

Overview

This standard covers the competence required to support safe navigation within port areas. This includes the assembly, laying and retrieving of navigation buoys, under supervision, as well as mooring for ship tiers and general moorings for yachts and other small craft within an enclosed port area. It also includes establishing the depth of water, under supervision, in navigable channels and other areas, as part of hydrographic surveys. This standard is also about maintaining navigable channels and water areas such as berths within the port area. It includes working under supervision to keep such areas clear of flotsam and other hazards, as well as dredging channels.

It is often necessary for individuals involved in these activities to be competent in handling small craft. The handling of such craft is covered by another standard.

Target Group

This standard applies to port workers, who under supervision, support safe navigation within port areas

There are 3 elements in this standard:

- Position moorings and lay buoys (Performance Criteria 1-8)
- •

Maintain clear channels and water areas (Performance Criteria 9-18)

• Establish water depths (Performance Criteria 19-26)



Performance criteria

You must be able to:

- 1. obtain all the equipment for assembly, laying and retrieval operations
- 2. conduct a pre-use check before leaving the shore to establish that all equipment functions are working within approved operating parameters before beginning operations, addressing any queries or faults according to organisation procedure
- 3. assemble moorings and buoys according to operational procedure and within agreed timescales, ensuring that:
 - 1. the mooring is of the right length
 - 2. the sinker or anchor is of the correct weight for the mooring or buoy
 - 3. swivels are positioned
 - 4. shackles are housed, in accordance with standard operating procedures
- 4. identify the location and water depth where the moorings or buoys are to be positioned, and lay them in position
- 5. ensure that the handling of materials and equipment is undertaken with care to avoid undue wear and tear
- 6. refer any operational difficulties and defects in equipment to the relevant person
- 7. ensure that craft and other work areas are kept clean, tidy and free of obstructions
- 8. ensure that all required records are maintained and up to date
- 9. undertake regular visual and hydrographic inspections of the port's navigable channels
- 10. respond to reports of obstructions in line with organisational procedures
- 11. report actual and potential obstructions or hazards in navigable channels
- 12. identify, and obtain, the appropriate gear and equipment required to carry out clearance operations, and confirm that it is in good working order before leaving the shore
- 13. establish and confirm clear communication links with relevant persons before leaving the shore
- 14. remove hazards or obstructions following a procedure that accounts for weather conditions, licencing or permissions and a safety management system that minimises risk to self and others.
- 15. identify the area to be dredged, and operate dredging equipment ensuring that dredging occurs at the required level
- 16. dispose of items and dredged materials removed from the water according to organisational procedure



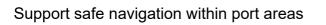
- 17. report any suspicious items to the relevant person
- 18. ensure that working areas above water are clean, tidy and free from obstructions on completion of the task
- 19. obtain all of the equipment for establishing the depth of water and confirm that it is fit for purpose before leaving the shore
- 20. identify the areas of water where depth measurements are required, before leaving the shore
- 21. monitor and record the vessel's position continuously, together with the height of the tide, throughout the survey operations
- 22. mark the depth-gauging equipment at regular intervals, and crossreference it to known positions
- 23. apply corrections in establishing water depths allowing, for vessel draught, heave, pitch and roll, the depth of the sensor, and the height of the tide, and record these corrections
- 24. use all equipment in line with manufacturers' instructions, ensuring that it is calibrated, and carrying out all recommended error checks
- 25. refer any operational difficulties, and defects in equipment, to the relevant person
- 26. identify any variations from charted water depths and report to the relevant person



Knowledge and understanding

understand:

You need to know and 1. the legal responsibilities for maintaining own and others' health and safety in the workplace 2. the requirements placed upon the individual and the organisation by current legislation relevant to supporting safe navigation within port areas 3. current industry guidance relevant to supporting safe navigation within port areas 4. own organisation's policies, procedures and working practices relevant to supporting safe navigation within port areas, including those for positioning mooring and laying buoys, maintaining clear channels and water areas and establishing water depths 5. the purpose and limitations of the components of mooring gear, including, buoys, swivels, anchors, chains, risers and sinkers 6. how to test and maintain mooring gear 7. how a craft's stability may be affected by lifting operations 8. the operation and limitations of the principal types of lifting and hauling gear used in ports 9. organisational requirements for addressing and reporting difficulties and faults in craft, gear and equipment 10. organisational inspection regime for lifting equipment 11. the safe working limits of the equipment used in positioning moorings and laying buoys within own organisation 12. the typical types of obstructions and hazards found within ports, and methods for dealing with them 13. how to interpret weather information and how different types of adverse weather can impact upon craft movements within port areas 14. the importance and impact of the relevant legal requirements of the dredging licence and upon dredging operations 15. organisational requirements for dealing with reports of hazards and obstructions within navigable channels 16. the local geography, including advertised water depths, and water conditions, and their impact upon the movement of crafts, obstructions and hazards within the port 17. how to apply the theory of chart work and navigation techniques appropriate to locating areas within a port 18. how to interpret weather information and understand how different types of adverse weather can impact upon vessel movements in port areas, and how heave, pitch and roll can impact upon the transducer head 19. buoyage systems and navigation lights 20. depth-gauging methods 21. how to operate communications, depth measurement, position finding, and tidal measurement equipment used within your port 22. organisational procedures for reporting operational difficulties and defects in equipment occurring when establishing the depth of water 23. the local geography and water conditions, including navigable channels and tides, and their consequence for establishing water depths





Developed by	Port Skills & Safety
Version Number	3
Date Approved	01 Dec 2020
Indicative Review Date	01 Dec 2025
Validity	Current
Status	Original
Originating Organisation	Port Skills and Safety
Original URN	PSSPO106
Relevant Occupations	Port Operations
Suite	Port Operations
Keywords	ports, port operations, cargo, loading, unloading