



Australian Government

MARC048 Monitor and manage vessel operations

Release: 2

MARC048 Monitor and manage vessel operations

Modification History

Release 2. This is the second release of this unit of competency in the MAR Maritime Training Package.

- Minor statement changes in unit Application
- Minor statement changes in Assessment Conditions.

Release 1. This is the first release of this unit of competency in the MAR Maritime Training Package.

Application

This unit involves the skills and knowledge required to plan and oversee activities associated with the regulatory and operational requirements for the continued performance and safety of a coastal vessel.

It includes developing operational strategies and procedures, supervising crew compliance with regulatory requirements, planning resources for vessel operations, planning vessel operations logistics and evaluating operational processes.

This unit applies to people working in the maritime industry in the capacity of Master up to 45 metres Near Coastal.

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit.

This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Master of a commercial vessel up to 100 metres in length as specified in Marine Order 505.

Seafarers seeking certification should check with AMSA.

Pre-requisite Unit

Not applicable.

Competency Field

C – Equipment Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Develop operational strategies and procedures

1.1 Action plan is developed to provide a clear and coherent direction according to organisational goals and objectives

1.2 Work health and safety (WHS)/occupational health and safety (OHS) and environmental issues are identified, and strategies are implemented to minimise risk factors

1.3 Quality system is developed for vessel in line with industry standards, compliance and organisational requirements

1.4 Performance measures and operational targets are developed to conform with business plan

1.5 Procedures are established and implemented according to organisational and legislative requirements

1.6 Procedures are communicated to crew members

2 Supervise crew compliance with regulatory requirements

2.1 Regulatory body requirements are correctly interpreted and applied

2.2 Instructions for crew members are developed and implemented

2.3 Crew members are briefed

2.4 Liaison with regulatory body officials is undertaken

3 Plan resources for vessel operations

3.1 Vessel resource and equipment requirements are investigated and documented

3.2 Resource needs are prioritised and matched to vessel budget, and priorities are confirmed after consultation with crew members

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| | 3.3 | Procurement plan with prioritised purchasing is devised and resources are procured accordingly |
| 4 Plan vessel operations logistics | 4.1 | Operational work plans are developed |
| | 4.2 | Operations are checked to ensure optimum use of human and physical resources |
| | 4.3 | Tasks are implemented according to plans and specifications |
| | 4.4 | Operational plans are implemented and crew members are briefed as to roles and responsibilities |
| | 4.5 | Operational plans are documented and amended according to procedures and crew expectations |
| | 4.6 | Proposed variations are investigated and negotiated in consultation with crew members |
| 5 Evaluate operational processes | 5.1 | Operational progress is closely monitored against required quality of work and adherence to both budget and time schedule |
| | 5.2 | Opportunities for preventative or corrective changes are identified using outcomes of monitoring activities and feedback from crew members |
| | 5.3 | Preventative and/or corrective action is recommended and implemented |
| | 5.4 | Changes are communicated to appropriate persons in a logical and easily understood manner |
| | 5.5 | Changes are monitored to confirm improvement in crew efficiency |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit Mapping Information

This unit replaces and is equivalent to MARC012 Monitor and manage vessel operations.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>

Assessment Requirements for MARC048 Monitor and manage vessel operations

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- collecting, organising and understanding information related to vessel resource and logistic requirements
- communicating ideas and information to enable input from crew and understanding by crew of plans developed
- completing a review of, and updating the process for, vessel operations
- developing effective action plan that have regard to:
 - cargo plan
 - dry-docking and slipping operations
 - planned maintenance system
 - safety management plan
 - voyage planning
- developing operational targets, including:
 - completion of survey and docking operations and routine maintenance
 - key performance indicators (KPIs)
 - optimal fuel usage
 - passage planning to achieve safe and efficient routing
- liaising with other crew members on a range of operational issues and challenges
- monitoring and responding to compliance issues and measuring progress against agreed objectives
- planning and organising activities, including consulting with crew to determine resource and logistics requirements, and developing, implementing and reviewing operational plans
- undertaking a job safety analysis (JSA) for working in areas of high risk
- using information gathering techniques to determine crew requirements and developing strategies to address these.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- analytical tools
- budgets and estimation of material requirements
- decision-making models and techniques
- information gathering strategies
- logistics and procurement management techniques
- operational plan development, including:
 - docking and repair plans
 - managing confined space entry
 - passage planning
 - periodic survey requirements
- resource availability
- work health and safety (WHS)/occupational health and safety (OHS) and environmental issues.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training current at the time of assessment.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Practical assessment must occur in a workplace, or realistic simulated workplace, under the normal range of workplace conditions.

Simulations and scenarios may be used where situations cannot be provided in the workplace or may occur only rarely, in particular for situations relating to emergency procedures and adverse weather conditions where assessment would be unsafe, impractical or may lead to environmental damage.

Resources for assessment must include access to:

- applicable documentation, such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- tools, equipment, materials, personnel and personal protective equipment (PPE) that replicate and are currently used in industry.

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