



Australian Government

MARF022 Apply maritime resource management principles

Release: 1

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Modification History

Release 1. New unit of competency. Not applicable.

Application

This unit involves the skills and knowledge required to establish and maintain maritime resource management procedures in accordance with Australian and international regulations and guidelines.

The unit applies to personnel responsible for controlling the operation of the ship and for the care of persons on board.

The unit reflects the requirements of the International Maritime Organization (IMO) International Convention on Standards of Training, Certification and Watchkeeping Manila Convention (STCW) including the Tables A-II/1, A-III/1, A-II/2 and A-III/2.

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

Pre-requisite Unit

Not applicable.

Competency Field

F – Operational Quality and Safety

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1 Establish working systems and procedures

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| 1.1 | Principles of resource management are interpreted to establish the functions and responsibilities of the crew |
| 1.2 | Principles of resource management are interpreted to establish arrangements and procedures |
| 1.3 | Operations are planned, and arrangements and procedures applied according to regulatory requirements and company procedures |

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| | 1.4 | Working systems are documented as required and communicated to relevant personnel |
| | 1.5 | Schedules are developed with due consideration to crew's experience |
| 2 Assign resources and allocate duties | 2.1 | Current competency of crew is evaluated and appropriate measures are taken to ensure all personnel have the required level of competency |
| | 2.2 | Clear and unambiguous roles and responsibilities of crew are determined |
| | 2.3 | Crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals concerned |
| | 2.4 | Resources are allocated and assigned as needed in correct priority to perform necessary tasks to obtain and maintain situational awareness |
| 3 Manage personnel | 3.1 | Crew are informed of current and predicted vessel and operational status and external environment |
| | 3.2 | Operations are undertaken in accordance with established functions and responsibilities |
| | 3.3 | Effective communication is maintained with crew on matters relevant to safety and integrity of vessel |
| | 3.4 | Questionable decisions and/or actions are dealt with using an appropriate challenge and response |
| | 3.5 | Fatigue management strategies are applied |
| | 3.6 | Operations are monitored and appropriate action is taken if found to be in breach of established arrangements, regulations and procedures |

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.

Applicable procedures and codes must include:	• International Regulations for Preventing Collisions at Sea • ISM Code • relevant international, commonwealth, state and territory work health and safety/occupational health and safety (WHS/OHS) legislation • relevant sections of AMSA Marine Orders • relevant sections of the IMO STCW including the Manila Amendments
Documentation/records include one or more of the following:	• AMSA Marine Orders • company procedures • ICS Bridge Procedures Guide • IMO STCW including the Manila Amendments • International Safety Management (ISM) Code safety management system plans, procedures, checklists and instructions • navigational charts • operational orders • vessel log
Factors to be taken into account when establishing watchkeeping arrangements include one or more of the following:	• attention necessary when navigating in or near traffic separation schemes or other routeing measures • bridge or engine room must never be left unattended • operational status of bridge/engine room instrumentation, controls and alarms • professional competency and experience of vessel officers and crew and their familiarity with the vessel's equipment, procedures and manoeuvring capability • provision of unmanned machinery space (UMS) controls, alarms and indicators • proximity of navigational hazards • size of the vessel and the field of vision available from the conning position • traffic density and other activities occurring in the area in which the vessel is navigating • unusual demands on the watch arising from operational conditions • use and operational condition of navigational aids • weather and sea conditions, visibility and whether there is daylight or darkness • whether the vessel is fitted with an automatic steering system • whether there are radio duties to be performed

Fatigue management strategies include one or more of the following:

- appropriate dietary habits
- arranging to take a break when symptoms of fatigue are identified
- avoiding excessive consumption of alcohol prior to watchkeeping duties
- maintaining personal fitness and health
- recognition of symptoms of fatigue

Watchkeeping principles (as described in AMSA Marine Orders) must include:

- all necessary precautions must be taken to avoid polluting the marine environment
- assistance must be available to be summoned to the bridge or engine room if required by a change in the vessel's situation
- duties of look-out and/or helmsman must be kept separate
- look-out must give full attention to keeping a proper look-out and must not be given other duties which could interfere with the task
- proper look-out must be maintained at all times

Unit Mapping Information

No equivalent unit.

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 MARF022 Apply maritime resource management principles

Modification History

Release 1. New unit of competency.

Performance Evidence

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

- applying principles of resource management
- applying relevant work health and safety/occupational health and safety (WHS/OHS) requirements and work practices
- assessing competency and experience of vessel officers and crew, and their suitability for specific roles
- assisting team members to develop and maintain the required level of competency
- communicating effectively with others on issues, arrangements and requirements
- demonstrating effective leadership and management skills
- developing and implementing operating procedures
- establishing and maintaining appropriate internal and external communication systems
- establishing and managing operations on an operational commercial vessel in an appropriate range of contexts
- identifying and evaluating problems and determining appropriate courses of action
- investigating and arbitrating shipboard conflicts
- monitoring arrangements and taking appropriate action where there is an identified breach of established arrangements, regulations or procedures
- planning and coordinating timelines, tasks, prioritisation and workload
- reading, interpreting and applying instructions, procedures and information relevant to procedures and responsibilities
- recognising and interpreting signs of fatigue among crew and initiating appropriate action.

Knowledge Evidence

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

- cultural differences and how to deal with them
- effective decision-making techniques
- fatigue management principles and techniques
- functions and responsibilities of shipboard personnel management and training
- importance of situation awareness to decision making
- related international maritime conventions, recommendations, and national legislation
- resource management principles including:
 - allocation, assignment and prioritisation of resources
 - effective communication onboard and ashore
 - assertiveness and leadership, including motivation
 - obtaining and maintaining situational awareness
 - consideration of team experience, including decisions that reflect team experiences
- ways of assessing the current competency of vessel officers and crew, and their familiarity with the vessel's equipment, procedures, and manoeuvring capability
- WHS/OHS requirements and work practices.

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

Assessment must satisfy the National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) standards.

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.

Assessment must occur in workplace operational situations or where these are not available, in simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to:

- relevant documentation including workplace procedures, regulations, codes of practice and operation manuals
- tools, material, equipment and personal protective equipment currently used in industry.

Performance should be demonstrated consistently over time and in a suitable range of contexts.

Links

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