



**Australian Government**

# **PUAOPE009 Navigate in an aquatic environment**

**Release: 1**

# PUAOPE009 Navigate in an aquatic environment

## Modification History

**Release 1.** This is the first release of this unit of competency in the Public Safety Training Package.

## Application

This unit of competency involves the skills and knowledge required to navigate a vessel in an aquatic environment including inland rivers, lakes, dams, surf zones and oceans, using a range of navigation equipment and techniques, while undertaking a search and rescue.

It includes determining current location, destination and resources; determining and planning a safe route or course; navigating to a destination; returning to home port and completing post navigational activities.

The unit is applicable in a range of open or closed water situations where a vessel of varying sizes is required to navigate. It typically applies to personnel from emergency services, volunteer organisations and/or organisations where surveillance and rescue operations in an open or closed water environment is required.

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

## Pre-requisite Unit

Not applicable

## Competency Field

Operations

## Unit Sector

Public Safety

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes.

#### 1 Determine current

### PERFORMANCE CRITERIA

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

#### 1.1 Incident location and task information are obtained from

|                                                    |                                                                                                                                                          |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>location, destination and resources</b>         | vessel in distress or organisational base station                                                                                                        |
| <b>1.2</b>                                         | Maps, charts, electronic navigation aids and equipment are prepared and made ready for use                                                               |
| <b>1.3</b>                                         | Drift, leeway and tidal influences are identified and recorded on charts                                                                                 |
| <b>1.4</b>                                         | Current location and estimated destination of vessel in distress are plotted on a chart using coastal navigational techniques within accepted tolerances |
| <b>2 Determine and plan a safe route or course</b> | <b>2.1</b> Operational plan is compiled including intercept and rendezvous chart work                                                                    |
| <b>2.2</b>                                         | All plots are recorded on a chart allowing for variables and weather conditions, in accordance with organisational operating procedures                  |
| <b>2.3</b>                                         | Rescue vessel's speed in sea and weather conditions is estimated and allowances are made to provide for an estimated time of arrival                     |
| <b>2.4</b>                                         | Hazards en-route to the incident are researched to determine a safe route or course                                                                      |
| <b>3 Navigate to destination</b>                   | <b>3.1</b> Route or course is checked, monitored and maintained using navigational aids and with alternates plotted, if required                         |
| <b>3.2</b>                                         | Helmsman is instructed to follow planned route or course and crew look outs are instructed to report any sightings including other marine traffic        |
| <b>3.3</b>                                         | Regular position fixes are undertaken to determine rescue vessel's position relative to planned route                                                    |
| <b>3.4</b>                                         | Search and rescue patterns are initiated within incident area where distressed vessel or survivors are believed to be located                            |
| <b>3.5</b>                                         | En-route and arrival position reporting information is communicated to organisational base station                                                       |
| <b>4 Return to home port</b>                       | <b>4.1</b> Course or route to return to home port with distressed vessel in tow or with survivors aboard is set, on resolution of the incident           |
| <b>4.2</b>                                         | Navigational techniques are used to ensure a safe and                                                                                                    |

timely return to home or alternate port, as instructed by state and/or territory authorities

## **5 Complete post navigational activities**

- 5.1** Navigation reports are completed, in accordance with organisational procedures
- 5.2** Navigational equipment is recovered, reset, updated and serviced, in accordance with operational procedures and manufacturers' specifications

## **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 Companion Volume Implementation Guide.

## **Unit Mapping Information**

This unit replaces and is equivalent to PUAOPE009C Navigate in an aquatic environment.

## **Links**

PUA Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>