



**Australian Government**

# **MARA025 Monitor, loading, unloading, securing and stowage of cargo**

**Release: 1**

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## **Modification History**

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 manage the loading, stowage, securing and care of cargo during the voyage and the unloading of cargo, according to the cargo plan, organisational procedures and vessel stowage limitations.

This unit applies to people working in the maritime industry in the capacity of:

- Master of a commercial vessel less than 80 metres in length within the exclusive economic zone (EEZ)
- Master of a commercial vessel less than 500 gross tonnage (GT)
- Watchkeeper Deck.

## **Licensing/Regulatory Information**

Legislative and regulatory requirements are applicable to this unit.

- 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.

### **Near Coastal Qualifications:**

- This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Master less than 80 metres Near Coastal as defined in the Marine Order 505 (Certificates of competency - National Law) 2013.

### **Blue Waters Qualifications:**

- This unit is one of the requirements to obtain AMSA certification as a Master of a commercial vessel less than 500 gross tonnage (GT) 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).

## Pre-requisite Unit

Not applicable.

## Competency Field

A – Handling Cargo and Vessel Stability

## Unit Sector

Not applicable.

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes.

#### 1 Develop cargo plan

### PERFORMANCE CRITERIA

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

- 1.1 Cargo plan is developed to determine required cargo operations
  - 1.2 Characteristics of cargo being transported are identified and the type, severity and impact of the hazard posed by cargo on safety, the environment, vessel operations and personnel are established
  - 1.3 Cargo plan is evaluated to ensure regulations relating to hazardous materials/dangerous goods are observed
  - 1.4 Cargo plan is assessed to ensure incompatible cargo stowage is avoided
  - 1.5 Cargo plan is checked to ensure unloading sequence is effective
- #### 2 Prepare for loading
- 2.1 Holds are checked to ensure they are clean, dry and free of odour
  - 2.2 Safety arrangements are verified to ensure they are operational
  - 2.3 Supplies of cargo protection and securing material are reviewed to ensure there are sufficient available
  - 2.4 Bilge suction are protected before loading

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|----------|---|--|
|          | <b>2.5</b>                                  | Checks are made to ensure cargo is correctly identified, inspected and confirmed against documentation   |
|          | <b>2.6</b>                                  | Preparations for loading are monitored according to stowage plan and organisational procedures   |
|          | <b>2.7</b>                                  | Ballast discharge plan is identified and confirmed and appropriate actions to support this plan are undertaken   |
| <b>3</b> | <b>Supervise loading/unloading of cargo</b> |  |
|          | <b>3.1</b>                                  | Instructions are given to crew and stevedores involved in cargo loading/unloading according to cargo stowage plan  |
|          | <b>3.2</b>                                  | Compliance with regulations, procedures and instructions pertaining to type of cargo being handled is managed during loading/unloading operations              |
|          | <b>3.3</b>                                  | Loading/unloading is monitored to ensure loading rate is not exceeded  |
|          | <b>3.4</b>                                  | Vessel stability is observed during loading/unloading operations   |
|          | <b>3.5</b>                                  | Loading/unloading operations are checked against cargo plan  |
|          | <b>3.6</b>                                  | Cargo is secured according to cargo plan   |
|          | <b>3.7</b>                                  | Cargo handling documentation is completed according to organisational procedures and regulatory requirements   |
|          | <b>3.8</b>                                  | Transfer of cargo is monitored to prevent hazards  |
|          | <b>3.9</b>                                  | Gas monitoring equipment is regularly inspected and used according to organisational procedures, as required   |
| <b>4</b> | <b>Monitor care of cargo during voyage</b>  |  |
|          | <b>4.1</b>                                  | Plan for care of cargo during voyage is implemented according to organisational and customer requirements, and relevant regulations                            |
|          | <b>4.2</b>                                  | Ventilation and humidity control systems are checked   |
|          | <b>4.3</b>                                  | Actions required to maintain the safety and security of cargo during the voyage are initiated according to customer requirements and organisational procedures |
|          | <b>4.4</b>                                  | Compliance with safety and hazard minimisation procedures and regulations related to cargo care is managed at all times during the voyage to maintain the      |

- safety of personnel, cargo and vessel
- 4.5** Safety procedures are followed, and appropriate action is taken when defects or damage to cargo are detected
- 5 Take precautions to prevent pollution of the environment**
- 5.1** Procedures to prevent pollution are identified and observed at all times
- 5.2** Measures to prevent pollution during normal and emergency situations are applied according to regulatory requirements and organisational procedures
- 5.3** All relevant information is immediately reported to appropriate persons when a vapour leak or cloud is detected or a malfunction has occurred that poses a risk of a vapour leak or cloud
- 5.4** Shore-based response personnel are promptly notified when a vapour leak or cloud occurs

## 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 MARA010 Manage loading, unloading and stowage of cargo

## Links

Companion Volume implementation guide can be found in VetNet -

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