



Australian Government

MARB049 Use internal communication systems, operate computers and computer networks on ships

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 use internal communication systems, operate computers and computer networks on the ship.

It includes reviewing internal communication systems and computer networks, installing and maintaining the networks and systems on board a ship.

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

- Electro-Technical Officer (STCW Electro-Technical Officer Unlimited)
- Engineer Class 1 (STCW Chief Engineer Unlimited)
- Engineer Class 2 (STCW Second Engineer Unlimited).

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 Electro-Technical Officer (STCW Electro-Technical Officer Unlimited), Engineer Class 1 (STCW Chief Engineer Unlimited) or Engineer Class 2 (STCW Second Engineer Unlimited) 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).
- Those 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.

Pre-requisite Unit

Not applicable.

Competency Field

B – Equipment Checking and Maintenance

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Review ship information technology devices

2 Manage maintenance of the computer network and internal communication systems

3 Maintain computer

PERFORMANCE CRITERIA

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

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| 1.1 | Current network requirements are determined from ship requirements and specifications |
| 1.2 | Ensure network is compatible with current shipboard work practices |
| 1.3 | Shipboard information technology devices are checked and handled in accordance with manufacturer specifications |
| 1.4 | Network data processing is evaluated in accordance with ship requirements and network capability |
| 2.1 | Computer network hardware and software control and security records are maintained in accordance with procedures |
| 2.2 | Network and internal communication faults are responded to and rectified in accordance with ship requirements |
| 2.3 | Major problems are reported in accordance with procedures |
| 2.4 | Software is filed and stored in accordance with procedures |
| 2.5 | Measured and testing devices are used to verify correct operation of network and systems |
| 3.1 | Information technology equipment is obtained and installed in accordance with ship requirements and |

networks on the ship	manufacturer specifications
	3.2 Proportional-integral-derivative (PID) controller, personal computer (PC)-based control systems and programmable logic controller (PLC) are adjusted in accordance manufacturer specifications
	3.3 New and updated software is installed in accordance with network requirements
	3.4 User network access is established effectively and efficiently
	3.5 Bridge and engine room information technology devices are maintained in accordance with industrial standards and manufacturer specifications
4. Transmit and receive messages	4.1 Transmission of messages are consistently undertaken in accordance with required internal communication protocols
	4.2 Reception of internal messages are acknowledged and actioned in accordance with internal communication protocols
	4.3 Clear and concise communication is used when using internal communication systems
5. Complete records	5.1 User and security records are maintained in accordance with shipboard confidentiality requirements
	5.2 Documentation and drawings are updated and processed in accordance with ship requirements

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 is a new unit. No equivalent unit.

Links

Companion Volume implementation guide can be found in VetNet -

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