate and maintain ship power systems exceeding 1,000 volts MARB049 Use internal communication systems, operate computers and computer networks on ships MARC056 Operate roll-on and roll-off machinery and equipment on board a vessel MARF040 Manage ship security (Ship Security Officer) MARF045 Provide leadership and managerial capability MARF047 Monitor compliance with legislative requirements MARN012 Manage advanced operations of ships in polar waters One hundred and seven (107) revised Units of Competency:

Release Number	Release Date	Comments
		MARA012 Contribute to basic cargo operations on liquefied gas tankers MARA013 Contribute to basic cargo operations on oil and chemical tankers (basic oil and chemical) MARA015 Contribute to safe anchor handling and towing operations MARA016 Contribute to safe cargo operations on offshore support vessels MARA017 Maintain seaworthiness of the ship (ship stability) MARA022 Manage loading, discharging and stowing of cargo MARA023 Manage trim, stability and stress of a vessel MARA024 Manage vessel stability MARA025 Monitor loading, unloading, securing and stowage of cargo MARB033 Assist with routine maintenance of a vessel MARB034 Carry out basic welding, brazing, cutting and machining operations on MARB035 Contribute to routine engine maintenance on a vessel MARB036 Implement vessel planned maintenance system MARB038 Maintain and repair marine electrical and electronic equipment MARB039 Maintain and repair shipboard machinery and equipment MARB041 Manage refuelling MARB042 Manage reported defects, damage, repairs and maintenance of a vessel MARB043 Manage stores for planned maintenance system MARB045 Perform routine maintenance and repairs on a vessel MARB046 Plan and supervise routine maintenance on a vessel up to 80 metres MARB047 Undertake maintenance of 240 to 440 voltage alternating current electrical systems MARB048 Undertake maintenance of machinery, machinery systems and structural components MARC045 Contribute to the operation of engine equipment and associated propulsion plant MARC046 Employ tools, equipment and materials in a shipboard context MARC047 Manage a propulsion unit using appropriate engine systems and support services MARC048 Monitor and manage vessel operations MARC049 Operate 240 to 440 voltage alternating current electrical systems MARC050 Operate auxiliary machinery systems up to 1500 kW MARC051 Operate deck machinery and steering gear on a vessel up to 80 metres MARC052 Operate deck machinery, cargo handling gear and equipment on a vessel MARC053 Operate marine internal combustion engines and associated systems up to 1500 kW MARC054 Operate propulsion transmission systems up to 1500 kW

Release Number	Release Date	Comments
		MARC055 Operate remote controls of propulsion plant, engineering systems and services MARC057 Perform dogging on board a vessel MARC058 Perform rigging on board a vessel MARC059 Transmit and receive information by marine VHF radio within Australian Territorial Waters MARC060 Use and care for hand and power tools MARD004 Manage business and administration on vessels limited by tonnage or near coastal operations MARD005 Manage operations and maintenance on vessels limited by tonnage or near coastal operations MARD006 Monitor and control compliance with legislative requirements MARF031 Apply leadership and team working capability MARF032 Apply medical first aid on board ship MARF033 Assist in an emergency response MARF034 Carry out fast rescue craft operations MARF035 Contribute to fire prevention and firefighting (basic firefighting) MARF036 Coordinate search and rescue operations MARF037 Follow vessel security procedures (security awareness training) MARF038 Manage provision of medical care on board a vessel MARF039 Manage safety and security of vessel, crew and passengers MARF041 Observe personal safety and social responsibility (PSSR) MARF042 Operate emergency equipment and apply emergency procedures MARF043 Operate survival craft, rescue boats and lifesaving appliances (proficiency in survival craft) MARF044 Prevent, control and fight fires on board a vessel (advanced firefighting) MARF046 Survive at sea in the event of vessel abandonment and personal survival techniques (PST) MARG007 Manage a small crew MARG008 Manage a vessel and its crew MARG009 Manage an engine room and small engineering team in emergencies MARG010 Supervise a crew MARG011 Work effectively as part of a crew on a vessel up to 80 metres MARH018 Apply command navigation procedures on vessels limited by tonnage or near coastal operations MARH019 Forecast weather and oceanographic conditions MARH020 Forecast weather and oceanographic conditions to plan a safe passage MARH021 Manage the navigation of a vessel MARH022 Plan and conduct a passage and determine position MARH023 Use an electronic chart display and information system (ECDIS) to maintain the safety of navigation MARH024 Use of radar and other bridge equipment to maintain safety of navigation

Release Number	Release Date	Comments
		MARJ008 Ensure compliance with pollution prevention requirements MARJ009 Manage compliance with environmental management legislation MARK009 Manoeuvre a vessel up to 80 metres MARK010 Manoeuvre and handle a ship in all conditions MARK011 Manoeuvre the ship MARK012 Steer a vessel under direction of the Master MARL038 Apply advanced principles of marine electrotechnology MARL039 Apply advanced principles of marine engineering thermodynamics MARL040 Apply advanced principles of marine mechanics MARL041 Apply advanced principles of trim, stability and stress MARL042 Apply basic principles of marine electrotechnology MARL043 Apply basic principles of marine engineering thermodynamics MARL044 Apply basic principles of marine mechanics MARL045 Apply basic principles of naval architecture MARL046 Carry out engineering calculations MARL047 Demonstrate advanced knowledge of marine auxiliary boilers MARL048 Demonstrate advanced knowledge of marine auxiliary machinery and systems MARL049 Demonstrate advanced knowledge of marine control systems and automation MARL050 Demonstrate advanced knowledge of marine diesel engines and systems MARL051 Demonstrate advanced knowledge of marine electrical systems MARL052 Demonstrate advanced knowledge of marine steam turbines and main boilers MARL053 Demonstrate advanced knowledge of ship operations and maintenance MARL054 Demonstrate basic knowledge of marine auxiliary boilers MARL055 Demonstrate basic knowledge of marine auxiliary machinery and equipment MARL056 Demonstrate basic knowledge of marine control systems and automation MARL057 Demonstrate basic knowledge of marine diesel engines and systems MARL058 Demonstrate basic knowledge of marine electrical systems MARL059 Demonstrate basic knowledge of marine steam turbines and main boilers MARL060 Demonstrate knowledge of ships and ship routines MARL061 Perform basic marine engineering calculations MARN010 Apply general purpose hand skills aboard a vessel MARN011 Maintain seaworthiness of the ship (ship construction) MARN013 Manage seaworthiness of a vessel up to 80 metres

Release Number	Release Date	Comments
		MARN014 Plan and manage safe loading, unloading, securing and stowage of cargo MARN015 Use seamanship skills on board a vessel MARO007 Contribute to monitoring and controlling a safe engine watch MARO008 Contribute to monitoring and controlling a safe navigational watch MARO009 Maintain a safe navigational watch MARO010 Perform basic lookout duties MARO011 Transmit and receive information by the Global Maritime Distress and Safety System (GMDSS) MARO012 Transmit and receive information by visual signalling Imported Units: Qualifications in MAR Maritime Training Package have been updated to include the most current imported Units of Competency
5.0	09 July 2018	Qualifications: Six qualifications updated to incorporate the Australian Maritime Safety Authority's (AMSA) certification requirements. MAR10418 Certificate I in Maritime Operations (Coxswain Grade 2 Near Coastal) MAR20318 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal) MAR20418 Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal) MAR30818 Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal) MAR30918 Certificate III in Maritime Operations (Master up to 24 metres Near Coastal) MAR31018 Certificate III in Maritime Operations (Master Inland Waters) Eight qualifications updated to incorporate new unit codes MAR10318 Certificate I in Maritime Operations (General Purpose Hand Near Coastal) MAR30118 Certificate III in Maritime Operations (Marine Engine Driver Steam) MAR30218 Certificate III in Maritime Operations (Integrated Rating) MAR30318 Certificate III in Marina Operations MAR40118 Certificate IV in Maritime Operations (Marine Surveying) MAR40218 Certificate IV in Maritime Operations (Chief Integrated Rating) MAR40518 Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal) MAR40618 Certificate IV in Maritime Operations (Master up to 35 metres Near Coastal) Skill Sets: Four Skill Sets updated to incorporate the new Unit of Competency codes (equivalent)

Release Number	Release Date	Comments
		MARSS00008 Shipboard Safety Skill Set MARSS00010 Marine Radio Operator's VHF and HF Skill Set MARSS00011 Marine Radio Operator's VHF Skill Set MARSS00017 Coxswains Grade 1 Skill Set Units of Competency: 35 Units of Competency revised to better describe how the unit is applied, include improved Licensing/regulatory information and strengthen assessment requirements. MARB027 Perform basic servicing and maintenance of main propulsion unit and auxiliary systems MARB028 Service marine internal combustion engines and propulsion and auxiliary systems MARB029 Perform routine maintenance on a vessel up to 24 metres MARB030 Slip or dock a vessel and maintain hull on a vessel up to 80 metres MARB031 Maintain marine internal combustion engines, propulsion plant and auxiliary systems MARB032 Undertake basic maintenance of electrical systems MARC033 Complete engine room tasks MARC034 Maintain hull out of water MARC035 Operate and maintain extra low and low voltage electrical systems and equipment MARC036 Operate deck machinery MARC037 Operate inboard and outboard motors MARC038 Operate main propulsion unit and auxiliary systems MARC039 Operate marine internal combustion engines, and propulsion and auxiliary systems MARC040 Manage fuel systems MARC041 Operate and monitor marine internal combustion engines, propulsion plant and auxiliary systems MARC042 Operate electrical systems MARC043 Transmit and receive information by marine radio MARC044 Transmit and receive information by marine VHF radio MARF027 Apply basic survival skills in the event of vessel abandonment MARF028 Follow procedures to minimise and fight fires on board a vessel MARF029 Meet work health and safety requirements MARF030 Survive at sea using survival craft MARH013 Plan and navigate a passage for a vessel up to 12 metres MARH014 Apply weather information when navigating inland waters as Master MARH015 Manage and maintain a navigational watch on board vessels up to 80 metres MARH016 Plan and navigate a passage for a vessel up to 80 metres MARH017 Use wheelhouse equipment for safe navigation MARI003 Comply with regulations to ensure safe operation of a vessel up to 12 metres

Release Number	Release Date	Comments
		MARI004 Observe regulations to ensure safe operation of a vessel up to 80 metres MARJ006 Follow environmental work practices MARJ007 Monitor environmental management on a vessel MARK007 Handle a vessel up to 12 metres MARK008 Manoeuvre a vessel up to 24 metres within Near Coastal waters MARN008 Apply seamanship skills aboard a vessel up to 12 metres MARN009 Perform seamanship operations on board a vessel up to 24 metres Minor Changes: All qualifications in MAR Maritime Training Package have been updated to include the most current imported Units of Competency.
4.0	24 February 2016	Three qualifications revised and transitioned to the Standards for Training Packages 2012. Qualifications: MAR20116 Certificate II in Maritime Operations (Linesperson) MAR30116 Certificate III in Maritime Operations (Integrated Rating) MAR40116 Certificate IV in Maritime Operations (Chief Integrated Rating) Eighteen Units of Competency revised and transitioned to the Standards for Training Packages 2012 and five new Units of Competency: Units of Competency: MARB016 Contribute to routine engine maintenance on a vessel MARB017 Perform routine maintenance and repairs on a vessel MARB018 Implement vessel planned maintenance system MARB019 Manage stores for planned maintenance system MARB025 Maintain mooring equipment MARB026 Apply knowledge of marine terminology and port procedures MARC022 Perform mooring and unmooring activities MARC027 Contribute to the operation of engine equipment and associated propulsion plant MARC028 Operate deck machinery, cargo handling gear and equipment on a vessel MARC029 Perform rigging on board a vessel MARC030 Use and care for hand and power tools MARC031 Shift mooring lines using mechanical means MARC032 Perform dogging on board a vessel MARE002 Communicate during mooring and unmooring activities MARF017 Follow work health and safety and emergency procedures during mooring and unmooring activities

Release Number	Release Date	Comments
		MARF018 Assist in an emergency response MARF019 Operate emergency equipment and apply emergency procedures MARF026 Follow port and terminal security procedures MARG005 Supervise a crew MARK005 Steer a vessel under direction of the Master MARN007 Use seamanship skills on board a vessel MARO005 Contribute to monitoring and controlling a safe engine watch MARO006 Contribute to monitoring and controlling a safe navigational watch Skill Sets: New Skill Sets for Tanker Familiarisation and dogging and Rigging: MARSS00015 Marine Dogging and Rigging skill set MARSS00016 Tanker Familiarisation skill set MARSS00017 Coxswains Grade 1 skill set MARSS00018 Marine Dogging skill set MARSS00019 Marine Rigging skill set ISC upgrade: Amendments to the following Units of Competency: MARB009 Manage refuelling MARF006 Observe personal safety and social responsibility MARF007 Operate survival craft and other lifesaving appliances MARF008 Prevent and fight fires on board a vessel MARJ001 Follow environmental work practices.
3.0	7 September 2015	Four qualifications transitioned to the Standards for Training Packages 2012 and one new qualification. Qualifications: MAR30315 Certificate III in Marina Operations MAR30415 Certificate III in Maritime Operations (Marine Cookery) MAR50315 Diploma of Maritime Operations (Watchkeeper Deck) MAR50415 Diploma of Maritime Operations (Master up to 500 GT) MAR60315 Advanced Diploma of Maritime Operations (Master Unlimited) Twelve Units of Competency transitioned to the Standards for Training Packages 2012 and eight new Units of Competency. Units of Competency: MARA009 Manage stability of a vessel 500 gross tonnage or more MARA010 Manage loading, unloading and stowage of cargo MARB020 Manage repairs and maintenance of a vessel 500 gross tonnage or more MARB021 Perform routine tasks in a marina MARB022 Refuel a vessel

Release Number	Release Date	Comments
		MARB023 Maintain marina infrastructure MARB024 Undertake basic boatyard operations MARC026 Operate remote controls of propulsion plant and engineering systems MARD003 Manage legal requirements of a vessel MARF020 Coordinate search and rescue operations MARF021 Manage safety and security of vessel crew and passengers MARF023 Apply safe work practices in a marina MARF024 Classify marina infrastructure, vessels and staffing structure MARF025 Respond to marina emergencies MARG006 Manage a vessel and its crew MARH011 Forecast weather and oceanographic conditions to plan a safe passage MARH012 Manage the navigation of a vessel 500 gross tonnage or more MARJ005 Manage compliance with environmental management legislation MARK006 Manoeuvre a vessel 500 gross tonnage or more MARN006 Manage cargo operations ISC upgrade: Amendments to the following Units of Competency: MARH004 Plan and navigate a passage for a vessel up to 80 metres MARH005 Use wheelhouse equipment for safe navigation MARJ002 Monitor environmental management on a vessel
2.0	27 February 2015	Seven qualifications transitioned to the Standards for Training Packages 2012. Qualifications: MAR30115 Certificate III in Maritime Operations (Marine Engine Driver Steam) MAR30215 Certificate III in Maritime Operations (Marine Surveying) MAR40115 Certificate IV in Maritime Operations (Marine Surveying) MAR50115 Diploma of Maritime Operations (Engineer Watchkeeper) MAR50215 Diploma of Maritime Operations (Marine Surveying) MAR60115 Advanced Diploma of Maritime Operations (Marine Engineering Class 2) MAR60215 Advanced Diploma of Maritime Operations (Marine Engineering Class1) Fifty Units of Competency transitioned to the Standards for Training Packages 2012 and two new Units of Competency. Units of Competency: MARF022 Apply maritime resource management principles MARL037 Demonstrate knowledge of ships and ship routines New units for Radio Operator and Fast Rescue Craft:

Release Number	Release Date	Comments
		MARC019 Transmit and receive information by marine VHF radio within Australian Territorial Waters MARC043 Transmit and receive information by marine radio MARC044 Transmit and receive information by marine VHF radio MARF016 Carry out fast rescue craft operations New units for Offshore Familiarisation: MARA007 Contribute to safe cargo operations on offshore support vessels MARA008 Contribute to safe anchor handling and towing operations Skill Sets: New Skill Sets for Radio Operator and Fast Rescue Craft: MARSS00009 Australian Territorial Waters VHF Radio Operators MARSS00010 Marine Radio Operators VHF and HF MARSS00011 Marine Radio Operators VHF MARSS00012 Fast Rescue Craft Operations New Skill Sets for Offshore Familiarisation: MARSS00013 Cargo Handling Skill Set MARSS00014 Anchor Handling and Cargo Operations Skill Set ISC upgrade: Amendments to the following Skill Set: MARSS00008 Shipboard Safety Skill Set Amendments to the following Units of Competency: MARB004 Perform routine maintenance on a vessel up to 24 metres MARB006 Maintain marine internal combustion engines, propulsion plant and auxiliary systems MARF001 Apply basic survival skills in the event of vessel abandonment MARF002 Follow procedures to minimise and fight fires on board a vessel MARF004 Meet work health and safety requirements MARF005 Survive at sea using survival craft MARK001 Handle a vessel up to 12 metres MARO003 Transmit and receive information by the global maritime distress and safety system
1.1	3 December 2013	ISC upgrade: Minor corrections to the following Units of Competency: MARA005 Maintain vessel stability MARC008 Contribute to safe anchor handling and towing operations MARC009 Manage stability of a vessel 500 gross tonnage or more MARC010 Manage loading, unloading and stowage of cargo MARC011 Manage a propulsion unit using appropriate engine systems and support services

Release Number	Release Date	Comments
		MARC018 Employ tools, equipment and materials in a shipboard context
1.0	7 October 2013	Primary release: The MAR Maritime Training Package is the result of the near coastal material in the MAR13 Maritime Training Package being transitioned to the new Standards for Training Packages 2012. The remaining material in the MAR13 Maritime Training Package will be transitioned to the MAR Maritime Training Package over time.

Training Packages, the Australian Qualifications Framework (AQF) and competency standards

Training Packages

Training Packages:

- specify the knowledge and skills required by individuals to perform effectively in the workplace, which are expressed in units of competency
- detail how units of competency are packaged into nationally recognised and portable qualifications that comply with the Australian Qualifications Framework (AQF)
- prescribe assessment requirements, but they do not prescribe how an individual should be trained
- specify the qualifications determined by industry groups and when required, by regulatory requirements to be most relevant for employment within the industry
- are used for a number of purposes, but they are predominantly used:
 - by RTOs, to design training curriculum tailored to support individual learner needs, and the needs of employers and industry
 - by employers, to assist with workforce design, development and structure
- are developed by the relevant national JSC in consultation with a range of stakeholders
- are recommended to Training Package Assurance Body (is a body nominated by Skills Ministers), to assess draft training products against the Training Package Organising Framework and make recommendations to Skills Ministers about the endorsement of proposed training products
- enable nationally recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training to suit individual needs and industry requirements
- support learning, training and assessment in a work-related environment, leading to verifiable workplace outcomes.

The title of each endorsed Training Package is unique and relates to the broad industry coverage of the Training Package.

Each Training Package has a unique national code assigned when the Training Package is endorsed, for example MAR.

Training and assessment using Training Packages must be conducted by a Registered Training Organisation (RTO) that has the qualification/s or specific Unit/s of Competency on its Scope of Registration.

New *Standards for Standards for Registered Training Organisations (RTOs)* are expected to come into effect during 2025, with the current *Standards for RTOs 2015* are available on the [Australian Government ComLaw website](#).

Information about these standards can be found at the:

- [Training Package Assurance Body](#) website
- [Australian Skills Quality Authority](#) website

Standards for Training Packages ('the Standards') setting the overarching design and development requirements of training products for endorsement by Skills Ministers.

Training Package Products Policy (TPPP) outlining the design rules that must be adhered to when developing or modifying a training product.

Training Package Products Development and Endorsement Process Policy (TPPDEPP) outlining the process for developing and seeking the endorsement of training products.

Information about these current standards, including applicable templates, can be found at the Training Package Assurance Body website (<https://www.dewr.gov.au/resources/skills-support-individuals>).

These templates describe mandatory and optional information that applies to Units of Competency, assessment requirements and qualifications.

Australian Qualifications Framework

The Australian Qualifications Framework (AQF) provides a comprehensive, nationally consistent framework for all qualifications in post-compulsory education and training in Australia. In the Vocational Education and Training (VET) sector the AQF enables national recognition of qualifications and Statements of Attainment.

The MAR Maritime Training Package provides details of the Units of Competency that must be achieved to award AQF qualifications.

The rules around which Units of Competency can be combined to make up a valid AQF qualification are referred to as the packaging rules. The packaging rules must be followed to ensure the integrity of nationally recognised qualifications issued.

The packaging rules are defined within each qualification in a Training Package.

Competency Standards

The broad concept of industry competency is the ability to perform particular tasks and duties to the standard of performance expected in the workplace. Competency standards cover all aspects of workplace performance and involve:

- performing individual tasks
- managing a range of different tasks
- responding to contingencies or breakdowns
- dealing with the responsibilities of the workplace, including working with others.

Workplace competency is the ability to apply relevant skills and knowledge consistently over time and in the required workplace situations and environments.

Competency standards are determined by industry to meet industry skill needs and focus on what is expected of a competent individual in the workplace.

Australian Qualifications Framework qualifications, Skill Sets and Units of Competency in the MAR Maritime Training Package

Qualifications

The MAR Maritime Training Package Release 12.0 provides details of the Units of Competency and their Assessment Requirements that must be achieved to award AQF qualifications.

The rules around which Units of Competency can be combined to make up a valid AQF qualification are referred to as the packaging rules. The packaging rules must be followed to ensure the integrity of nationally recognised qualifications issued.

Codes and titles

There are mandatory conventions specified in the Standards for Training Packages for the titles and codes used in Training Packages and their components.

QUALIFICATION CODE MANDATORY FIELD	The qualification code contains the three alpha characters identifying the Training Package, a numeric character identifying the AQF level, a two numeric character sequence identifier, and two numeric characters identifying the year the qualification was endorsed. It must comply with the length specified in the AVETMIS Standard.
QUALIFICATION TITLE MANDATORY FIELD	A unique title that reflects the qualification outcome. It must comply with the length specified in the AVETMIS Standard (no more than 100 characters).

Extract from the [Standards for Training Packages](#).

Extract from the Training Package Products Policy.

Each qualification has an eight-character code where the:

- first three characters identify the Training Package
- first number identifies the AQF qualification level
- second and third numbers identify a qualification's position in the sequence of qualifications at that AQF qualification level
- fourth and fifth numbers identify the year in which the qualification was endorsed.

For example: MAR20324 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal).

The title of each endorsed Training Package qualification is unique. Qualification titles use the following sequence:

- first, the qualification is identified as either Certificate I, Certificate II, Certificate III, Certificate IV, Diploma, Advanced Diploma, Graduate Certificate, or Graduate Diploma

- this is followed by the words 'in' for Certificates I to IV and Graduate Certificate, and 'of' for Diploma, Advanced Diploma and Graduate Diploma
- then, the industry descriptor, for example Maritime Operations
- then, if applicable, the occupational or functional stream in brackets.

For example: MAR20324 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal).

AQF Qualifications in the MAR Maritime Training Package

The following AQF qualifications are in the MAR Maritime Training Package Release 12.0:

Code	Qualification Title
AQF 1	
MAR10224	Certificate I in Maritime Operations (General Purpose Hand Near Coastal)
MAR10424	Certificate I in Maritime Operations (Coxswain Grade 2 Near Coastal)
AQF 2	
MAR20121	Certificate II in Maritime Operations (Linesperson)
MAR20324	Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)
MAR20424	Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal)
AQF 3	
MAR30122	Certificate III in Marina Operations
MAR30220	Certificate III in Maritime Operations (Integrated Rating)
MAR30324	Certificate III in Maritime Operations (Marine Cookery)
MAR30824	Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal)
MAR30924	Certificate III in Maritime Operations
MAR31225	Certificate III in Autonomous Maritime Systems
AQF 4	
MAR40121	Certificate IV in Maritime Operations (Chief Integrated Rating)
MAR40224	Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal)
MAR40324	Certificate IV in Maritime Operations (Master up to 45 metres Near Coastal)
AQF 5	
MAR50120	Diploma of Marine Engineering
MAR50320	Diploma of Maritime Operations
AQF 6	
MAR60120	Advanced Diploma of Marine Engineering (Class 1)
MAR60220	Advanced Diploma of Maritime Operations (Master Unlimited)

Skill Sets

Skill Sets are single Units of Competency or combinations of Units of Competency from an endorsed Training Package/s that link to a licensing or regulatory requirement or a defined industry need.

Source: [Training Package Products Policy](#).

A Skill Set is awarded with the issuing of a Statement of Attainment.

Each Skill Set has a code that is automatically issued by www.training.gov.au (TGA) where the:

- first three characters identify the Training Package
- next two characters indicate that it is a Skill Set
- numbers identify the Skill Set's position in the sequence of Skill Sets.

For example: MARSS00013 Cargo Handling Skill Set

The following Skill Sets are in the MAR Maritime Training Package Release 12.0:

Code	Title
MARSS00004	Marine Emergency Care, Craft and Communication Skill Set
MARSS00006	Marine Engineering Class 3 Near Coastal Shipboard Safety Skill Set
MARSS00008	Shipboard Safety Skill Set
MARSS00009	Australian Territorial Waters VHF Radio Operator's Skill Set
MARSS00010	Marine Radio Operator's VHF and HF Skill Set
MARSS00011	Marine Radio Operator's VHF Skill Set
MARSS00012	Fast Rescue Craft Operations Skill Set
MARSS00013	Cargo Handling Skill Set
MARSS00014	Anchor Handling and Cargo Operations Skill Set
MARSS00015	Marine Dogging and Rigging Skill Set
MARSS00016	Tanker Familiarisation Skill Set
MARSS00017	Coxswains Grade 1 Skill Set
MARSS00018	Marine Dogging Skill Set
MARSS00019	Marine Rigging Skill Set
MARSS00020	Able Seafarer – Deck Skill Set
MARSS00021	Able Seafarer – Engine Skill Set
MARSS00022	Advanced Chemical Tanker Cargo Operations Skill Set

Code	Title
MARSS00023	Advanced Liquefied Gas Tanker Cargo Operations Skill Set
MARSS00024	Advanced Oil Tanker Cargo Operations Skill Set
MARSS00025	Advanced Operations for Ships in Polar Waters Skill Set
MARSS00026	Advanced Gas and Low-Flashpoint Fuels Skill Set
MARSS00027	Basic Ship Operations in Polar Waters Skill Set
MARSS00028	Basic Operations for Ships Subject to IGF Code Skill Set
MARSS00029	Chief Integrated Skill Set
MARSS00030	Global Maritime Distress Signal Radio Operators Skills Set
MARSS00031	Marine Engineering Workshop Skills Equivalent Skill Set
MARSS00032	Operate Roll-On and Roll-Off Equipment Skill Set
MARSS00033	Safety Training Certification Skill Set
MARSS00034	Ship Security Officer Skill Set
MARSS00035	Assist Marine Towage Operations Skill Set
MARSS00036	Basic Operations for Dynamic Positioning Skill Set
MARSS00037	Compass Adjuster Limited Skill Set
MARSS00038	Compass Adjuster Unlimited Skill Set
MARSS00039	Dynamic Positioning Operator Skill Set
MARSS00040	Perform Marine Towage Operations Skill Set
MARSS00041	Plan Marine Towage Operations Skill Set
MARSS00042	Dredging Familiarisation Skill Set
MARSS00043	Engine Room Watch Rating Skill Set
MARSS00044	Navigational Watch Rating Skill Set
MARSS00045	Autonomous Maritime System (AMS) Fundamentals Skill Set
MARSS00048	Coxswains Grade 3 Skill Set
MARSS00049	Autonomous Underwater Vehicle (AUV) Technician Skill Set
MARSS00050	Autonomous Surface Vessels (ASV) Technician Skill Set

Units of Competency

Units of Competency are nationally agreed statements about the skills and knowledge required for effective performance in the workplace. They outline work outcomes as defined by regulatory requirements and agreed by industry.

As such, they identify the skills and knowledge (as outcomes) that contribute to the whole job function – they do not describe how to perform a particular role.

Each Unit of Competency covers a specific work activity, the range of conditions under which the activity is conducted and the foundation skills essential to performance.

The same Unit of Competency (i.e. specific work activity) can be relevant across a range of AQF qualification levels. It is important to check the packaging rules in qualifications to establish how units can apply.

UNIT CODE MANDATORY FIELD	The unit code contains the three alpha characters identifying the Training Package, followed by alpha and/or numeric characters. It must comply with the length specified in the AVETMIS Standard (no more than 12 characters).
UNIT TITLE MANDATORY FIELD	The title concisely describes the unit outcome. It must comply with the length specified in the AVETMIS Standard (no more than 100 characters)

Extract from the [Standards for Training Packages](#).
Extract from the [Training Package Products Policy](#).

Codes and titles

There are mandatory conventions specified in the Standards for Training Packages for the codes and titles used in Training Packages and their components.

The codes are assigned to Units of Competency when the Training Package is endorsed, or when new Units of Competency are added to an existing endorsed Training Package.

Each Unit of Competency has a specific character code where the:

- first three characters identify the Training Package, *for example: MAR*
- next character/s indicates the competency field
- numbers identify a unit's position in the sequence of units in the competency field in the Training Package.

For example: MARF030 Survive at sea using survival craft.

Assessment Requirements

Each Unit of Competency has its own assessment requirements that identify the:

- Performance evidence
- Knowledge evidence
- Assessment conditions.

People first, for a future-fit
supply chain workforce

TITLE <i>MANDATORY FIELD</i>	Assessment Requirements for [insert Unit of Competency Code and Title]
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The same code is used for the Unit of Competency and its associated assessment requirements.

Units of Competency in the MAR Maritime Training Package Release 12.0

The following Units of Competency are in the MAR Maritime Training Package Release 12.0:

Code	Title
MARA Handling Cargo and Vessel Stability	
MARA011	Contribute to basic operations of ships in polar waters
MARA012	Contribute to basic cargo operations on liquefied gas tankers
MARA013	Contribute to basic cargo operations on oil and chemical tankers (basic oil and chemical)
MARA014	Contribute to basic operations of a ship subject to IGF Code
MARA015	Contribute to safe anchor handling and towing operations
MARA016	Contribute to safe cargo operations on offshore support vessels
MARA017	Maintain seaworthiness of the ship (ship stability)
MARA018	Manage advanced chemical tanker cargo operations
MARA019	Manage advanced liquefied gas tanker cargo operations
MARA020	Manage advanced oil tanker cargo operations
MARA021	Manage advanced operations of a ship subject to IGF Code
MARA022	Manage loading, discharging and stowing of cargo
MARA023	Manage trim, stability and stress of a vessel
MARA024	Manage vessel stability
MARA025	Monitor, loading, unloading, securing and stowage of cargo
MARB Equipment Checking and Maintenance	
MARB027	Perform basic servicing and maintenance of main propulsion unit and auxiliary systems
MARB028	Service marine internal combustion engines and propulsion and auxiliary systems
MARB029	Perform routine maintenance on a vessel up to 24 metres
MARB031	Maintain marine internal combustion engines, propulsion plant and auxiliary systems
MARB032	Undertake basic maintenance of electrical systems
MARB034	Carry out basic welding, brazing, cutting and machining operations on a coastal vessel
MARB035	Contribute to routine engine maintenance on a vessel

Code	Title
MARB036	Implement vessel planned maintenance system
MARB037	Maintain and repair bridge navigation equipment and ship communication systems
MARB038	Maintain and repair marine electrical and electronic equipment
MARB039	Maintain and repair shipboard machinery and equipment
MARB040	Maintain control and safety systems of hotel equipment
MARB041	Manage refuelling
MARB042	Manage reported defects, damage, repairs and maintenance of a vessel
MARB043	Manage stores for planned maintenance system
MARB044	Operate and maintain ship power systems exceeding 1,000 volts
MARB045	Perform routine maintenance and repairs on a vessel
MARB047	Undertake maintenance of 240 to 440 voltage alternating current electrical systems
MARB048	Undertake maintenance of machinery, machinery systems and structural components
MARB049	Use internal communication systems, operate computers and computer networks on ships
MARB050	Adjust a magnetic compass
MARB051	Apply elements of magnetic compass adjusting
MARB052	Apply knowledge of the principles of magnetic compass adjusting
MARB053	Assist with routine maintenance on a commercial vessel
MARB054	Apply marine terminology and port procedures
MARB055	Maintain mooring equipment
MARB056	Maintain marina infrastructure
MARB057	Perform routine tasks in a marina
MARB058	Refuel a vessel
MARB059	Undertake basic boatyard operations
MARB060	Slip or dock a vessel and maintain hull on a vessel up to 100 metres
MARB061	Plan and supervise routine maintenance on a vessel up to 100 metres
MARC Equipment Operations	
MARC033	Complete engine room tasks
MARC034	Maintain hull out of water

Code	Title
MARC035	Operate and maintain extra low and low voltage electrical systems and equipment
MARC036	Operate deck machinery
MARC037	Operate inboard and outboard motors
MARC038	Operate main propulsion unit and auxiliary systems
MARC039	Operate marine internal combustion engines, and propulsion and auxiliary systems
MARC040	Manage fuel systems
MARC041	Operate and monitor marine internal combustion engines, propulsion plant and auxiliary systems
MARC042	Operate electrical systems
MARC043	Transmit and receive information by marine radio
MARC044	Transmit and receive information by marine VHF radio
MARC045	Contribute to the operation of engine equipment and associated propulsion plant
MARC046	Employ tools, equipment and materials in a shipboard context
MARC047	Manage a propulsion unit using appropriate engine systems and support services
MARC048	Monitor and manage vessel operations
MARC049	Operate 240 to 440 voltage alternating current electrical systems
MARC050	Operate auxiliary machinery systems up to 1500 kW
MARC052	Operate deck machinery, cargo handling gear and equipment on a vessel
MARC053	Operate marine internal combustion engines and associated systems up to 1500 kw
MARC054	Operate propulsion transmission systems up to 1500 kW
MARC055	Operate remote controls of propulsion plant, engineering systems and services
MARC056	Operate roll-on and roll-off machinery and equipment on board a vessel
MARC057	Perform dogging on board a vessel
MARC058	Perform rigging on board a vessel
MARC059	Transmit and receive information by marine VHF radio within Australian Territorial Waters
MARC060	Use and care for hand and power tools
MARC061	Conduct mooring operations using mechanical equipment
MARC062	Perform mooring operations
MARC064	Operate deck machinery and steering gear on a vessel up to 100 metres

Code	Title
MARD Administration and Human Resources	
MARD004	Manage business and administration on vessels limited by tonnage or near coastal operations
MARD005	Manage operations and maintenance on vessels limited by tonnage or near coastal operations
MARD006	Monitor and control compliance with legislative requirements
MARE Communication	
MARE003	Communicate during mooring operations
MARF Operational Quality and Safety	
MARF028	Follow procedures to minimise and fight fires on board a vessel
MARF029	Meet work health and safety requirements
MARF030	Survive at sea using survival craft
MARF031	Apply leadership and team working capability
MARF032	Apply medical first aid on board ship
MARF033	Assist in an emergency response
MARF034	Carry out fast rescue craft operations
MARF035	Contribute to fire prevention and firefighting (basic firefighting)
MARF036	Coordinate search and rescue operations
MARF037	Follow vessel security procedures (security awareness training)
MARF038	Manage provision of medical care on board a vessel
MARF039	Manage safety and security of vessel, crew and passengers
MARF040	Manage ship security (Ship Security Officer)
MARF041	Observe personal safety and social responsibility (PSSR)
MARF042	Operate emergency equipment and apply emergency procedures
MARF043	Operate survival craft, rescue boats and lifesaving appliances (proficiency in survival craft)
MARF044	Prevent, control and fight fires on board a vessel (advanced firefighting)
MARF045	Provide leadership and managerial capability
MARF046	Survive at sea in the event of vessel abandonment and personal survival techniques (PST)
MARF047	Monitor compliance with legislative requirements
MARF048	Plan marine towage operations

Code	Title
MARF049	Follow port and terminal security procedures
MARF050	Follow work health and safety, and emergency procedures during mooring operations
MARF054	Apply safe work practices in a marina
MARF055	Classify marina infrastructure, vessels and staffing structure
MARF057	Respond to marina emergencies
MARF060	Apply basic survival skills in the event of vessel abandonment
MARF061	Apply knowledge of Autonomous Underwater Vehicles (AUV) technical management
MARF062	Apply knowledge of Autonomous Surface Vessels (ASV) technical management
MARG Teamwork	
MARG007	Manage a small crew
MARG008	Manage a vessel and its crew
MARG009	Manage an engine room and small engineering team in emergencies
MARG010	Supervise a crew
MARG012	Work as part of a crew on a commercial vessel
MARH Navigation	
MARH013	Plan and navigate a passage for a vessel up to 12 metres
MARH014	Apply weather information when navigating inland waters as Master
MARH017	Use wheelhouse equipment for safe navigation
MARH018	Apply command navigation procedures on vessels limited by tonnage or near coastal operations
MARH019	Forecast weather and oceanographic conditions
MARH020	Forecast weather and oceanographic conditions to plan a safe passage
MARH021	Manage the navigation of a vessel
MARH022	Plan and conduct a passage and determine position
MARH023	Use of electronic chart display and information system (ECDIS) to maintain the safety of navigation
MARH024	Use of radar and other bridge equipment to maintain safety of navigation
MARH025	Apply knowledge of dynamic positioning fundamentals
MARH026	Apply knowledge of dynamic positioning operations
MARH027	Apply knowledge of dynamic positioning systems

Code	Title
MARH028	Conduct dynamic positioning operations
MARH029	Perform marine towage operations
MARH034	Demonstrate fundamental knowledge of Autonomous Maritime Systems (AMS) operations
MARH035	Demonstrate fundamental knowledge of Autonomous Maritime Systems (AMS)
MARH036	Manage and maintain a navigational watch on board vessels up to 100 metres
MARH037	Plan and navigate a passage for a vessel up to 100 metres
MARH040	Apply knowledge of core Autonomous Underwater Vehicles (AUV) operations
MARH041	Apply knowledge of core Autonomous Surface Vessels (ASV) operations
MARH042	Conduct advanced Autonomous Underwater Vehicles (AUV) operations
MARH043	Conduct advanced Autonomous Surface Vessels (ASV) operations
MARI Regulations and Port Operations	
MARI003	Comply with regulations to ensure safe operation of a vessel up to 12 metres
MARI006	Observe regulations to ensure safe operation of a vessel up to 100 metres
MARJ Environment	
MARJ006	Follow environmental work practices
MARJ007	Monitor environmental management on a vessel
MARJ008	Ensure compliance with pollution prevention requirements
MARK Manoeuvring Vessels	
MARK007	Handle a vessel up to 12 metres
MARK008	Manoeuvre a vessel up to 24 metres within near coastal waters
MARK010	Manoeuvre and handle a ship in all conditions
MARK011	Manoeuvre the ship
MARK012	Steer a vessel under direction of the Master
MARK013	Manoeuvre a vessel up to 100 metres
MARL Marine Engineering	
MARL038	Apply advanced principles of marine electrotechnology
MARL039	Apply advanced principles of marine engineering thermodynamics
MARL040	Apply advanced principles of marine mechanics
MARL041	Apply advanced principles of trim, stability and stress
MARL042	Apply basic principles of marine electrotechnology

Code	Title
MARL043	Apply basic principles of marine engineering thermodynamics
MARL044	Apply basic principles of marine mechanics
MARL045	Apply basic principles of naval architecture
MARL046	Carry out engineering calculations
MARL047	Demonstrate advanced knowledge of marine auxiliary boilers
MARL048	Demonstrate advanced knowledge of marine auxiliary machinery and systems
MARL049	Demonstrate advanced knowledge of marine control systems and automation
MARL050	Demonstrate advanced knowledge of marine diesel engines and systems
MARL051	Demonstrate advanced knowledge of marine electrical systems
MARL052	Demonstrate advanced knowledge of marine steam turbines and main boilers
MARL053	Demonstrate advanced knowledge of ship operations and maintenance
MARL054	Demonstrate basic knowledge of marine auxiliary boilers
MARL055	Demonstrate basic knowledge of marine auxiliary machinery and equipment
MARL056	Demonstrate basic knowledge of marine control systems and automation
MARL057	Demonstrate basic knowledge of marine diesel engines and systems
MARL058	Demonstrate basic knowledge of marine electrical systems
MARL059	Demonstrate basic knowledge of marine steam turbines and main boilers
MARL060	Demonstrate knowledge of ships and ship routines
MARL061	Perform basic marine engineering calculations
MARN Seamanship	
MARN008	Apply seamanship skills aboard a vessel up to 12 metres
MARN009	Perform seamanship operations on board a vessel up to 24 metres
MARN011	Maintain seaworthiness of the ship (ship construction)
MARN012	Manage advanced operations of ships in polar waters
MARN014	Plan and manage safe loading, unloading, securing and stowage of cargo
MARN015	Use seamanship skills on board a vessel
MARN016	Apply general purpose hand skills aboard a commercial vessel
MARN017	Assist with marine towage operations
MARN018	Contribute to basic marine dredging operations
MARN019	Command and manage a voyage on a vessel up to 45 metres (Near coastal)
MARN020	Manage seaworthiness of a vessel up to 100 metres

Code	Title
MARO Watchkeeping	
MARO007	Contribute to monitoring and controlling a safe engine watch
MARO008	Contribute to monitoring and controlling a safe navigational watch
MARO009	Maintain a safe navigational watch
MARO011	Transmit and receive information by the Global Maritime Distress and Safety System (GMDSS)
MARO012	Transmit and receive information by visual signalling

Qualification Mapping Information

The qualification mapping information maps the MAR Maritime Training Package Release 12.0 qualifications to previous releases.

Companion Volume Implantation Guide [Attachment A: Qualification mapping information](#)

Skill Sets Mapping Information

The Skill Sets information maps the MAR Maritime Training Package Release 12.0 Skill Sets to previous releases. Specific pathway information for Skill Set's relationship with qualifications in the Training Package is included in Companion Volume Mapping Attachments A-C (Comments Column).

Companion Volume Implantation Guide [Attachment B: Skill Sets mapping information](#)

Unit of Competency Mapping Information

The Unit of Competency information maps the MAR Maritime Training Package Release 12.0 Units of Competency previous releases.

Companion Volume Implantation Guide [Attachment C: Units of Competency mapping information](#)

Prerequisite Units of Competency

The following Units of Competency have prerequisite requirements:

Code	Title
MARB050	Adjust a magnetic compass ⊬ MARB051 Apply elements of magnetic compass adjusting ⊬ MARB052 Apply knowledge of the principles of magnetic compass adjusting
MARB051	Apply elements of magnetic compass adjusting ⊬ MARB052 Apply knowledge of the principles of magnetic compass adjusting
MARF061	Apply knowledge of Autonomous Underwater Vehicles (AUV) technical management ⊬ MARH040 Apply knowledge of core Autonomous Underwater Vehicles (AUV) operations ⊬ MARH042 Conduct advanced Autonomous Underwater Vehicles (AUV) operations ⊬ MARH035 Demonstrate fundamental knowledge of Autonomous Maritime Systems (AMS) ⊬ MARH034 Demonstrate fundamental knowledge of Autonomous Maritime System (AMS) operations
MARF062	Apply knowledge of Autonomous Surface Vessels (ASV) technical management ⊬ MARH034 Demonstrate fundamental knowledge of Autonomous Maritime System (AMS) operations ⊬ MARH035 Demonstrate fundamental knowledge of Autonomous Maritime Systems (AMS) ⊬ MARH041 Apply knowledge of core Autonomous Surface Vessels (ASV) operations ⊬ MARH043 Conduct advanced Autonomous Surface Vessels (ASV) operations
MARH026	Apply knowledge of dynamic positioning operations ⊬ MARH025 Apply knowledge of dynamic positioning fundamentals ⊬ MARH027 Apply knowledge of dynamic positioning systems
MARH027	Apply knowledge of dynamic positioning systems ⊬ MARH025 Apply knowledge of dynamic positioning fundamentals
MARH028	Conduct dynamic positioning operations ⊬ MARH025 Apply knowledge of dynamic positioning fundamentals ⊬ MARH027 Apply knowledge of dynamic positioning systems ⊬ MARH026 Apply knowledge of dynamic positioning operations

Where imported units have prerequisites, these units have been listed in the qualification packaging rules.

Imported units and their prerequisite units

The MAR Maritime Training Package Release 12.0 includes imported Units of Competency from other Training Packages.

Please check the relevant assessment requirements of the source Training Package by accessing the national training website www.training.gov.au (TGA) or a physical copy regarding any special conditions that may apply to the assessment of imported Units of Competency.

For up-to-date releases of the imported units, refer to www.training.gov.au or the respective Jobs and Skills Council.

Where any of the Units of Competency listed below are used to form a qualification or Skill Set they do not count as Units of Competency imported under the qualification packaging rules:

- Elective units may be selected from any relevant endorsed Training Package. The elective units must contribute to the vocational outcomes of the qualification

Where imported Units of Competency are selected, care must be taken to ensure that all prerequisite Units of Competency specified are complied with.

Code	Title
BSB - Business Services Training Package	
BSBCMM211	Apply communication skills
BSBLDR301	Support effective workplace relationships
BSBSTR301	Contribute to continuous improvement
BSBTWK201	Work effectively with others
BSBWHS211	Contribute to health and safety of self and others
BSBWHS308	Participate in WHS hazard identification, risk assessment and risk control processes
BSBWHS411	Implement and monitor WHS policies, procedures and programs
BSBXTW301	Work in a team
HLT - Health	
HLTWHS005	Conduct manual tasks safely
MSM - Manufacturing Training Package	
MSMPER200	Work in accordance with an issued permit

Code	Title
MSMPER205	Enter confined space └ MSMPER200 Work in accordance with an issued permit
RII - Resources and Infrastructure Industry Training Package	
SIT - Tourism, Travel and Hospitality Training Package	
SITHCCC024	Prepare and present simple dishes └ SITXFSA005 Use hygienic practices for food safety
SITHCCC027	Prepare dishes using basic methods of cookery └ SITXFSA005 Use hygienic practices for food safety
SITHCCC034	Work effectively in a commercial kitchen └ SITHCCC027 Prepare dishes using basic methods of cookery └ SITXFSA005 Use hygienic practices for food safety
SITHKOP009	Clean kitchen premises and equipment └ SITXFSA005 Use hygienic practices for food safety
SITXCCS014	Provide service to customers
SITXFSA005	Use hygienic practices for food safety
SITXINV006	Receive, store and maintain stock └ SITXFSA005 Use hygienic practices for food safety
SITXINV008	Control stock
SITXWHS005	Participate in safe work practices
TLI - Transport and Logistics Training Package	
TLID0021	Store and handle dangerous goods and hazardous substances
TLII3003	Provide customer service in transport vehicles/vessels

Key work and training requirements in the industry

The maritime industry is a highly-regulated environment and has a diverse range of occupations, business types, sizes and locations. People with a MAR Maritime Training Package qualification and/or Skill Set are well placed to work in the maritime industry as a seafarer. The range of occupations include Linesperson, Deckhands and Coxswains, Marine Engine Drivers, Marine Engineers, Cooks, Integrated Ratings, Marine Surveyors, Deck Officers and Ships Master.

Regulation and licensing implications for implementation

Most Units of Competency, Skill Sets and qualifications in MAR Maritime Training Package Release 12.0 align to national and international legislation.

Where regulation and/or licensing does not apply, the following statement is included:

- No licensing, legislative or certification requirements apply to this qualification/Unit of Competency at the time of publication

Where regulation and/or licensing does apply, the relevant statements have been included into qualifications and Units of Competency.

Licensing and Regulatory Requirements

The MAR Maritime Training Package has direct links to:

- Marine Order 505 (Certificates of competency – national law) 2022 effective 1 January 2023
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)
- STCW International Maritime Organization (IMO) model courses
- Relevant industry standards and codes of practice for electrical work
- Radio Communications Act 1992
- International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) model course (C-103/1)

Seafarer certification is the responsibility of the Australian Maritime Safety Authority (AMSA).

Near Coastal Certificates of Competency (CoC)

The Near Coastal (NC) qualifications and Units of Competency in the MAR Maritime Training Package are cited as meeting AMSA requirements as defined by:

- the revised Marine Order 505 (Certificates of competency – national law) effective as of 1 January 2023.

There are Near Coastal (NC) qualifications, Skill Sets and Units of Competency in the MAR Maritime Training Package which still reference the Marine Order 505. The licensing and regulatory requirements has been to Marine Order 505.

Revised Marine Order 505 (Certificates of competency – national law) 2022 effective as of 1 January 2023.

The MAR Maritime Training Package has direct links to Marine Order 55 (MO55).

Marine Order 505 commenced on 1 January 2023 and includes content that was previously contained in Part D of the National Standards for Commercial Vessels (NSCV).

Key changes under MO505 relevant to the MAR training package includes the following:

- the introduction of three new AMSA certificates of competency:
 - Coxswain Grade 3 Near Coastal (NC)
 - Master up to 45m, and
 - Master up to 100m NC
- phasing out of three AMSA certificates of competency which will no longer be issued:
 - Master <35m NC
 - Mate <80m NC
 - Master <80m NC.

Key changes to the AMSA certificates of competency relevant to the MAR Training Package includes:

- a new Coxswain Grade 3 Near Coastal Certificates of competency which replaces the current Exemption 38 arrangements
- replacement of the Master <35m Certificates of competency with the Master up to 45m Certificates of competency
- replacement of the Master <80m Certificates of competency with the Master up to 100m Certificates of competency
- phasing out of the Mate <80m NC
- clarification of supervisory definitions for General Purpose Hand.

Sea service requirements

MO505 also made some changes to qualifying sea time requirements, endorsements, and restrictions for Certificates of competency.

The assessment for medical fitness was also modified under MO505 including requirements and validity duration.

Final assessments

Current arrangements for final assessments for Oral and AMSA Mandated Practical Assessment (AMPA) have not changed.

RTO Resources

Transition arrangements for AMSA Certificates of competency can be located at the AMSA website [here](#).

Information for RTO's includes:

- AMSA Factsheet for Registered Training Organisations new Marine Order 505
- [New AMSA certificates of competency](#)
- [General Purpose Hand certificate of competency](#)
- [Phasing out of old certificates of competency](#)
- [New standard for the assessment of Medical Fitness](#)
- [Changes to sea service](#)

AMSA Approved Providers

For a qualification, Skill Set or Unit of Competency to be accepted for AMSA certification, the National law requires the RTO issuing the qualification, Skill Set or Units of Competency to be approved by AMSA.

For certification purposes, credit transfer cannot be provided for qualifications, Skill Sets or Units of Competency issued by a non-approved AMSA RTO. However, evidence that the candidate has been assessed as competent via a challenge test or skills recognition carried out by an approved AMSA RTO would be accepted. People seeking certification should check with AMSA.

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)

The MAR Maritime Training Package has direct links to the STCW which are reflected in Marine Orders 70-73 (2014) under the Navigation Act 2013.

If a qualification or Unit of Competency is cited as meeting AMSA certification requirements defined by Marine Orders 70-73, this is noted in the qualification and unit description (under licensing/regulatory information).

For example: 'This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Chief Integrated Rating, Electro-Technical Officer (STCW Electro-Technical Officer Unlimited), Engineer Watchkeeper (STCW Engineer Watchkeeper Unlimited), Integrated Rating, Master of a commercial vessel less than 500 gross tonnage (GT), Master Unlimited or Watchkeeper Deck and to meet regulatory requirements this unit must be delivered consistent with Marine Orders and with the relevant sections of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)'.

STCW International Maritime Organization (IMO) model courses

The MAR Maritime Training Package has direct links to the STCW IMO model courses.

If a Unit of Competency is cited as meeting STCW IMO model course, this is noted in the unit application (under licensing/regulatory information).

Example: 'Regulatory requirements include STCW International Maritime Organization (IMO) model course competencies and areas of knowledge, understanding and proficiency, together with the estimated total hours required for lectures and practical exercises. Teaching staff should note that timings are suggestions only and should be adapted to suit individual groups of trainees depending on their experience, ability, equipment and staff available for training'.

IMO model courses

IMO model courses include information on the following:

- model course competencies
- areas of knowledge, understanding and proficiency
- estimated total hours and timings.

Industry standards and codes of practice for electrical work

The MAR Maritime Training Package has direct links to the industry standards and codes of practice for electrical work.

If a Unit of Competency is cited as meeting an electrical requirement, this is noted in the unit application (under licensing/regulatory information).

For example:

This unit is subject to the following requirements:

- Legislation, regulations, relevant industry standards and codes of practice for electrical work including specific work health and safety (WHS)/occupational health and safety (OHS) legislation and regulatory requirements
- Legislation, regulations, relevant industry standards and codes of practice for ship power systems exceeding 1,000 volts.

Radiocommunications Act 1992

The *Radiocommunications Act 1992* (the *Radcomm Act*), through the Radiocommunications Licence Conditions (Maritime Ship Licence) Determination 2015 requires that operators of very-high frequency (VHF) maritime ship stations are appropriately qualified to operate the stations. This means that operators are required to hold a relevant Australian maritime radio operator's certificate of proficiency or an equivalent overseas qualification.

The Australian Maritime College (AMC) acts as the Australian Communications and Media Authority (ACMA) delegate in providing marine radio certificate services under the *Radcomm Act* including the issue of Short-Range Radio Operator's Certificates of Proficiency (SROCPs). Operators who have attained a Statement of Attainment from an RTO for one of the following Units of Competency can apply to the AMC for the issue of a SROCP without the need to sit a further examination.

- MARC043 Transmit and receive information by marine radio
- MARC044 Transmit and receive information by marine VHF radio

International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) model course (C-103/1)

People first, for a future-fit
supply chain workforce

If a unit of competency is cited as having requirements relevant to the delivery and assessment of the IALA Model Courses, this is noted in the unit application (under licensing/regulatory information).

IALA model courses

IALA model courses include information on the following:

- model course competencies
- areas of knowledge, understanding and proficiency
- estimated total hours and timings.

[Attachment E: Summary of qualification licensing and regulatory requirements](#)

IMPLEMENTATION INFORMATION

Key features of maritime training package

Release 12.0 - Autonomous Maritime Systems

Key updates to the MAR Training Package in response to stakeholder requirements are as follows

Reviewed and updated MAR31225 Certificate III in Autonomous Maritime Systems, two Skill Sets and six Units of Competency.

Pre-requisites units in four Units of Competency were removed from the Certificate III in Autonomous Maritime Systems to support streamlined delivery of units for new and emerging job roles conducting AUV and ASV vessels operations.

Release 11.0 - MARINE ORDER 505

Key changes made to the MAR Maritime Training Package in response to Marine Order 505 (MO505) are as follows:

MARINE ORDER 505

Wording in the 13 qualifications and 81 associated units description including licensing and regulatory requirements has been amended to reflect key changes in MO505.

One new unit of competency has been developed to meet seamanship, passage planning, watchkeeping (including collision regulations) skills requirements for a Master up to 45m Near Coastal.

COXSWAIN GRADE 3 NEAR COASTAL

A new Coxswain Grade 3 Skill Set was developed (MARSS00048) in line with regulator Marine Order 505 requirement.

VESSEL TRAFFIC SERVICES

Vessel Traffic Services qualification and six units of competency have been removed from the MAR Maritime Training Package in line with stakeholder requirements:

- MAR30022 Certificate III in Vessel Traffic Services
- MARC063 Operate Vessel Traffic Services (VTS) equipment
- MARF051 Apply communication, coordination and interactions for VTS provision
- MARF052 Apply nautical knowledge
- MARF053 Apply personal attributes
- MARF056 Provide Vessel Traffic Services
- MARI005 Respond to emergency situations

Release 10.0 - MARINE ORDER 505

Key changes made to the MAR Training Package in response to Marine Order 505 (MO505) are as follows:

MAR10220 Certificate I in Maritime Operations (General Purpose Hand Near Coastal)

Wording in the qualification description including licensing and regulatory requirements has been amended to reflect key changes in MO505:

- reference to general supervision, Marine Order 505 (Certificates of competency – national law) 2022, and 5 days qualifying sea service on a commercial vessel.

MAR40320 Certificate IV in Maritime Operations (Master up to 35 metres Near Coastal) to MAR40320 Certificate IV in Maritime Operations (Master up to 45 metres Near Coastal)

Wording in the qualification title and description including licensing and regulatory requirements has been amended to reflect key changes in MO505:

- reference to Master less than 45 metres, Marine Order 505 (Certificate of competency – national law) 2022 and Mate less than 100 metres.

Seafarers can be awarded a qualification for Master up to 45 meters.

MAR50320 Diploma of Maritime Operations (Master less than 80 metres) to MAR50320 Diploma of Maritime Operations (Master less than 100 metres)

Wording in the qualification description including licensing and regulatory requirements and packaging rules have been amended to reflect key changes in MO505:

- reference to Master less than 100 metres Near Coastal and Marine Order 505 (Certificates of competency – national law) 2022

Seafarers can be awarded a qualification for a Master up to 100 metres.

For further information on changes under Marine Order 505, please see section in this CVIG – ‘Regulation and Licensing implications for implementation’.

This also includes a list of resources that AMSA has created to support RTO's to understand Marine Order 505.

AUTONOMOUS MARITIME SYSTEMS

MAR31222 Certificate III in Autonomous Maritime Systems

- Seafarers have the opportunity to develop specialised skills in Autonomous Maritime Systems (AMS), Autonomous Underwater Vehicles (AUV) and Autonomous Surface Vessels (ASV) in Near Coastal (NC) Waters
- One new qualification, three new Skill Sets and eight new units of competency have been developed to meet requirements for a person who is involved in conducting AMS operations as an:
 - AUV or ASV Operator

- AUV or ASV Technician, or
- A person responsible for managing, leading, or supporting AMS operations
- Job role requirements:
 - Job roles for AUV and ASV Operators and Technicians are not considered to be entry-level positions in the maritime industry
 - An AUV and ASV Operator means the human responsible for the monitoring and control of the vessel. The operator is responsible for operating the vessel at a point in time. The operator may be supported in their role by other members of crew or by electronic control systems
 - AUV and ASV Technician is a person whose job it is to keep the Autonomous Underwater Vehicle (AUV) or Autonomous Surface Vessel (ASV) of in good condition and working order
 - Seafarers are required to have seafaring experience relevant to the safety and navigation of vessels
- Operator requirements:
 - Operators are required to conduct AUV and USV operations in Near Coastal Waters (NC) within the limits of the operators AMSA Certificate of Competency.
- **Entry requirements** for MAR3122 Certificate III in Autonomous Maritime Systems
 - Seafarers are required to have achieved:
 - Australian Maritime Safety Authority (AMSA) certificate of competency for Coxswain Grade 1 NC as defined in MO505, or
 - An equivalent or higher level of achievement in the command, navigation, or operation of vessels equal to or greater than 12 metres in length in Near Coastal waters.
- Industry and **pathway** information:
 - Skill Sets have been developed to give seafarers the flexibility to gain skills and knowledge as an AUV and USV Technician
 - **Entry requirements** for MARSS00047 Autonomous Surface Vessels (ASV) Technician Skill
 - seafarers are required to have achieved the MAR3122 Certificate III in Autonomous Maritime Systems (ASV Operator)
 - this Skill Set could be utilised by a seafarer who wanted to transition from AUV operations as a technician to ASV operations as a technician.
 - **Entry requirements** for MARSS0046 Autonomous Underwater Vehicle (AUV) Technician Skill Set
 - seafarers are required to have achieved the MAR31222 Certificate III in Autonomous Maritime Systems (AUV Operator)
 - this Skill Set could be utilised by a seafarer who wanted to transition from USV operations as a technician to AUV operations as a technician.

- MARSS00045 Autonomous Maritime System (AMS) Fundamentals Skill Set can be utilised by seafarers who are not required to be AUV or ASV Operators or Technicians and are required to understand the skills and knowledge to manage these operations.
- Definitions of Autonomous Maritime Systems, AUV (Autonomous Underwater Vehicle) and ASV (Autonomous Surface Vessel) can be found in Attachment G: Glossary of Terms and Definitions.

Release 9.0 - MARINA OPERATIONS

MAR30122 Certificate III in Marina Operations

- This qualification has been redesigned to reflect the skills and knowledge required for an entry-level person to work in a marina
- Removal of the requirement to complete manufacturing and engineering units, including their prerequisites, facilitates a real-world pathway into the maritime industry and supports the use of this qualification as a traineeship.

MAR30022 Certificate III in Vessel Traffic Services

- This qualification has been developed to incorporate the vocational outcomes relevant to the job role of Vessel Traffic Services Operator.

Release 8.0 - PORT OPERATIONS

MAR20120 Certificate II in Maritime Operations (Linesperson)

- A core and elective qualification has been developed which provides seafarers with the opportunity to:
 - choose electives which meet specific port, wharf and terminal requirements relevant to their place of employment
 - develop and maintain currency with linesperson work practices by incorporating new technologies and updated port, terminal and wharf practices into existing units of competency
 - develop a pathway into senior linesperson job role including:
 - the ability to be recognised for prior learning under the STCW requirements for basic security awareness, and
 - apply for credit for STCW and Near Coastal requirements in environmental work practices
- The qualification:
 - replaces the recently updated BSB, HLT, TLI imported Units of Competency which are more aligned with the job role of linesperson, and
 - removes a potential barrier for a linesperson to attain a VHF radio licence under recently revised radio licence requirements
- Industry and pathway information:
 - Linesperson is an entry-level position into the maritime industry

- This qualification allows for a seafarer to develop pathways to other job roles in the maritime sector including senior linesperson job role, able-seafarer deck and integrated rating.

SPECIALIST MARITIME OPERATIONS

Marine Dredging Operations

- Seafarers have the opportunity to develop specialised skills in dredging operations
- One new Skill Set and one new Unit of Competency have been developed to meet requirements for a crew member assisting with dredging operations
 - Skill Set:
 - MARSS00042 Dredging Familiarisation Skill Set
 - Units of competency:
 - MARN018 Contribute to basic marine dredging operations
- Industry and pathway information
 - Dredging operations focus on capital dredging operations (new dredging work) and/or dredging maintenance (maintaining existing dredging works). This includes:
 - creating new or deeper access or berths for vessels, and
 - maintaining the depth in existing harbours, channels and ports
 - MARN018 Contribute to basic marine dredging operations can also be undertaken as part of MAR30124 Certificate III in Marina Operations.

SKILL SETS

Navigational Watch Rating and Engine Room Watch Rating

- These skills form some of the requirements for certification by Australian Maritime Safety Authority (AMSA) certification as Navigational Watch Rating and Engine Room Watch Rating as defined in Marine Orders and International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW):
- MARSS00043 Engine Room Watch Rating Skill Set
- MARSS00044 Navigational Watch Rating Skill Set

Release 7.1

MAR30118 Certificate III in Maritime Operations (Marine Engine Driver Steam)

- This qualification is no longer needed to meet training requirements for certification as a Marine Engine Driver (Steam)
- This qualification and associated units of competency as listed below have been deleted from the MAR Maritime Training Package:
 - MARB015 Maintain firefighting appliances
 - MARC023 Operate and maintain a boiler

- MARC024 Operate and maintain a steam engine up to 750 kW and steam auxiliary equipment
- MARC025 Operate and maintain engines for auxiliary systems other than steam auxiliary systems
- People should check the training, licensing and regulatory requirements for Marine Engine Driver (Steam) with AMSA.

Release 7.0 - MASTERS AND DECK OPERATIONS

MAR10220 Certificate I in Maritime Operations (General Purpose Hand Near Coastal)

- Seafarers have the opportunity to develop entry-level skills which can be transferrable across a variety of maritime operations
- Core units of the qualification have been reduced to eight Units of Competency
- Four Units of Competency were reviewed
 - MARO101 Perform Basic Look Out Duties and MARG011 Work effectively as part of a crew on a vessel up to 80 metres have been merged together
 - Vocational outcomes have been incorporated into MARG012 Work as part of a crew on a commercial vessel
- Industry and pathway information
 - General Purpose Hand is an entry-level position into the maritime industry
 - a General Purpose Hand is required to work under supervision and take instruction while under supervision
 - can involve working on the deck and in an engine room under supervision
 - operations can include:
 - barge and charter operators
 - ferry operators
 - fishing industry
 - marine rescue operations
 - ports
 - tourism operators.

SPECIALIST MARITIME OPERATIONS

Maritime Towage Operations

- Seafarers have the opportunity to develop specialised skills in marine towage operations
- Three new Skill Sets and three new Units of Competency have been developed to meet requirements for Master, Engineer or Deckhand:

- Skill Sets:
 - MARSS00035 Assist Marine Towage Operations Skill Set
 - MARSS00040 Perform Marine Towage Operations Skill Set
 - MARSS00041 Plan Marine Towage Operations Skill Set
- Units of competency:
 - MARF048 Plan marine towage operations
 - MARH029 Perform marine towage operations
 - MARN017 Assist with marine towage operations
- Industry and pathway information
 - marine towage operations are considered a high-risk operation and can take place in Near Coastal or Blue Waters
 - organisations that are involved in marine towage operations have towage as their core business activity
 - operations can include:
 - harbour towage
 - ocean towage
 - marine towage operations can require a seafarer to have significant seafaring experience and/or AMSA certification because of the risks and hazards involved
 - expected pathway would be the achievement of certification as a:
 - Master or Engineer with seafaring experience, or
 - Deckhand with seafaring experience
 - job roles for Master, Engineer and Deckhand in marine towage are not considered to be entry-level positions into the maritime industry.

Dynamic Positioning

- Seafarers have the opportunity to develop specialised skills in dynamic positioning, including dynamic positioning and dynamic positioning systems
- Two new Skill Sets and four new Units of Competency have been developed to meet requirements for a Dynamic Positioning Operator:
 - Skill Sets:
 - MARSS00036 Basic Operations for Dynamic Positioning Skill Set
 - MARSS00039 Dynamic Positioning Operator Skill Set
 - Units of Competency:
 - MARH025 Apply knowledge of dynamic positioning fundamentals
 - MARH026 Apply knowledge of dynamic positioning operations
 - MARH027 Apply knowledge of dynamic positioning systems

- MARH028 Conduct dynamic positioning operations
- Industry and pathway information
 - Dynamic Positioning Operator is a person who operates the dynamic positioning system on a dynamic positioning vessel
 - seafarers are required to hold certification to operate as a Dynamic Positioning Operator to operate a dynamic positioning system
 - expected pathway would be
 - holding or be working towards AMSA certification for Masters, Engineer or Officers
 - seafarers can utilise these qualifications to gain certification as Master, Engineer or Officer:
 - MAR50220 Diploma of Maritime Operations
 - MAR60220 Advanced Diploma of Maritime Operations (Master Unlimited)
 - MAR60120 Advanced Diploma of Marine Engineering (Class 1)
 - MAR50120 Diploma of Marine Engineering
 - Seafarers who are certified as a Master, Engineer or Officers would utilise the dynamic positioning operations Skill Set as a pathway to Dynamic Positioning Operator
 - Seafarers who are already enrolled or going to enrol into Masters, Engineer or Officers qualifications would utilise the specialist elective units as a pathway to Dynamic Positioning Operator
 - A Master, Engineer or Officer can also undertake MARSS00036 Basic Operations for Dynamic Positioning Skill Set to enhance their knowledge of dynamic positioning systems and operations to support their current job role
 - Dynamic Positioning Operator is not considered to be an entry-level position in the maritime industry.

Compass Adjuster

- Seafarers have the opportunity to meet AMSA licensing and regulatory requirements for Compass Adjuster Limited and Compass Adjuster Unlimited
- Two new Skill Sets and three new Units of Competency have been developed:
 - Skill Sets:
 - MARSS00038 Compass Adjuster Unlimited Skill Set
 - MARSS00037 Compass Adjuster Limited Skill Set
 - Units of competency:
 - MARB050 Adjust a magnetic compass
 - MARB051 Apply elements of magnetic compass adjusting
 - MARB052 Apply knowledge of the principles of magnetic compass adjusting
- Industry and pathway information

- Compass Adjuster Limited is certified by AMSA to adjust magnetic compasses for vessels less than or equal to 45 metres in length
- Compass Adjuster Unlimited is certified by AMSA to adjust magnetic compasses for vessels of any length or Gross Tonnage (GT)
- seafarers are required to hold AMSA certification:
 - o Master less than 45 metres Near Coastal or above, or equivalent as recognised by AMSA for Compass Adjuster Unlimited
 - o that permits a person to command a vessel less than 24 meters or equivalent as recognised by AMSA for Compass Adjuster Limited
- expected career pathway would be a Masters certification which allows for:
 - o achievement of Master less than 45 meters Near Coastal or above (or equivalent) for Compass Adjuster Unlimited
 - o that permits a person to command a vessel less than 24 metres (or equivalent) for Compass Adjuster Limited
- Compass Adjuster Limited and Compass Adjuster Unlimited are not considered to be entry-level positions into the maritime industry.

Release 6.0 - MASTERS AND DECK OPERATIONS

MAR60220 Advanced Diploma of Maritime Operations (Master Unlimited)

- Seafarers have the opportunity to develop skills to meet specialist STCW training requirements (Specialist Electives)
- STCW and STCW IMO model course requirements have been incorporated into Units of Competency (where relevant).

MAR50220 Diploma of Maritime Operations

- Master less than 80 metres, Master less than 500 GT and Watchkeeper Deck have been incorporated ('streamed') into this qualification
- Seafarers have the opportunity to develop skills to meet specialist STCW training requirements (Specialist Electives)
- Vocational outcomes of MAR50315 Diploma of Maritime Operations (Watchkeeper Deck), MAR50415 Diploma of Maritime Operations (Master up to 500 GT) and MAR50713 Diploma of Maritime Operations (Master up to 80 meters Near Coastal) have been incorporated into this qualification
- RIIWHS202D Enter and work in a confined space has replaced MARF010 Work safely in confined spaces on a vessel
- STCW, Marine Order 505 and STCW IMO model course requirements have been incorporated into Units of Competency (where relevant).

MAR40320 Certificate IV in Maritime Operations (Master up to 35 metres Near Coastal)

- Marine Order 505 requirements have been incorporated into Units of Competency
- RIIWHS202D Enter and work in a confined space has replaced MARF010 Work safely in confined spaces on a vessel
- Minimum resources for assessment have been specified.

MAR40121 Certificate IV in Maritime Operations (Chief Integrated Rating)

- STCW, Marine Order 505 and STCW IMO Model Course requirements have been incorporated into Units of Competency (where relevant)
- TAEASS402 Assess competence has been removed from the qualification.

MAR30220 Certificate III in Maritime Operations (Integrated Rating)

- Able Seafarer Deck, Able Seafarer Engine and Integrated Ratings have been incorporated ('streamed') into this qualification
- Units of Competency focusing on mooring, unmooring, equipment and lines have been included:
 - MARB054 Apply marine terminology and port procedures
 - MARC062 Perform mooring operations
 - MARC061 Conduct mooring operations using mechanical equipment
- STCW and STCW IMO model course requirements have been incorporated into Units of Competency (where relevant).

MAR10120 Certificate I in Maritime Operations (General Purpose Hand Near Coastal)

- Marine Order 505 requirements have been incorporated into Units of Competency
- Minimum resources for assessment have been specified.

ENGINEERING OPERATIONS**MAR60120 Advanced Diploma of Marine Engineering (Class 1)**

- Chief Engineer (Class 1) and Second Engineer (Class 2) have been incorporated into this qualification
- Seafarers have the opportunity to develop skills to meet specialist STCW training requirements (Specialist Electives)
- Advanced Class 1 and Intermediate Class 2 units have been merged together
- Vocational outcomes of MAR60215 Advanced Diploma of Maritime Operations (Marine Engineering Class 1) and MAR60115 Advanced Diploma of Maritime Operations (Marine Engineering Class 2) have been incorporated into this qualification

- STCW and STCW IMO model course requirements have been incorporated into Units of Competency (where relevant).

MAR50120 Diploma of Marine Engineering

- Engineering Watchkeeper, Electro-Technical Officer and Engineer Class 3 Near Coastal have been incorporated into this qualification ('streamed')
- New Electro-Technical Officer stream has been developed
- New Electro-Technical Officer Units of Competency have been developed and included into this qualification:
 - MARB049 Use internal communication systems, operate computers and computer networks on ships
 - MARB044 Operate and maintain ship power systems exceeding 1,000 volts
 - MARB040 Maintain control and safety systems hotel and equipment
 - MARB037 Maintain and repair bridge navigation equipment and ship communication systems
- Seafarers have the opportunity to develop skills to meet specialist STCW training requirements (Specialist Electives)
- Vocational outcomes of MAR50115 Diploma of Maritime Operations (Engineer Watchkeeper) and MAR50613 Diploma of Maritime Operations (Marine Engineering Class 3 Near Coastal) have been incorporated into this qualification
- RIIWHS202D Enter and work in a confined space has replaced MARF010 Work safely in confined spaces on a vessel
- STCW and STCW IMO model course requirements have been incorporated into Units of Competency (where relevant).

ELECTRO-TECHNICAL OFFICER

- New Electro-Technical Officer Units of Competency have been developed:
 - MARB049 Use internal communication systems, operate computers and computer networks on ships
 - MARB044 Operate and maintain ship power systems exceeding 1,000 volts
 - MARB040 Maintain control and safety systems hotel and equipment
 - MARB037 Maintain and repair bridge navigation equipment and ship communication systems
- STCW, STCW IMO model course requirements and industry standards and codes of practice for electrical work requirements have been incorporated into Units of Competency (where relevant).

MAR40224 Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal)

- Marine Order 505 requirements have been incorporated into Units of Competency
- Minimum resources for assessment have been specified
- RIIWHS202D Enter and work in a confined space has replaced MARF010 Work safely in confined spaces on a vessel.

SKILL SETS

- New Skill Sets have been developed for:
 - MARSS00020 Able Seafarer – Deck Skill Set
 - MARSS00021 Able Seafarer – Engine skill Set
 - MARSS00022 Advanced Chemical Tanker Cargo Operations Skill Set
 - MARSS00023 Advanced Liquefied Gas Tanker Cargo Operations Skill Set
 - MARSS00024 Advanced Oil Tanker Cargo Operations Skill Set
 - MARSS00025 Advanced Operations for Ships in Polar Waters Skill Set
 - MARSS00026 Advanced Gas and Low-Flashpoint Fuels Skill Set
 - MARSS00027 Basic Ship Operations in Polar Waters Skill Set
 - MARSS00028 Basic Gas and Low-Flashpoint Fuels Skill Set
 - MARSS00029 Chief Integrated Rating Skill Set
 - MARSS00030 Global Maritime Distress Signal Radio Operators Skills Set
 - MARSS00031 Marine Engineering Workshop Skills Equivalent Skill Set
 - MARSS00032 Operate Roll-On and Roll-Off Equipment Skill Set
 - MARSS00033 Safety Training Certification Skill Set
 - MARSS00034 Ship Security Officer Skill Set

Skill Set Units

- New Skill Set Units of Competency have been developed:
 - MARA011 Contribute to basic operations of ships in polar waters
 - MARA014 Contribute to basic operations of a ship subject to IGF code
 - MARA019 Manage advanced liquefied gas tanker cargo operations
 - MARA018 Manage advanced chemical tanker cargo operations
 - MARA021 Manage advanced operations of a ship subject to IGF Code
 - MARF040 Manage ship security (Ship Security Officer)
 - MARN012 Manage advanced operations of ships in polar waters

Marine Surveying Qualifications

The following qualifications have been deleted:

- MAR30420 Certificate III in Maritime Operations (Marine Surveying)
- MAR40118 Certificate IV in Maritime Operations (Marine Surveying)
- MAR50320 Diploma of Maritime Operations (Marine Surveying)

Key features of the Training Package pathways

Pathways define a sequence of learning or experience that can be followed to attain competency and describe the way in which training and assessment is undertaken in an education or training program. They are **not mandatory** and may vary depending on the qualification or training program, the needs of the individual and the industry.

The structure of qualifications maximises flexibility between qualifications at the same AQF level (horizontal) and between qualifications at different levels (vertical). The MAR Maritime Training Package is flexible and in many ways pathways can be constructed to align with individual requirements and business needs of industry. RTOs can work with their clients to apply the flexibility available in the qualifications to ensure 'fit for purpose outcomes'.

The MAR Maritime Training Package also contains Units of Competency imported from other Training Packages to enable organisations with broader needs to ensure qualifications are relevant to their operation.

Industry sectors and occupational outcomes of qualifications

The MAR Maritime Training Package contains 18 qualifications comprising 189 industry-specific Units of Competency and 43 Skill Sets aligned to occupations across the following sectors:

- Near Coastal (NC)
- Blue water/Ocean going
- Off-shore
- Ports (Linesperson)
- Marinas
- Autonomous Maritime Systems (AMS)

Qualification entry requirements

Entry requirements are the knowledge, skills or experience required to enter a qualification. They may be expressed as Units of Competency, qualifications or vocational outcomes and **must** be demonstrated prior to commencing the qualification.

There are entry requirements in the MAR Maritime Training Package Release 12.0 for qualifications.

Pathways advice

[Attachment F](#) provides qualification pathways guidance. Information about specific pathways relevant to qualifications in the MAR Maritime Training Package is best provided by RTOs delivering the qualifications and state/territory advisory bodies.

Specific pathway information for Skill Set's relationship with qualifications in the Training Package is included in Companion Volume Mapping Attachments A-C.

Generally, all qualifications in the MAR Maritime Training Package Release 12.0 are suitable for delivery via an Australian Apprenticeship pathway.

The [Australian Apprenticeships website](#) offers information about traineeships and apprenticeships and includes links to State and Territory Training Authorities (STAs) that monitor provision.

VET in Schools programs are packaged and delivered in a variety of ways across Australia. However, it is highly recommended that schools work together in partnership with an RTO where qualifications or Skill Sets result in strong transferable skills relevant to the needs of the individual and commercial enterprises.

The following qualifications have been identified as being suitable for VET in Schools:

- MAR10224 Certificate I in Maritime Operations (General Purpose Hand Near Coastal)
- MAR10424 Certificate I in Maritime Operations (Coxswain Grade 2 Near Coastal)
- MAR30122 Certificate III in Marina Operations.

VET in Schools programs are packaged and delivered in a variety of ways across Australia. However, it is highly recommended that schools work together in partnership with an RTO with the above qualifications on their Scope of Registration.

Currently there are no credit transfer arrangements between qualifications in the MAR Maritime Training Package and higher education qualifications.

[Attachment F: MAR Maritime Training Package Release 12.0 pathways advice](#)

Access and equity

Good vocational education and training, and assessment include making adjustments to meet the learning and assessment needs of individuals. An open mind, common sense and tailoring training and assessment to individual circumstances should ensure individuals achieve the standards employers and RTOs expect.

Adjustments can be made to assist learners to access and participate in vocational education and training. Adjustments are reasonable if they achieve this purpose and take into account factors such as the nature of the learner's ability and disability, the views of the learner, the potential effect of the adjustment on the learner and others, and the costs and benefits of making the adjustment.

Reasonable adjustments need only be that – reasonable. It is about identifying what adjustments might reasonably be made and how they may be put into place.

Assessment processes and techniques should be modified for distance-based learners, be culturally appropriate and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.

An individual's access to the assessment process should not be adversely affected by restrictions placed on the location or context of assessment.

Foundation Skills

Foundation skills is the term that the Australian Government uses in a range educational contexts, including vocational Units of Competency, to capture the language, literacy and numeracy skills required to effectively complete a work task.

Language, literacy and numeracy skills can make the difference between whether or not someone succeeds in training and at work and describe the important foundation skills required to support other communication and technical skills in the work context.

Language, literacy and numeracy skills are represented by the five core skills set out in the Australian Core Skills Framework (ACSF): Learning, reading, writing, oral communication and numeracy.

Foundation Skills may also include employment skills which can be described using either:

- the skills set out in the employability skills framework: Teamwork, Initiative and enterprise, Planning and organising, Problem solving, Self-management, and Technology; or
- the core skills for work set out in the Core Skills for Work developmental framework: Navigate the world of work, Interact with others, and Get the work done.

Foundation skills should be considered as an integrated part of the unit for delivery and assessment purposes

Units of Competency in this MAR Maritime Training Package release describe the foundation skills essential to performance in the elements and performance criteria where possible. Where the language descriptors are overly complex or multidimensional, they are clarified within the Assessment requirements of the unit under Performance and/or Knowledge evidence.

Where practicable in the Elements and Performance Criteria, key words are used to indicate the foundation skills essential to performance. This language is aligned to one or more of the five key Foundation Skills categories of the ACSF - Learning, Reading, Writing, Oral Communication and Numeracy. It is important to note that foundation skills may not have the same meaning in every instance or context and therefore need to be considered in reference to the additional items listed under the Assessment requirements of the unit and the demands of the task within the relevant job context.

Foundation skills that are made explicit in the Assessment requirements utilise language specific to the foundation skill and level of skill required.

For example,

- **Learning Skills:** 'organise', 'clarify meaning or advice', 'take follow up action'
- **Reading Skills:** 'read and interpret', 'compare and comply with', 'analyse and determine'
- **Writing:** 'maintain/complete records', 'report on', 'develop processes', 'document'
- **Oral communication:** 'communicate warnings and advice', 'give directions', 'listen and clarify instructions'
- **Numeracy:** 'interpret charts, maps and schedules', 'estimate distances and time'; 'calculate'

MAR Maritime Training Package		
Foundation Skill Area	Key word examples	Example of task description
Reading	• access • according to... • adhere to • analyse • apply • check • compare • comply with • determine • follow written ... • identify • interpret • observe • source	- information and documentation - regulatory and licencing requirements - organisational procedures - documents relating to work role - plans, schedules and tables - checklists and inspection guides - manuals and specifications - organisational policies and procedures - WHS/OHS legislation - AMSA rules and regulations - licensing requirements
Writing	• articulate • chart • check • complete • develop • document • list • maintain records • mark up • monitor • note • outline • record	- checklists - inspection plans - proforma - risk assessments - emails - reports - warnings and advice - instructions - directions - workplace documents relevant to work role - schedules; tables; rosters - plans; charts; procedures
Oral Communication	• assist • advise • clarify meaning • consult • instruct • respond • request • encourage • articulate • report • consult • facilitate • contribute	- service information - instructions/directions - industry terminology - interactions/discourse - conflict resolution - navigating language barriers - seeking / requesting assistance - seeking approval / verification/ clarification - giving/interpreting oral information - advising/mentoring/guiding - emergency response - meetings/ training - events/issues/warnings - non-speaking communication: (verbal/non-verbal) to establish, develop and maintain effective work relationships

MAR Maritime Training Package		
Foundation Skill Area	Key word examples	Example of task description
Numeracy	• interpret plans • adjust • observe allowance • analyse • calculate • collect data • convert • determine value • give directions • estimate • formulate	- interpreting/developing plans; schedules - interpreting/developing charts; graphs; maps. - maritime signage, codes and labels - specifications - data on weight/load/area/volume - data on weather and ocean conditions - measurements of distance/speed/time/depth - load/ volume/ space / fuel/ energy /power - allowance / time - proportions/ ratios
Learning Skills	• organise • apply planning and organising • clarify meaning or advice • follow step by step instructions • take follow up action • identify/locate/ access information sources • transfer skills and knowledge • organise and make connections • reflect /consider	- access/ locate information and sources - Work within regulatory, licencing laws; ethical guidelines; workplace policies and procedures; and protocols. - WHS/OHS requirements - principles of effective communication and influences on thoughts and processes. - organisational structure and lines of reporting - scope and nature of legal and ethical responsibilities. - key areas of diversity and their characteristics - risks, hazards and control measures - transfer of knowledge and learnings - problem solving; decision making - reflection on own social and cultural perspectives and biases. - Inclusivity and cultural competence.

FSK Foundation Skills Training Package

The FSK Foundation Skills Training Package allows RTOs to choose and deliver foundation skills Units of Competency, qualifications and Skill Sets that will enable learners to build the specific foundation skills they need to achieve vocational competency.

Foundation skills units provide additional information about the types of language, literacy and numeracy skills that are needed to meet the requirements of vocational units.

The Training Package can be downloaded from www.training.gov.au.

Health and safety implications in the industry

Work health and safety (WHS)/occupational health and safety (OHS) has been used in Units of Competency to refer to the relevant legislation. As not all jurisdictions have implemented the Model Work Health and Safety (WHS) Act the combined term is used to recognise that either the national model or existing state/territory instrument will apply, as specified by the relevant regulatory authority.

In jurisdictions where the Model WHS Act has not been implemented, RTOs are advised to contextualise the Unit of Competency by referring to the existing state OHS legislative requirements.

Marine safety awareness

Identifying and managing risks as part of a vessel's safety management system is essential. Vessel and maintenance-related hazards and risks can include:

Asbestos

The presence and location of asbestos in Domestic Commercial Vessels depends on the age of the vessel. Engineers involved in conducting maintenance activities need to be aware of the potential for encountering asbestos.

Asbestos may be found in fire-rated doors and bulkheads, exhaust pipe lagging/insulation, hot water system lagging/insulation, electrical switchboards, electrical penetrations through a watertight or collision bulkhead and many times within laminated ceiling and wall panels of vessel accommodation structure.

Resources and equipment relevant to the Training Package

The assessment requirements relevant to each Unit of Competency refer to the relevant resources and equipment required for assessment.

Where specific equipment is referred to, it must be used in the relevant assessment.

In particular, for assessment, access is required to:

- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment (PPE) that replicate and are currently used in industry.

Specific assessment requirements and strategies are defined in the relevant Unit of Competency where applicable.

RTOs can only conduct training and/or assessment of the qualifications and/or Units of Competency in this Training Package provided they are covered by their Scope of Registration.

The assessment requirements for each Unit of Competency specify the relevant resources and equipment required to achieve the vocational outcomes of the MAR Maritime Training Package Release 12.0.

Legal considerations for learners in the workplace / on placements

Legal requirements that apply to specific industries and VET vary across each state and territory, and the Commonwealth.

Contact relevant state/territory and Commonwealth departments to determine specific legal requirements.

Supporting learner transition between education sectors

The MAR10224 Certificate I in Maritime Operations (General Purpose Hand Near Coastal) and MAR10424 Certificate I in Maritime Operations (Coxswain Grade 2 NC) provide school leavers with an introduction to the maritime industry.

There are currently no formal transition arrangements between VET and Higher Education.

ATTACHMENT A: Qualification Mapping

Mapping information for qualifications can be found in the MAR CVIG Mapping Information [Attachments A–C spreadsheet](#)

ATTACHMENT B: Skill Sets Mapping

Mapping information for Skill Sets can be found in the MAR CVIG Mapping Information [Attachments A–C spreadsheet](#)

ATTACHMENT C: Units Of Competency Mapping

Mapping information for Units of Competency can be found in the MAR CVIG Mapping Information [Attachments A–C spreadsheet](#)

ATTACHMENT D: Implementation Guide

MAR Qualifications	
MAR10224 Certificate I in Maritime Operations (General Purpose Hand Near Coastal)	
Duties and functions may include:	- assist with deck work on a vessel up to 100 m long and up to 3000 GT within the Exclusive Economic Zone (EEZ) under general supervision of the master of the vessel or an appropriately certificated crew member to whom the master delegates the supervision - assist with engine work on a vessel with propulsion power up to 3000 kW within the Exclusive Economic Zone (EEZ) under general supervision of the chief engineer of the vessel or another appropriately certificated crew member to whom the chief engineer delegates the supervision Note: This means that a person assisting with deck work or engine work under direct supervision rather than general supervision is not required to hold a certificate.
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
MAR10424 Certificate I in Maritime Operations (Coxswain Grade 2 Near Coastal)	
Duties and functions may include:	- command, and operate the engines, of a vessel up to 12 m long: - in sheltered waters or within 5 nautical miles (nm) of shore or an aquaculture lease; and - with propulsion power: - for an inboard engine — up to 100 kW; or - for an outboard engine — unlimited - command, and operate the engines, of a vessel up to 12 m long: - as a tender within 3 n mile of the parent vessel within the Exclusive Economic Zone (EEZ); and - with propulsion power: - for an inboard engine — up to 100 kW; or - for an outboard engine — unlimited - undertake the duties and perform the functions of a Coxswain Grade 3 Near Coastal (NC)
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
MAR20121 Certificate II in Maritime Operations (Linesperson)	
AMSA domestic certificates guidance details	AMSA Fact sheets weblink

MAR20324 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)

Duties and functions may include:

- command, and operate the engines, of a vessel up to 12 m long:
 - in inshore waters, or in waters designated for a specific purpose by a State or Territory authority in which it permits holders of this certificate to operate, subject to any conditions that it may impose; and
 - with propulsion power:
 - for an inboard engine — up to 500 kW; or
 - for an outboard engine — unlimited
- command, and operate the engines, of the vessel up to 12 m long:
 - as a tender within 3 n mile of the parent vessel within the Exclusive Economic Zone (EEZ); and
 - with propulsion power:
 - for an inboard engine — up to 500 kW; or
 - for an outboard engine — unlimited
- act as chief mate or deck watchkeeper on a vessel up to 24 m long in inshore waters
- undertake the duties and perform the functions of a General Purpose Hand NC, a Coxswain Grade 3 NC and Coxswain Grade 2 NC

AMSA domestic certificates guidance details

[AMSA Fact sheets weblink](#)

MAR20424 Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal)

Duties and functions may include:

- chief engineer on a vessel with an inboard engine with propulsion power up to 500 kW within the Exclusive Economic Zone (EEZ)
- chief engineer on a vessel with an outboard engine of unlimited propulsion power within the Exclusive Economic Zone (EEZ)
- second engineer on a vessel with an inboard engine with propulsion power up to 750 kW within the Exclusive Economic Zone (EEZ)
- assist an engineer in any tasks that may be required on board while working under the general supervision of the person in charge of the vessel's engines within the Exclusive Economic Zone (EEZ)
- work in the engine room of a vessel with an inboard engine with propulsion power up to 3000 kW within the Exclusive Economic Zone (EEZ)

AMSA domestic certificates guidance details

[AMSA Fact sheets weblink](#)

MAR30824 Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal)

Duties and functions may include:	- chief engineer on a vessel with an inboard engine with propulsion power up to 750 kW within the Exclusive Economic Zone (EEZ) - chief engineer on a vessel with an outboard engine of unlimited propulsion power within the Exclusive Economic Zone (EEZ) - second engineer on a vessel with an inboard engine with propulsion power up to 1500 kW within the Exclusive Economic Zone (EEZ) - assist an engineer in any tasks that may be required on board while working under the general supervision of the person in charge of the vessel's engines within the Exclusive Economic Zone (EEZ) - work in the engine room of a vessel with an inboard engine with propulsion power up to 3000 kW within the Exclusive Economic Zone (EEZ)
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
MAR30924 Certificate III in Maritime Operations	
Master up to 24 metres Near Coastal duties and functions may include:	- command a vessel up to 24 m long within the Exclusive Economic Zone (EEZ) - act as chief mate on a vessel up to 45 m long within the Exclusive Economic Zone (EEZ) - act as deck watchkeeper on a vessel up to 100 m and up to 3000 GT within the Exclusive Economic Zone (EEZ) - act as chief mate on a vessel up to 100 m and up to 3000 GT in inshore waters - undertake the duties and perform the functions of a General Purpose Hand NC and Master (Inland waters) NC
Master Inland Waters duties and functions may include:	- command a vessel up to 45 m long in inland waters - undertake the duties and perform the functions of a General Purpose Hand NC
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
MAR31225 Certificate III in Autonomous Maritime Systems	
Definitions	The definitions are taken from the Australian Code of Practice for Design, Construction, Survey and Operation of Autonomous and Remotely Operated Vessels (Edition 1 April 2022)

AUV (Autonomous Underwater Vehicle)	• An Autonomous Underwater Vehicle is a robotic platform that can operate independently of human control in the underwater environments. • There is a broad range of hull forms such as: - the torpedo shape for its hydrodynamic efficiency. - more cubic shape with propellers pointed in multiple directions. These are less hydrodynamically efficient but are designed to operate in close confines, or with a high degree of freedom to avoid obstacles. • AUVs are deployed to undertake a wide range of missions, including scientific observation, mapping, search and recovery, and mine detection.
ASV (Autonomous Surface Vessels)	• These are also referred to as Uninhabited or Unmanned Surface Vehicle or Vessel • ASVs are a surface-based craft with no human occupants • The craft may be remotely controlled, driven by autonomous systems or some combination.
ROV (Remotely Operated Vehicle)	• A Remotely Operated Vehicle is a robotic platform that is tethered to the surface, typically with a cable: - the cable provides two-way data - power may be supplied by a battery in the vehicle or over the cable, which in larger robots it is more common. • ROV pilots at the surface directly command the operation of the robotic platform. • There are often autonomous systems onboard the ROV, though they are commonly at a low level of autonomy, e.g., keeping depth or orientation. • ROVs are extensively used in the oil and gas industry, mine countermeasures, search and rescue, infrastructure inspection and marine science • ROVs are particularly useful for deployments where fine manipulation and human intelligence is desired.
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
MAR40121 Certificate IV in Maritime Operations (Chief Integrated Rating)	
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
MAR40224 Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal)	

Duties and functions may include:	- chief engineer on a vessel with an inboard engine with propulsion power up to 1500 kW within the Exclusive Economic Zone (EEZ) - second engineer on a vessel with an inboard engine with propulsion power up to 3000 kW within the Exclusive Economic Zone (EEZ) - chief engineer on a vessel with an outboard engine with unlimited propulsion power within the Exclusive Economic Zone (EEZ) - assist an engineer in any tasks that may be required on board while working under the general supervision of the person in charge of the vessel's engines within the Exclusive Economic Zone (EEZ) - work in the engine room of a vessel with an inboard engine with propulsion power up to 3000 kW within the Exclusive Economic Zone (EEZ)
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
MAR40324 Certificate IV in Maritime Operations (Master up to 45 metres Near Coastal)	
Duties and functions may include:	- command a vessel up to 45 m long within the Exclusive Economic Zone (EEZ) - command a vessel up to 100 m and up to 3000 GT in inshore waters - act as chief mate or deck watchkeeper on a vessel up to 100 m and up to 3000 GT within the Exclusive Economic Zone (EEZ) - undertake the duties and perform the functions of a General Purpose Hand NC
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
MAR50120 Diploma of Marine Engineering	
Engineer Class 3 Near Coastal duties and functions may include:	- chief engineer on a vessel with an inboard engine with propulsion power up to 3000 kW within the Exclusive Economic Zone (EEZ) - chief engineer on a vessel with an outboard engine with unlimited propulsion power within the Exclusive Economic Zone (EEZ) - assist an engineer in any tasks that may be required on board while working under the general supervision of the person in charge of the vessel's engines within the Exclusive Economic Zone (EEZ) - work in the engine room of a vessel with an inboard engine with propulsion power up to 3000 kW within the Exclusive Economic Zone (EEZ)
Engineer Watchkeeper may include:	engineer watchkeeper officer on ships of any propulsion power in any operating area
Electro-Technical Officer may include:	electro-technical officer on ships powered by main propulsion machinery of any propulsion power in any operating area

AMSA domestic certificates guidance details	AMSA Fact sheets weblink
AMSA international certificates Guidance details	AMSA Fact sheets weblink
MAR50320 Diploma of Maritime Operations	
Master up to 100 metres Near Coastal duties and functions may include:	- command a vessel up to 100 m and up to 3000 GT within the Exclusive Economic Zone (EEZ) - undertake the duties and perform the functions of a General Purpose Hand NC, Master up to 24 m NC and Master up to 45 m NC
Master less than 500 gross tonnage may include:	- master or chief mate on ships less than 500 gross tonnage in any operating area - watchkeeper deck officer on ships of any gross tonnage in any operating area - master and chief mate on ships less than 3000 gross tonnage in near coastal waters - able seafarer—deck
Watchkeeper Deck may include:	watchkeeper deck officer on ships of any gross tonnage in any operating area
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
AMSA international certificates Guidance details	AMSA Fact sheets weblink
MAR60120 Advanced Diploma of Marine Engineering (Class 1)	
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
AMSA international certificates Guidance details	AMSA Fact sheets weblink
MAR60220 Advanced Diploma of Maritime Operations (Master Unlimited)	
Master unlimited may include:	master, chief mate or Watchkeeper deck on ships of any gross tonnage
AMSA domestic certificates guidance details	AMSA Fact sheets weblink
AMSA international certificates Guidance details	AMSA Fact sheets weblink

MAR units of competency	
MARB038 Maintain and repair marine electrical and electronic equipment	
Vessel operating systems include:	• auxiliary machinery • boilers • main engine • power generate and distribution
MARB046 Plan and supervise routine maintenance on a vessel up to 100 metres	
Management of supplies, suppliers, and external contractors include:	• hire • issue • purchase • receipt • stock control • storage
Routine maintenance activities include:	• checking lifesaving appliances • inspecting breathing apparatus • navigational equipment • operation of emergency firefighting equipment, including fire hoses and nozzles • servicing equipment as required by service manuals and manufacturer instructions relating to vessel equipment • testing communication equipment, including distress calling • testing lifting equipment
MARB050 Adjust a magnetic compass	
Analysis method	Process for the analysis method includes: • place the Flinders Bar on the appropriate side of the binnacle • steady the ship on intercardinal compass heading, observing deviation and calculating coefficient D • spheres are adjusted to alter deviation by the amount for the coefficient • steady ship on: - each of the four equidistant magnetic headings and value of A2 is found - east or west magnetic heading and heeling error is corrected by using a vertical force instrument with the use of A2 - east or west by compass, deviations are observed, coefficient B is calculated and corrected using fore and aft magnets (if coefficient B is larger than coefficient C)

	- north and south by compass, deviations are observed, coefficient C calculated and corrected by athwartship magnets • swing the ship slowly and observing deviations on a minimum of 8 points up to 16 points • residual approximate coefficients are calculated to determine inaccuracies • conducting a second swing and readjusting (if required)
Tentative method	Process for the tentative method includes: • checking Flinders Bar and altering it (if required) • testing spheres for permanent magnetism and are left secured in their present position (if required) • heading ship on east or west magnetic and heeling error corrected by the use of the vertical force instrument • steadying ship on: - east or west by compass and deviation removed by adjusting the fore and aft magnets - north or south by compass and deviation is removed by adjusting athwartship magnets • heading ship on quadrantal point by compass and deviation removed by adjusting position of the spheres • steadying ship on opposite headings, half of the observed deviations are removed using fore and aft magnets or athwartship magnets • heading ship on quadrant point and half of observed deviation is removed by adjusting set of spheres • swinging the ship slowly and observing deviations on a minimum of 8 points up to 16 points
MARB051 Apply elements of magnetic compass adjusting	
Analysis method	Process for the analysis method includes: • place the Flinders Bar on the appropriate side of the binnacle • steady the ship on intercardinal compass heading, observing deviation and calculating coefficient D • spheres are adjusted to alter deviation by the amount for the coefficient • steady ship on: - each of the four equidistant magnetic headings and value of A2 is found - east or west magnetic heading and heeling error is corrected by using a vertical force instrument with the use of A2

	- east or west by compass, deviations are observed, coefficient B is calculated and corrected using fore and aft magnets (if coefficient B is larger than coefficient C) - north and south by compass, deviations are observed, coefficient C calculated and corrected by athwartship magnets • swing the ship slowly and observing deviations on a minimum of 8 points up to 16 points • residual approximate coefficients are calculated to determine inaccuracies • conducting a second swing and readjusting (if required)
Tentative method	Process for the tentative method includes: • checking Flinders Bar and altering it (if required) • testing spheres for permanent magnetism and are left secured in their present position (if required) • heading ship on east or west magnetic and heeling error corrected by the use of the vertical force instrument • steadying ship on: - east or west by compass and deviation removed by adjusting the fore and aft magnets - north or south by compass and deviation is removed by adjusting athwartship magnets • heading ship on quadrantal point by compass and deviation removed by adjusting position of the spheres • steadying ship on opposite headings, half of the observed deviations are removed using fore and aft magnets or athwartship magnets • heading ship on quadrant point and half of observed deviation is removed by adjusting set of spheres • swinging the ship slowly and observing deviations on a minimum of 8 points up to 16 points
MARB054 Apply marine terminology and port procedures	
Relevant information includes one or more of the following:	• maritime authority instructions • mooring and unmooring plans, procedures, checklists and instructions • reports and records of mooring and unmooring operations or safety incidents • rope and equipment manufacturer instructions and procedures • safety instructions and procedures • port procedure manuals

Personnel include one or more of the following:	• launch crew • mooring supervisor • wharf mooring personnel (bow) forward • wharf mooring personnel (stern) aft • pilot • port and terminal personnel • tug crew/s • vessel crew
MARB055 Maintain mooring equipment	
Mooring equipment includes:	• buoys • chains • hooks • marine fenders • mooring cock • mooring rollers • quick release systems • radios • ropes and lines • shackles • sheaves • stoppers • towing hook • wires
Personal protective equipment (PPE) includes:	• eye protection/glasses or protective shield • helmet • personal life vest • radiant heat protection/coat • reflective clothing • safety footwear • suitable gloves • vest
MARC061 Conduct mooring operations using mechanical equipment	
Mooring operations include:	• mooring • unmooring
Safety procedures include:	• verification of:

	- own as well as other team members personal fitness and medical wellbeing • consideration given to working over water, working at heights, working in all weather conditions, working in poor light conditions and working with limited resources • knowledge of own personal flotation device and plan of these on site on arrival at mooring and unmooring operation • keeping clear of snapback zone and barricade or No-Go areas • keeping work area hazard-free • correct usage of PPE (such as safety footwear, safety helmet, suitable gloves, safety vest and reflective clothing, personal life jacket vest, safety glasses) • loose personal wear (long hair, neck chain, rings) should be made safe to avoid them being caught on ropes
Berth and terminals may include one or more of the following:	• liquid petroleum gas (LPG/LNG) berths • bulk liquids berths (crude oil, clean petroleum and chemical) • solid bulk (coal, iron ore, fertiliser, grain, wood chip) berths • RoRo terminals • container terminals • passenger ship or cruise terminals
Relevant documentation and records include one or more of the following:	• mooring and unmooring plans, procedures, checklists, and instructions • Harbour Master's Directions (HMDs), Port Information Guide (PIG), Notice to Mariners and shore officer instructions • lessons learnt from reports and records of mooring and unmooring operations or any safety incident • rope and equipment manufacturer instructions and procedures • safety instructions and procedure
Mooring operations include:	• landing a gangway • placing or removing brow onto gangway • mooring lines launch • positioning mooring lines on berth • preparing a berth • receiving mooring lines under a vessel using: • a heaving line • a messenger line • a launch • returning equipment (heaving line) to a vessel • unmooring and letting go a vessel

	• working: - by day or night - in normal and emergency situations - under any permissible conditions of weather - at various shore-side terminals and wharves • mooring buoys terminals
MARC062 Perform mooring operations	
Mooring operations includes:	• mooring • unmooring
Relevant documentation and records include one or more of the following:	• mooring and unmooring plans, procedures, checklists and instructions • relevant maritime authority instructions • relevant sections of maritime regulations concerning mooring and unmooring operations • reports and records of mooring and unmooring operations or safety incidents • rope and equipment manufacturer instructions and procedures • safety instructions and procedures
Issues related to mooring or unmooring operations include one or more of the following:	• bollard/hook and capstan numbers • special circumstances
Made clear and ready for mooring includes one of the following:	• removing obstructions • stopping any work that creates excessive dust or noise
Safety precautions include:	• checking: - own personal fitness and medical wellbeing - whereabouts of edge of wharf - whereabouts of other members of mooring and unmooring team • confirming availability of a personal flotation device on arrival at mooring and unmooring operation • keeping clear of snapback zone and demarcated areas • keeping work area hazard-free • obtaining and using required PPE (such as safety footwear, safety helmet, suitable gloves, safety vest and reflective clothing, personal life vest, safety glasses)

	- removing rings from fingers to avoid them being caught on steel wire ropes - wearing suitable clothing
Mooring operations include:	- landing a gangway - positioning lines launch - positioning mooring lines - preparing a berth - receiving mooring lines under a vessel - receiving heaving line from: - a launch - a vessel - returning heaving line to a vessel - towing mooring lines using vehicles - unmooring and letting go a vessel - working: - by day or night - in normal and emergency situations - under any permissible conditions of weather - at various shore-side terminals and wharves
MARE003 Communicate during mooring operations	
Mooring operations includes:	- mooring - unmooring
Safety procedures include:	- verification of own as well as other team members personal fitness and medical wellbeing - consideration given to working over water, working at heights, working in all weather conditions, working in poor light conditions, and working with limited resources - knowledge of own personal flotation device and a plan of those on site on arrival at mooring and unmooring operation - keeping clear of snapback zone and barricade or No-Go areas - keeping work area hazard-free - correct usage of PPE (such as safety footwear, safety helmet, suitable gloves, safety vest and reflective clothing, personal life jacket vest, safety glasses) - loose personal wear (long hair, neck chain, rings) should be made safe to avoid them being caught on ropes. - removing rings from fingers to avoid them being caught on steel wire ropes

Relevant documentation and records include one or more of the following:	• Harbour Master's Directions (HMDs), Port Information Guide (PIG), Notice to Mariners and shore officer instructions • mooring and unmooring plans, procedures, checklists, and instructions • relevant of maritime regulations concerning mooring and unmooring operations • lessons learnt from reports and records of mooring operations or safety incidents • rope and equipment manufacturer instructions and procedures • safety instructions and procedures • Code of Practice 1/2000 incorporating the Australian Offshore Support Vessel Code of Safe Working Practice • The Code of Safe Working Practice for Australian seafarers
Communication includes one or more of the following:	• oral communication with mooring supervisor or Master and other members of mooring or unmooring team • radio between mooring supervisor (shore-side) and: - pilot on vessel - wharf mooring personnel (bow) forward - wharf mooring personnel (stern) aft • portable radio between: - tug crew and pilot on vessel - tug crew and mooring launch crew - mooring launch crew and pilot on vessel • hand and other visual signals
Others involved in mooring and unmooring activities include one or more of the following:	• lines launch driver • mooring launch crew • mooring master or supervisor • mooring team • pilot and crew on vessel being moored or unmoored and tug • tug crew • vessel crew
MARF032 Apply medical first aid on board ship	
Authorised health worker includes one or more of the following:	• general practitioner • nurse practitioner • paramedic/ambulance officer

Documentation includes one or more of the following:	• administration of medications, including time, date, dose, person administering • description of injury • first aid management • fluid/oral intake/output, including fluid loss via blood, vomit, faeces and urine • location • time • vital signs
Options for transporting casualty or waiting for medical assistance options include one or more of the following:	• advice given by authorised health worker • severity of injury • time required for medical assistance to arrive • whether contact with medical and/or emergency services has been achieved • whether movement might cause a deterioration in casualty condition
Personal protective equipment (PPE) includes one or more of the following:	• chemical resistant gloves and apron • ear protection (muffs or plugs) • eye protection • fire-resistant clothing • hard hat head protection • respiratory devices • thermally insulated gloves • working protective gloves
MARF037 Follow vessel security procedures (security awareness training)	
Designated personnel include one or more of the following:	• Company Security Officer • emergency services • First Aid Officer • Master • Port Security Officer • Ship Security Officer • WHS/OHS representative
MARF041 Observe personal safety and social responsibility (PSSR)	
Hazards include one or more of the following:	• contact with chemicals and hazardous substances • contact with electricity • contact with plant and marine life • contaminants

	• dangerous organisms • equipment operation and maintenance • exposure to heat, cold and water • falls, trips and slips • hitting or being hit by stationary or moving objects • immersion in water without a personal flotation device (PFD) • ladders • manual handling • noise • poor housekeeping and lack of deck space • repetitive movements and awkward postures • smoking and alcohol • unventilated holds • weather and water conditions • working in confined spaces • working with inappropriate clothing • working with knives
Emergency situations include one or more of the following:	• beaching with and without heavy surf • chemical spills • collisions • disabled vessel • electrocution • falling or being dragged overboard • fire • flood • grounding • hull damage • immersion in water • injuries associated with dangerous organisms (such as bites, stings, poisoning) • injuries associated with machines, vehicles, vessels and diving • loss of rudder • lost or fouled propeller • rescue activities • rough weather and heavy seas • vessel capsize

Individual rights and responsibilities include one or more of the following:	• avoiding and preventing harassment of others • avoiding drug and alcohol abuse on board vessel • implementing appropriate precautions to avoid contributing to the spread of the human immunodeficiency virus (HIV) infection/acquired immunodeficiency syndrome (AIDS) and other communicable diseases • maintaining appropriate standards of hygiene and cleanliness • providing a good example to others as a responsible, fair, sympathetic and equitable member of the shipboard team • respecting the religious and cultural habits of crew members
MARF044 Prevent, control and fight fires on board a vessel (advanced firefighting)	
Fire hazards must include:	• accommodation • cargo areas • engine rooms • electrical distribution systems • fuel handling systems • galleys • lack of maintenance • laundry • poor housekeeping • smoking • stores areas
Firefighting equipment and systems must include:	• fixed fitted detection and suppression systems • foam applicators • hoses • international ship-to-shore connection • nozzles • portable and semi-portable extinguishers • stretchers/ropes and lines
Personal protective equipment (PPE) must include:	• firefighter outfit as per current Fire Safety Systems Code (as applicable) • foot protection/boots • hand protection/gloves • head protection/helmet • radiant heat protection/coat • self-contained breathing apparatus (SCBA)

Extinguishing media/agents must include:	- extinguishing powder - foam - gaseous extinguishing agents - water
MARF046 Survive at sea in the event of vessel abandonment and personal survival techniques (PST)	
Radio equipment includes one or more of the following:	- emergency position indicating radio beacon (EPIRB) - Global Maritime Distress and Safety System (GMDSS) - high frequency (HF) - search and rescue transponders (SARTs) - very-high frequency (VHF)
Survival craft and rescue boats include one or more of the following:	- inflatable life raft - lifeboat - rescue boat
Lifesaving and survival equipment includes one or more of the following:	- flares - immersion suit - life jacket - person overboard combination light and smoke float - SARTs
MARF049 Follow port and terminal security procedures	
Legislative requirements include one or more of the following:	- applicable crime Acts and codes of practice - award and enterprise agreements - general duty of care responsibilities - maritime industry codes of practice - maritime transport Acts and regulations
Procedures for reporting security threats include one or more of the following:	- completing documentation such as logs and activity reports - completing police reports - contacting designated personnel - requesting security assistance
Alert modes include one or more of the following:	- alarms - call codes and signs - hand signals - megaphone - mobile phone - public address system

	• telephone • two-way radio • verbal communication
MARF050 Follow work health and safety, and emergency procedures during mooring operations	
Mooring operations includes:	• mooring • unmooring
Risk and hazards include one or more of the following:	• crane movement and crane booms lowered • faulty communications equipment • inadequate lighting • ship mooring lines and wires in poor condition • wharf traffic • weather conditions • time of the day • inadequate separation of berthing vessels • working in restricted conditions • fatigue management
Personnel include one or more of the following:	• mooring: - launch and crew - mooring supervisor - wharf mooring personnel (bow) forward - wharf mooring personnel (stern) aft • pilot • tug crew/s • vessel crew
Safety precautions include:	• verification of own as well as other team members personal fitness and medical wellbeing • consideration given to working over water, working at heights, working in all weather conditions, working in poor light conditions, and working with limited resources • knowledge of own personal flotation device and a plan of those on site on arrival at mooring and unmooring operation • keeping clear of snapback zone and barricade or No-Go areas • keeping work area hazard-free • correct usage of PPE (such as safety footwear, safety helmet, suitable gloves, safety vest and reflective clothing, personal life jacket vest, safety glasses)

	loose personal wear (long hair, neck chain, rings) should be made safe to avoid them being caught on ropes
Hazard minimisation procedures include:	- ensuring ropes and equipment have been tested and are in good condition - placing warning signage and barricades in appropriate places - pre-start checks for equipment carried out prior to operation
Mooring or unmooring operations include one or more of the following:	- landing a gangway - preparing a berth - receiving heaving line from: - a launch - a vessel - returning heaving line to a vessel - unmooring and letting go a vessel - working: - by day or night - in normal and emergency situations - under any permissible conditions of weather - at various shore-side terminals and wharves - landing a gangway - placing or removing brow onto gangway - mooring positioning lines launch handling lines - positioning mooring lines on berth - preparing a berth - receiving mooring lines from vessel using under a vessel - receiving heaving line from: - a heaving line - a messenger line - a mooring launch - a vessel - returning equipment (heaving line) to a vessel - mooring buoy terminals
MARO009 Maintain a safe navigational watch	
Nature of emergencies include:	- anchoring - assisting a vessel in distress - collision - contaminated fuel

	• emergencies which arise in port • engine breakdown or malfunction • fire • flooding • grounding • hypothermia • incidents • injuries/illness • lack of fuel • lost • person overboard • rescuing persons from sea • sinking • swamping
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ATTACHMENT E: Summary of Qualification Licensing/Regulatory Information

The regulatory authority at the time of publication of this Training Package is the Australian Maritime Safety Authority (AMSA).

For AMSA certification purposes the qualifications listed below must be delivered and assessed by an RTO approved by AMSA.

People seeking certification should check with AMSA.

MASTERS, DECK AND ENGINEERING OPERATIONS

MAR10224 Certificate I in Maritime Operations (General Purpose Hand Near Coastal)

This level of qualification is currently cited as meeting some of the requirements for certification as a General Purpose Hand Near Coastal as specified in Marine Order 505.

Certification will require achievement of the MAR10224 Certificate I in Maritime Operations (General Purpose Hand Near Coastal) and an Australian Maritime Safety Authority (AMSA) approved first aid certificate; people seeking certification should check with AMSA.

MAR10424 Certificate I in Maritime Operations (Coxswain Grade 2 Near Coastal)

This qualification is required to obtain an AMSA certificate of competency as a Coxswain Grade 2 NC as specified in Marine Order 505.

AMSA certification will require:

- achieving MAR10424 Certificate I in Maritime Operations (Coxswain Grade 2 Near Coastal)
- qualifying sea service
- meeting the medical and eyesight requirements specified in the Marine Order 505, and
- assessment by an AMSA approved assessor using the AMSA mandated practical assessment (AMPA) conducted on a vessel greater than or equal to 5.0 m in length.

MAR20324 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)

This qualification is required to obtain an AMSA certificate of competency as a Coxswain Grade 1 Near Coastal (NC) as defined in Marine Order 505.

AMSA certification will require:

- achieving MAR20324 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)
- qualifying sea service

People first, for a future-fit
supply chain workforce

- meeting the medical and eyesight requirements specified in the Marine Order 505, and
- assessment by an AMSA approved assessor using the AMSA mandated practical assessment (AMPA) conducted on a commercial vessel greater than or equal to 5.0 m in length.

MAR20424 Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal)

This qualification is required to obtain an AMSA certificate of competency as a Marine Engine Driver Grade 3 NC as defined in Marine Order 505.

AMSA certification will require:

- achieving MAR20424 Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal)
- qualifying sea service
- meeting the medical and eyesight requirements specified in the Marine Order 505, and
 - assessment by an AMSA approved assessor using the AMSA mandated practical assessment (AMPA).

MAR20121 Certificate II in Maritime Operations (Linesperson)

This qualification is suitable for people working in the maritime industry as a Linesperson engaged in a range of tasks in mooring and unmooring operations.

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

MAR30122 Certificate III in Marina Operations

This qualification is suitable for people working in the marina industry performing a range of tasks such as berthing, mooring and storage of vessels, and a range of boatyard tasks connected to sailing, cruising and general boating.

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

MAR30824 Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal)

This qualification is required to obtain an AMSA certification as a Marine Engine Driver Grade 2 Near Coastal (NC) as defined in the Marine Order 505.

AMSA certification will require:

- achieving MAR30824 Certificate III in Maritime Operations (Marine Engine Driver Grade 2 NC)
- qualifying sea service
- meeting the medical and eyesight requirements specified in the Marine Order 505, and

- assessment by an AMSA approved assessor using the AMSA mandated practical assessment (AMPA)

MAR30924 Certificate III in Maritime Operations

Master up to 24 metres Near Coastal

This qualification is required to obtain an AMSA certificate of competency as a Master <24 metres NC as defined in the Marine Order 505.

AMSA certification of competency will require:

- achieving MAR30924 Certificate III in Maritime Operations (Master <24 m Near Coastal)
- a Marine Radio Operators Certificate of Proficiency
- qualifying sea service
- meeting the medical and eyesight requirements specified in the Marine Order 505, and
- assessment by an AMSA approved assessor using the AMSA mandated practical
- assessment (AMPA) conducted on a commercial vessel greater than or equal to 7.5 m in length.

Master Inland Waters

This qualification is required to obtain an AMSA certificate of competency as a Master Inland Waters as defined in the Marine Order 505.

AMSA certification will require:

- achieving MAR30824 Certificate III in Maritime Operations (Master Inland Waters)
- qualifying sea service
- meeting the medical and eyesight requirements specified in the Marine Order 505, and
- assessment by an AMSA approved assessor using the AMSA mandated practical
- assessment (AMPA) conducted on a commercial vessel greater than or equal to 7.5 m in length.

MAR30220 Certificate III in Maritime Operations (Integrated Rating)

This qualification forms some of the requirements for certification by the Australian Maritime Safety Authority (AMSA) as Able Seafarer Deck, Able Seafarer Engine and Integrated Rating as defined in Marine Orders and International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

This qualification is required to obtain an AMSA certificate of competency as an Integrated Rating as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study that meets STCW A-II/4, A-II/5, A-III/4 and A-III/5 (MAR30220 Certificate III in Maritime Operations Integrated Rating)

- holding or have held certificates of competency as defined in Marine Order 73
- qualifying sea service as defined in Marine Order 73
- completing STCW short courses as defined in Marine Order 73
- holding a valid AMSA certificate of medical fitness
- meeting any other regulatory requirements as defined in Marine Order 73.

Able Seafarer – Deck

This qualification is required to obtain an AMSA certificate of competency as an Able Seafarer – Deck as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study that meets STCW A-II/4 and A-II/5 (Able Seafarer Deck)
- holding or have held certificates of competency as defined in Marine Order 73
- qualifying sea service as defined in Marine Order 73
- completing STCW short courses as defined in Marine Order 73
- holding a valid AMSA certificate of medical fitness
- meeting any other regulatory requirements as defined in Marine Order 73.

Able Seafarer – Engine

This qualification is required to obtain AMSA certificate of competency as an Able Seafarer – Engine as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study that meets STCW A-III/4 and A-III/5 (Able Seafarer Engine)
- holding or have held certificates of competency as defined in Marine Order 73
- qualifying sea service as defined in Marine Order 73
- completing STCW short courses as defined in Marine Order 73
- holding a valid AMSA certificate of medical fitness
- meeting any other regulatory requirements as defined in Marine Order 73.

MAR30324 Certificate III in Maritime Operations (Marine Cookery)

This qualification is currently cited as meeting some of the requirements for certification as a Marine Cook by the Australian Maritime Safety Authority (AMSA).

Certification will require the successful achievement of the MAR30324 Certificate III in Maritime Operations (Marine Cookery), the completion of the AMSA Basic Safety Training course (which includes Security Awareness Training) and hold the following valid certificates:

- Certificate of Safety Training
- AMSA Certificate of Medical Fitness

People seeking certification should check with AMSA.

MAR40121 Certificate IV in Maritime Operations (Chief Integrated Rating)

This qualification forms some of the requirements for certification by the Australian Maritime Safety Authority (AMSA) as a Chief Integrated Rating as defined in Marine Orders.

This qualification is required to obtain AMSA certificate of competency as a Chief Integrated Rating as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study appropriate for the grade of certificate (MAR40121 Certificate IV in Maritime Operations - Chief Integrated Rating)
- holding or have held certificates of competency as defined in Marine Order 73
- qualifying sea service as defined in Marine Order 73
- completing STCW short courses as defined in Marine Order 73
- holding a valid AMSA certificate of medical fitness
- meeting any other regulatory requirements as defined in Marine Order 73.

MAR40324 Certificate IV in Maritime Operations (Master up to 45 metres Near Coastal)

This level of qualification is currently cited as meeting some of the requirements for certification as a Master up to 35 metres Near Coastal as specified in Marine Order 505.

Certification as a Master less than 35 metres Near Coastal (as defined by the Marine Order 505) will require achievement of the MAR40324 Certificate IV in Maritime Operations (Master up to 45 metres Near Coastal), certification as a Master less than 24 metres Near Coastal, an appropriate radio certificate of proficiency, Australian Maritime Safety Authority (AMSA) final assessment and an AMSA approved first aid certificate; People seeking certification should check with AMSA.

This level of qualification is also currently cited as meeting some of the requirements for certification as a Mate less than 80 metres Near Coastal as defined by the Marine Order 505. Certification as a Mate less than 80 metres Near Coastal will require achievement of the MAR40324 Certificate IV in Maritime Operations (Master up to 45 metres Near Coastal), qualifying sea service and completion of AMSA approved task book or qualifying sea service, an appropriate radio certificate of proficiency, AMSA final assessment and an AMSA approved first aid certificate; People seeking certification should check with AMSA.

MAR40224 Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal)

This level of qualification is currently cited as meeting some of the requirements for certification as a Marine Engine Driver Grade 1 Near Coastal as specified in Marine Order 505.

Certification will require achievement of the MAR40224 Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal), qualifying sea service and completed Australian Maritime Safety Authority (AMSA) approved task book or qualifying sea service or qualifying sea service and a workshop skill equivalent qualification, AMSA final assessment and an AMSA approved first aid certificate; people seeking certification should check with AMSA.

MAR50120 Diploma of Marine Engineering

This qualification is currently cited as meeting some of the requirements for certification as an Engineer Class 3 Near Coastal as defined in Marine Order 505 (Certificate of competency – National Law) 2013.

This qualification is currently cited as meeting some of the requirements for certification as an Engineer Watchkeeper (STCW Engineer Watchkeeper Unlimited) or Electro-Technical Officer (STCW Electro-Technical Officer Unlimited) as defined in Marine Orders and International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

- **Engineering Class 3 Near Coastal**

This qualification is required to obtain AMSA certification of competency as an Engineer Class 3 Near Coastal as defined in Marine Order 505 (Certificate of competency – National Law) 2013.

AMSA certification of competency will require:

- completing an approved program of study that meets Engineer Class 3 at Diploma level (MAR50120 Diploma of Marine Engineering Engineer Class 3 Near Coastal)
- holding or have held certificates of competency or an engineering trade as defined in Marine Order 505
- qualifying sea service as defined in Marine Order 505
- meeting the medical and eyesight requirements specified in the Marine Order 505
- having passed a final AMSA assessment
- meeting any other regulatory requirements as specified in the Marine Order 505.

- **Electro-Technical Officer**

This qualification is required to obtain an AMSA certificate of competency as an Electro-Technical Officer (STCW Electro-Technical Officer Unlimited) as defined in Marine Orders and STCW.

AMSA certification of competency will require:

- completing an approved program of study that meets regulation STCW A-III/6 (Diploma of Marine Engineering Electro-Technical Officer)
- holding or have held certificates of competency or trade certificate as defined in Marine Order 72

- qualifying sea service as defined in Marine Order 72
- completing STCW short courses as defined in Marine Order 72
- holding a valid AMSA certificate of medical fitness
- having passed a final AMSA assessment
- meeting any other regulatory requirements as defined in Marine Order 72.

- **Engineer Watchkeeper**

This qualification is required to obtain an AMSA certificate of competency as an Engineer Watchkeeper (STCW Engineer Watchkeeper Unlimited) as defined in Marine Orders and STCW.

AMSA certification of competency will require:

- completing an approved program of study that meets regulation STCW A-III/1 (Diploma of Marine Engineering Engineer Watchkeeper)
- holding or have held certificates of competency as defined in Marine Order 72
- qualifying sea service as defined in Marine Order 72
- completing STCW short courses as defined in Marine Order 72
- holding a valid AMSA certificate of medical fitness
- having passed a final AMSA assessment
- meeting any other regulatory requirements as defined in Marine Order 72.

MAR50220 Diploma of Maritime Operations

This qualification is currently cited as meeting some of the requirements for certification as a Master less than 80 metres as defined in Marine Order 505 (Certificates of competency – National law) 2013.

This qualification forms some of the requirements for certification by the Australian Maritime Safety Authority (AMSA) as a Master of a commercial vessel less than 500 gross tonnage (GT) or Watchkeeper Deck as defined in Marine Orders and International Convention on Standards of Training Certification and Watchkeeping for Seafarers (STCW).

- **Master less than 80 metres**

This qualification is required to obtain an AMSA certificate of competency as a Master less than 80 metres Near Coastal as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved study of program that meets Master less than 80 metres course at Diploma level (MAR50220 Diploma of Maritime Operations - Master less than 80 metres Near Coastal)
- holding or have held certificates of competency as defined in Marine Order 505
- holding a Marine Radio Operators certificate of proficiency as defined in Marine Order 505

- qualifying sea service as defined in Marine Order 505
- meeting the medical and eyesight requirements specified in the Marine Order 505
- having passed a final AMSA assessment
- meeting any other regulatory requirements as defined in Marine Order 505.

- **Master less than 500 GT**

This qualification is required to obtain an AMSA certificate of competency as a Master of a commercial vessel less than 500 gross tonnage (GT) as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study that meets STCW A-11/1 and A-11/2 (MAR50220 Diploma of Maritime Operations - Master less than 500 GT)
- holding or have held certificates of competency as defined in Marine Order 71
- qualifying sea service as defined in Marine Order 71
- completing STCW short courses as defined in Marine Order 71
- holding a valid AMSA certificate of medical fitness
- having passed a final AMSA assessment
- meeting any other regulatory requirements as defined in Marine Order 71.

- **Watchkeeper Deck**

This qualification is required to obtain an AMSA certificate of competency as a Watchkeeper Deck as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study that meets STCW A-II/1 (MAR50220 Diploma of Maritime Operations - Watchkeeper Deck)
- holding or have held certificates of competency as defined in Marine Order 71
- qualifying sea service as defined in Marine Order 71
- completing STCW short courses as defined in Marine Order 71
- holding a valid AMSA certificate of medical fitness
- having passed a final AMSA assessment
- meeting any other regulatory requirements as defined in Marine Order 71

MAR60220 Advanced Diploma of Maritime Operations (Master Unlimited)

This qualification forms some of the requirements for certification by the Australian Maritime Safety Authority (AMSA) as a Master Unlimited as defined in Marine Orders and International Convention on Standards of Training Certification and Watchkeeping for Seafarers (STCW).

This qualification is required to obtain an AMSA certificate of competency as a Master Unlimited as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study that meets STCW A-II/1 and A-II/2 (MAR60220 Advanced Diploma of Maritime Operations Master Unlimited)
- holding or have held certificates of competency as defined in Marine Order 71
- qualifying sea service as defined in Marine Order 71
- completing STCW short courses as defined in Marine Order 71
- holding a valid AMSA certificate of medical fitness
- having passed a final AMSA assessment
- meeting any other regulatory requirements as defined in Marine Order 71.

MAR60120 Advanced Diploma of Marine Engineering

This qualification forms some of the requirements for certification by the Australian Maritime Safety Authority (AMSA) as an Engineer Class 1 (STCW Chief Engineer Unlimited) or Engineer Class 2 (STCW Second Engineer Unlimited) as defined in Marine Orders and International Convention on Standards of Training Certification and Watchkeeping for Seafarers (STCW).

Engineering Class 1

This qualification is required to obtain an AMSA certificate of competency as an Engineer Class 1 (STCW Chief Engineer Unlimited) as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study that meets regulation STCW A-III/1 and A-III/2 (MAR60120 Advanced Diploma of Marine Engineering - Class 1)
- holding or have held certificates of competency as defined in Marine Order 72
- qualifying sea service as defined in Marine Order 72
- completing STCW short courses as defined in Marine Order 72
- holding a valid AMSA certificate of medical fitness
- having passed a final AMSA assessment
- meeting any other regulatory requirements as defined in Marine Order 72.

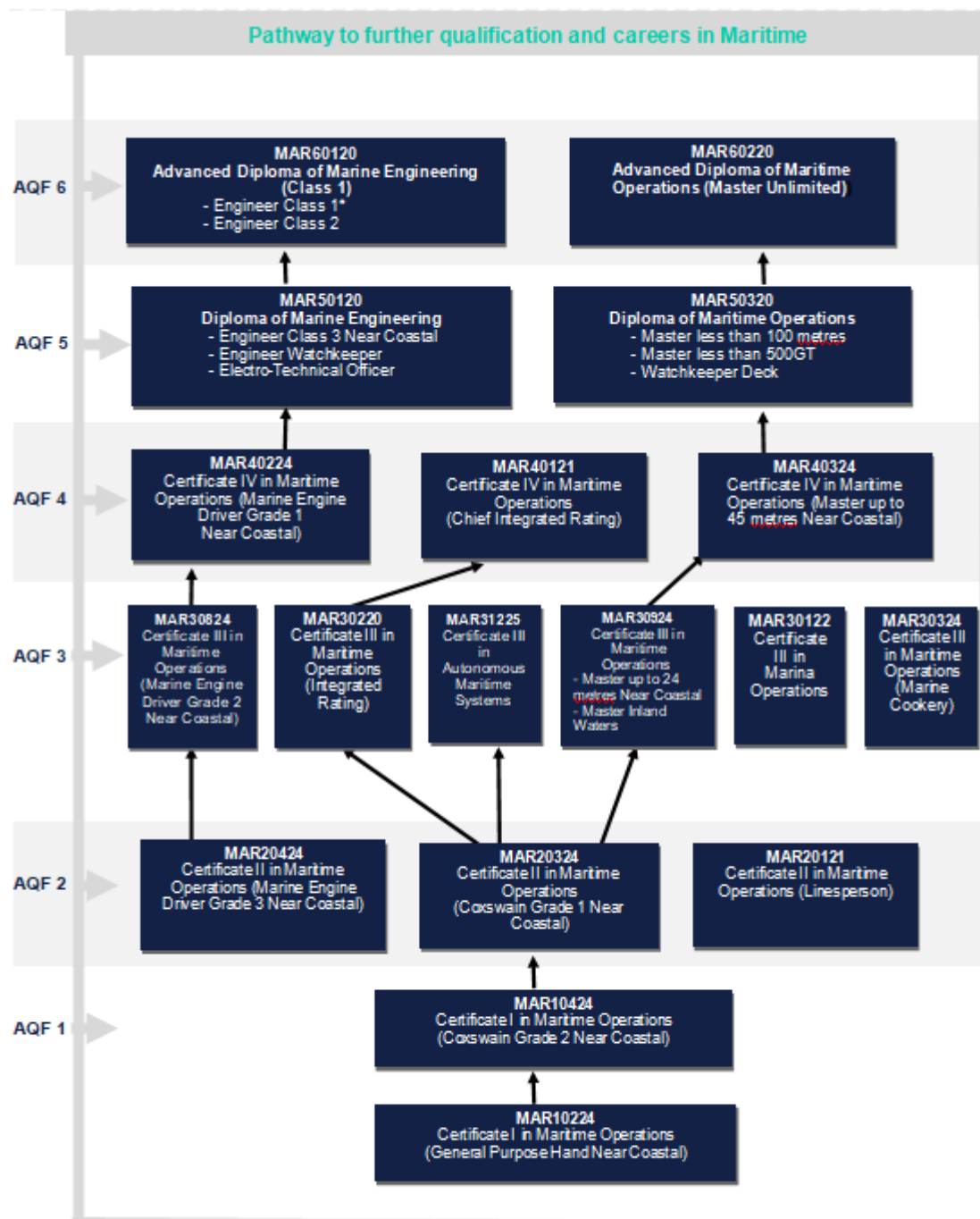
Engineering Class 2

This qualification is required to obtain an AMSA certificate of competency as an Engineer Class 2 (STCW Second Engineer Unlimited) as defined in Marine Orders.

AMSA certification of competency will require:

- completing an approved program of study that meets regulation STCW A-III/1 and A-III/2 (MAR60120 Advanced Diploma of Marine Engineering Class 2)
- holding or have held certificates of competency as defined in Marine Order 72
- qualifying sea service as defined in Marine Order 72
- completing STCW short courses as defined in Marine Order 72
- holding a valid AMSA certificate of medical fitness
- having passed a final AMSA assessment
- meeting any other regulatory requirements as defined in Marine Order 72.

ATTACHMENT F: Training Package Pathways Advice



*Advanced Diploma of Marine Engineering (Class 1) - transition pathway from engineering Class 2 to Class 1 may be available. Contact your training provider for further details.

ATTACHMENT G: Glossary of Terms and Definitions

Autonomous Maritime Systems

The definitions are taken from the Australian Code of Practice for Design, Construction, Survey and Operation of Autonomous and Remotely Operated Vessels (Edition 1 April 2022).

AUV (Autonomous Underwater Vehicle)	• An Autonomous Underwater Vehicle is a robotic platform that can operate independently of human control in the underwater environments. • There is a broad range of hull forms such as: ○ the torpedo shape for its hydrodynamic efficiency. ○ more cubic shape with propellers pointed in multiple directions. These are less hydrodynamically efficient but are designed to operate in close confines, or with a high degree of freedom to avoid obstacles. • AUVs are deployed to undertake a wide range of missions, including scientific observation, mapping, search and recovery, and mine detection.
ASV (Autonomous Surface Vessel)	• These are also referred to as Uninhabited or Unmanned Surface Vehicle or Vessel • ASVs are a surface-based craft with no human occupants The craft may be remotely controlled, driven by autonomous systems or some combination.
ROV (Remotely Operated Vehicle)	• A Remotely Operated Vehicle is a robotic platform that is tethered to the surface, typically with a cable: ○ The cable provides two-way data ○ Power may be supplied by a battery in the vehicle or over the cable, which in larger robots it is more common. • ROV pilots at the surface directly command the operation of the robotic platform. • There are often autonomous systems onboard the ROV, though they are commonly at a low level of autonomy, e.g., keeping depth or orientation. • ROVs are extensively used in the oil and gas industry, mine countermeasures, search and rescue, infrastructure inspection and marine science • ROVs are particularly useful for deployments where fine manipulation and human intelligence is desired.

Radio Units of Competency

ARPA	Automatic Radar Plotting Aids
MARPA	Manual Automatic Radar Plotting Aid
ECS	Electronic Chart System

Terms

Inshore operations	Operations of a vessel that are conducted laterally along the coast from either the base or a regular port of departure of the vessel that is within 15 nm to seaward from: - the baseline of any of the following: - the Australian mainland - the Tasmanian mainland - a recognised island - sheltered waters limits.
Sheltered waters operational areas	Sheltered waters means waters comprising designated smooth or partially smooth waters. Sheltered waters operational area means either of the following areas: - partially smooth water operations - smooth water operations.

Water Areas

Jurisdiction	Name of island or island group
New South Wales	Lord Howe Island
Western Australia	Houtman-Abrolhos Group
Tasmania	Furneaux Group
	Kent Group
	King Island
	Waterhouse Island
Northern Territory	Any island that is part of the Northern Territory
Commonwealth	Christmas Island
	Cocos (Keeling) Islands

ATTACHMENT H: Companion Volume Implementation Guide

Quality Assurance Process

A CVIG is initiated in accordance with the requirements of the Standards for Training Packages.

The steps in the Quality Assurance (QA) process as they apply to the CVIG are:

1. The CVIG is developed by the ISA in accordance with Standards 11 and 12:
 - **Standard 11:** A quality assured Companion Volume Implementation Guide produced by the Training Package developer is available at the time of endorsement and complies with the Companion Volume Implementation Guide template
 - **Standard 12:** Training Package developers produce other quality assured companion volumes to meet the needs of their stakeholders as required.
2. The Implementation Guide is designed to assist assessors, trainers, training providers and enterprises to deliver nationally endorsed industry training packages.
3. Content is validated and amended as part of the validation stage in the implementation of the Standards.
4. The CVIG is submitted for external QA with the Training Package changes, to ensure it is available at the time of endorsement.
5. The CVIG is reviewed by the JSC to ensure mapping tables are updated and any additional information is added as required. Proposed changes are subject to industry validation as part of the endorsement process.
6. Where changes are made to a Training Package and minor amendments are required for the CVIG, the JSC includes amendments as part of the validation phase and incorporates the reference in the version control modification history at the front of the CVIG.

ATTACHMENT I: Companion Volume Implementation Guide Template

COMPANION VOLUME IMPLEMENTATION GUIDE FOR THE MAR MARITIME TRAINING PACKAGE

Mandatory field

OVERVIEW

INFORMATION

Mandatory field

- Version control and modification history.
- List of AQF qualifications, Skill Sets and Units of Competency in the Training Package.
- Unit mapping information, including equivalence table linking old to new Units of Competency.
- Qualification mapping information, including equivalence table linking old to new qualification.
- List of imported and prerequisite units in the Training Package.
- Key work and training requirements in the industry.
- Regulation and licensing implications for implementation.

IMPLEMENTATION INFORMATION

Mandatory field

- Information on the key features of the Training Package and the industry that will impact on training pathways selection.
- Industry sectors and occupational outcomes of qualifications.
- Explanation of any mandatory entry requirements for qualifications.
- Pathways advice, particularly in line with requirements of the AQF Pathways Policy.
- Access and equity considerations.
- Foundation Skills.
- Advice on any health and safety implications in the industry.
- Resource and equipment relevant to the Training Package.
- Legal considerations for learners in the workplace/on placements.
- Other information relevant to implementation of the Training Package.

LINKS

Optional field

- Resources supporting the Companion Volume Implementation Guide.
- Other companion volumes as required including:
 - Learning strategies guidance, describing the diversity of learners and learning strategies.
 - Knowledge guidance, identifying contextual information such as knowledge requirements and resources.
 - Assessment strategies, providing guidance on implementation of assessment requirements.
- Training Package developer's quality assurance process for companion volumes.