



Australian Government

MARF056 Provide Vessel Traffic Services

Release: 1

MARF056 Provide Vessel Traffic Services

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 conduct the provision of Vessel Traffic Services (VTS) as described in Module 2 of International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Model Course C0103-1 Vessel Traffic Services Operator Training to contribute to the safety of life at sea, improve the safety and efficiency of navigation, and support the protection of the environment by mitigating the development of unsafe situations through:

- providing timely and relevant information on factors that may influence ship movements and assist onboard decision-making
- monitoring and managing ship traffic to ensure the safety and efficiency of ship movements
- responding to developing unsafe situations.

Key elements include:

- legislative and regulatory requirements
- operating in a VTS environment
- delivering the purpose of VTS.

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

- Vessel Traffic Services (VTS) Operator

IMO Regulatory framework

International Convention for the Safety of Life at Sea (SOLAS) V/12 states that Contracting Governments planning and implementing VTS shall, wherever possible, follow the guidelines developed by the International Maritime Organization (IMO).

IMO Resolution A.1158(32) Guidelines for VTS states:

- VTS personnel should only be considered competent when appropriately trained and qualified for their VTS duties. This includes, amongst other things, that personnel have satisfactorily completed generic VTS training approved by a competent authority.
- IALA publishes standards and associated recommendations, guidelines and model courses specifically related to the establishment and operation of VTS contribute to achieving worldwide harmonization of VTS.
- Contracting Governments are encouraged to take into account IALA standards and associated recommendations, guidelines and model courses specifically related to the operation of VTS.

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this qualification.

- Marine Order 64 (Vessel Traffic Services)
- RTOs must:
 - demonstrate compliance with IALA Standard 1050 – Training and Certification
 - take into account IALA standards and associated recommendations, guidelines and model courses, including G1089, G1132 and G1141.

Pre-requisite Unit

MARC063 Operate Vessel Traffic Services (VTS) equipment

Competency Field

F – Operational Quality and Safety

Unit Sector

Maritime Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Explain legislative and regulatory requirements, roles and responsibilities relevant to VTS

PERFORMANCE CRITERIA

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

- 1.1** Fundamental principles of the IMO regulatory regime related to the provision of VTS, including roles and responsibilities, SOLAS V/12, IMO Resolution A.1158(32) and IALA Standards and the provisions of Australian Law in relation to VTS, are explained
- 1.2** Relevant IMO conventions, resolutions and circulars, including United Nations Convention on the Law of the Sea (UNCLOS), International Convention for the Prevention of Pollution from Ships (MARPOL), Search and Rescue Convention (SAR), International Convention on Facilitation of International Maritime Traffic (FAL) and International Maritime Dangerous Goods (IMDG) Code are identified
- 1.3** Implications of duty of care and liability related to the

		provision of VTS are identified
	1.4	Roles and responsibilities related to VTS, including competent authority, VTS provider, master and allied services, are explained
2 Operate in a VTS environment	2.1	Considerations that influence the monitoring and management of ship traffic are identified
	2.2	Principles of waterway and traffic management are identified
3 Deliver the purpose of VTS	3.1	Purpose of VTS and its application, including providing timely and relevant information on factors that may influence ship movements, assisting onboard decision making, monitoring and managing ship traffic to ensure the safety and efficiency of ship movements, and responding to developing unsafe situations, are applied
	3.2	Conformance with IALA guidance, including guidelines for the provision of a VTS, VTS voice communications and workplace procedures for delivering VTS, is identified

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.

Non-essential conditions may be found in the MAR Maritime Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a new unit. 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 MARF056 Provide Vessel Traffic Services

Modification History

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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:

- explaining legislative, regulatory requirements, roles and responsibilities applicable to international and national legislative and regulatory framework associated with Vessel Traffic Services (VTS), including:
 - relevant provisions of International Convention for the Safety of Life at Sea (SOLAS) V/12
 - International Maritime Organization (IMO) Resolution A.1158
 - International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Standards and guidelines
- monitoring and organising traffic, including:
 - carrying out tasks safely, effectively and in a timely manner to meet VTS requirements
 - conducting interactions between VTS and participating ships according to workplace procedures and requirements
 - conducting situational analysis to maintain safe and efficient waterways
 - providing timely and relevant information to assist with onboard decision making to meet VTS requirements
 - responding in a timely manner to developing unsafe situations
- monitoring and managing traffic in the VTS area
- operating in a VTS environment, including applying the principles of waterway and traffic management, and identifying considerations that influence traffic movement
- using equipment according to workplace procedures and requirements.

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:

legislative and regulatory requirements, roles and responsibilities, including:

- applicable international and national legislative framework associated with VTS, including:
 - SOLAS V/12, IMO Resolution A.1158(32) and IALA Standards

- national legislative and regulatory framework for VTS, including Australia's:
 - legal basis for VTS that gives effect to regulation V/12
 - regulatory framework for establishing and operating VTS
 - regulatory requirements for participating ships to:
 - provide reports and information required by VTS
 - comply with the requirements and instructions given by VTS
 - compliance and enforcement framework for VTS
 - legal liabilities of VTS functions
 - maritime organisations related to VTS
 - roles and responsibilities of, and relationships between, ship masters, marine pilots, VTS and allied services
 - regulatory provisions for VTS under the Navigation Act 2012 and relevant state and territory legislation under which VTS provider operates
- IMO conventions, resolutions and circulars, including:
 - United Nations Convention on the Law of the Sea (UNCLOS) (innocent passage, freedom of navigation, areas, and zones)
 - SOLAS V-10, 11 and 13
 - International Convention for the Prevention of Pollution from Ships (MARPOL)
 - Search and Rescue Convention (SAR)
 - International Convention on Facilitation of International Maritime Traffic (FAL)
 - International Maritime Dangerous Goods (IMDG) Code

principles of waterway and traffic management, including:

- allocation of water space:
 - authorising traffic movements
 - prioritisation of movements
 - ship domain
 - traffic clearances
- criteria (factors) which determine the parameters for the safe passage and movement of ships:
 - safe air draft
 - safe channel width and principles of channel design
 - safe under keel clearance
 - shipping movements/traffic authorisation
 - water reference level
- planning:
 - routeing:
 - anchorage areas
 - channel geography
 - obstructions
 - passage (voyage) plan
 - traffic restricted areas

- type of traffic (vessel and cargo characteristics)
- information
- risk management and mitigation

traffic monitoring and management of vessel traffic, including:

- options for managing traffic:
 - aids to navigation
 - sailing/shipping or route plans
 - traffic routing measures, including traffic separation schemes and criteria
- responses to developing unsafe situations:
 - a ship unsure of its route or position
 - a ship deviating from the route
 - a ship requiring guidance to an anchoring position
 - a ship that has defects or deficiencies, such as navigation or manoeuvring equipment failure
 - severe meteorological conditions (e.g. low visibility, strong winds)
 - a ship at risk of grounding or collision
 - emergency response or support for emergency services
- situational awareness:
 - conflict assessment
 - determination of relevant traffic
 - tools for determining traffic-risk collision
 - traffic patterns
 - procedures for intervention
 - provision of navigational support

information from and to ships

VTs operational area, including:

- definition of the VTS area:
 - area limits, boundaries, separation zones, shipping lanes and channels
 - prohibited or dangerous areas and safety zones
- geographical constraints

VTs policies and workplace procedures.

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 Organisations 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.

Assessment must occur in workplace operational situations, where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Resources for assessment must include access to:

- applicable documentation such as policies, workplace procedures, regulations, codes of practice and operation manuals
- applicable VTS equipment and systems.

Links

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