



# End Point Assessment Specification

Apprenticeship standard: ST0765 Harbourmaster

Link to apprenticeship standard:

<https://skillsengland.education.gov.uk/apprenticeships/st0765-v1-0>

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# 1. Qualification objective

The broad purpose of the occupation is to enforce regulations and industry codes of practice in a particular port, harbour or marina in order to ensure the safety of vessel navigation, the security of the harbour, the protection of the marine environment, and the safe operation of the port facilities. The Harbour Master is accountable to the Duty Holder (a person whose sole responsibility is to ensure that the port complies with the Port Marine Safety Code) for the safety of navigation within the harbour jurisdiction and to the Board for marine governance. In their daily work, an employee in this occupation interacts with ship masters, enforcement officers, stakeholders, tenants, members of the public, agents, customers, marine pilots as well as port operations and commercial staff.

## 2. Prior qualifications

### a. Qualifications which a learner must have completed before taking the qualification

Prior to undertaking this end-point assessment, apprentices must have obtained the following qualifications/certificates as required by the Apprenticeship Standard and EPA plan:

There are no mandatory certifications

IAMI do not stipulate any additional qualifications that an apprentice must have completed prior to taking the qualification, additional qualifications are at the discretion of the individual employers.

### b. Prior knowledge, skills or understanding which the Learner is required to have before taking the qualification

IAMI do not stipulate any additional knowledge, skills or understanding beyond those outlined in the Apprenticeship Standard that an apprentice must have completed prior to taking the qualification. Required prior knowledge, skills or understanding is at the discretion of the individual employers.

Knowledge, skills or understanding as required by this apprenticeship:

#### **Knowledge**

**K1:** Current international and national regulations, codes of practice and guidance relating to marine safety management

**K2:** Marine Safety Management Systems which ensure that every port complies with mandatory rules and regulations and follow codes of practice and guidelines

**K3:** Policies required to underpin a Marine Safety Management System

**K4:** How to evaluate evidence to support sound judgement

**K5:** Effective oral and written communication strategies and a working knowledge of the terminology used in this occupation

**K6:** How to commission and implement an independent internal and an independent external audit

**K7:** Principles of change control and auditable record keeping

**K8:** National and international marine legislation applicable to ports

**K9:** Local legislation, bylaws and direction applicable to ports and the processes for updating these

**K10:** How to develop and operate marine enforcement policies and procedures

**K11:** How to collect evidence, take statements and initiate criminal prosecutions in-line with national regulations

**K12:** Enforcement options available as an alternative to prosecution

**K13:** Current regulatory reporting requirements and guidance relating to marine accidents/incidents

**K14:** How to conduct systematic, well-documented investigations and produce remedial recommendations based on report findings

**K15:** Current international and national regulations, codes of practice and guidance relating to marine conservancy

**K16:** How to use formal Risk Assessment to establish the need for activities including (but not limited to) surveying, dredging, the use of Aids to Navigation, marking and wreck recovery

**K17:** Operating procedures and the administration involved in port recreational activities

**K18:** Current international and national regulations, codes of practice and guidance relating to emergencies and pollution incidents

**K19:** The powers and working practices of statutory and other organisations that may be concerned with responding to a port emergency or pollution incident

**K20:** The nature of the interaction between the port and statutory or other organisations, including the extent of the port's obligation to cooperate on emergencies or pollution incidents

**K21:** How to develop and manage effective relationships with statutory and other organisations (including the media) involved in an emergency or pollution incident

**K22:** Principles of business continuity planning

**K23:** Current international and national regulations, codes of practice and guidance relating to pilotage, vessel traffic services and navigation

**K24:** What alternate risk management and safety management systems might typically be required when a pilotage service is assessed to be unnecessary

**K25:** What alternate risk management and safety management systems might typically be required when a vessel tracking service is assessed to be unnecessary

**K26:** The powers and working practices of a Competent Harbour Authority and other organisations that may be concerned with pilotage services

**K27:** How a pilotage service is typically administered

**K28:** Procedures for promoting and conducting pilotage directions

**K29:** The powers and working practices of a Competent Harbour Authority and other organisations that may be concerned with vessel traffic services

**K30:** How a vessel traffic service is typically administered

**K31:** The nature, purpose, powers and working practices of statutory and other organisations that may be concerned with vessel traffic services

**K32:** What port activities are likely to have an impact on the environment, and what adverse consequences could potentially arise from those activities

**K33:** The types and classification of port environmental and conservational features

**K34:** Current international and national regulations, codes of practice and guidance relating to the management of the port environment, including requirements for licenses and consents

**K35:** Typical conservation measures a port might use to protect the environment within its jurisdiction

**K36:** The typical format, content and issues addressed in maintenance and capital dredging policies and plans

**K37:** Current international and national regulations, codes of practice and guidance relating to port security

**K38:** Operating procedures and the administration involved in a local port security plan

**K39:** How to design and run a port security exercise

**K40:** How a marine department is typically constituted and managed

**K41:** Who the stakeholders and workforce representatives are in the marine organisation

**K42:** Current employment regulations, guidance and codes affecting marine employees

**K43:** The principle revenue and expenditure streams of the port and the contribution made to port business by the marine function

**K44:** The factors likely to affect the financial performance of a port

**K45:** The principles and practice of effective change management, quality management, customer service, business networking and project management

**K46:** Current international and national regulations, codes of practice and guidance relating to health & safety in the workplace

**K47:** The port marine operations and activities typically undertaken in the physical environment for which the harbour master has responsibility and authority and/or which might impact on safety

## Skills

**S1:** Develop, operate, evaluate and amend in light of new information a fully functional Marine Safety Management System

**S2:** Develop and implement auditable port marine policies, plans and procedures based on sound evidence and delivers an inclusive and effective service, consulting with stakeholders who might be affected

**S3:** Implement a system for formally reviewing the appropriateness and effectiveness of local and nationally conferred legislation at pre-defined periods

**S4:** Identify and apply for new powers as needed to facilitate safe and efficient port marine activities

**S5:** Operate an Enforcement Policy in line with statutory and local powers and industry good practice including: - systematically collecting, preserving and documenting evidence and witness statements - take enforcement action up to criminal prosecution - initiate criminal prosecution

**S6:** Conduct investigations; systematically collect, preserve and documenting evidence and witness statements

**S7:** Communicate findings and proposals to appropriate stakeholders

**S8:** Implement and monitor remedial action appropriate to incident findings

**S9:** Manage the provision, maintenance and inspection of aids to navigation

**S10:** Develop a comprehensive method for the provision of timely and accurate navigational safety information and warnings to maintain the safe passage of vessels

**S11:** Ensure accurate hydrographic surveys are undertaken, communicate the information to affected stakeholders and maintain accurate hydrographic and hydrological records

**S12:** In consultation with affected stakeholders, develop, exercise review and amend in light of new information an integrated Response Plan for port emergencies. Communicate the plan to affected stakeholders

**S13:** In consultation with affected stakeholders, develop, exercise, review and amend in light of new information, a port counter-pollution plan to minimise navigational, environmental, commercial, and reputational impact. Communicate the plan to affected stakeholders

**S14:** Determine the need for, and scope of, port pilotage services based on a formal, navigational risk assessment

**S15:** Produce documented findings and recommendations in line with accepted practice. Circulate findings and outputs to affected stakeholders

**S16:** Identify and implement suitable and sufficient alternate navigational risk management measures where a pilotage service is assessed to be unnecessary

**S17:** Determine the need for, and scope of, vessel traffic services based on a formal, navigational risk assessment

**S18:** Identify and implement suitable and sufficient alternate navigational risk management measures where a vessel traffic service is assessed to be unnecessary

**S19:** Develop, comprehensive procedures and rules for the administration of pilots and operation of a pilotage service in consultation with stakeholders and communicate findings and outputs to affected stakeholders

**S20:** Manage a pilotage service appropriate to the port, that takes account of pilotage regulations, guidance and codes

**S21:** Review procedures and rules for the administration of pilots and operation of a pilotage service periodically and in light of new information

**S22:** Develop comprehensive procedures for the operation of a vessel traffic service or local port information service appropriate to the port, in consultation with stakeholders and communicate them to affected stakeholders

**S23:** Implement a vessel traffic service or local port information service appropriate to the port that takes account of local context, regulations, guidance and codes

**S24:** Review procedures and rules for the operation of a vessel traffic service or local port information service periodically and in light of new information

**S25:** Manage the potential risk posed by dangerous and polluting substances and dangerous vessels

**S26:** Manage (and/or monitor) the safe and effective provision, of other marine services such as towage and mooring

**S27:** Develop, operate, evaluate and amend in light of new information, a fully functional port environmental Safety Management System which incorporates management of maintenance and capital dredging and port waste

**S28:** Assess the risk and mitigation effect of conservation measures

**S29:** Conduct a port security assessment in consultation with stakeholders to establish the type and level of security required and develop appropriate port security policies and plans

**S30:** Manage port security and cooperate with enforcement and other relevant agencies to ensure effective port security, complying with regulatory security requirements

**S31:** Assess operational needs to identify the resourcing structure and skill levels required to deliver a safe and efficient service

**S32:** Manage employees, including (but not limited to): - recruitment and selection - training - professional development - performance management - succession planning

**S33:** Develop and implement effective employee communications, including dialogue with workforce representatives

**S34:** Develop and manage a port marine budget

**S35:** Plan, lead and implement change within the Harbour Master's jurisdiction

**S36:** Contribute to quality management processes relating to port management

**S37:** Deliver effective customer service relating to port management

**S38:** Promote the port in business and other forums

**S39:** Manage projects to quality, time and cost

**S40:** Conduct a formal risk assessment to identify correctly all hazards and levels of risk associated with land-side marine employee work place activities, in consultation with stakeholders

**S41:** Operate a formally documented Safety Management System (SMS) ensuring controls are monitored and maintained and risks remain as low as reasonably practicable

### **Behaviours**

**B1:** Is self-motivated, with the ability to work independently and with integrity

**B2:** Takes personal responsibility for their actions and shows resilience

**B3:** Works well under pressure and to tight deadlines, delivering quality results

**B4:** Leads by example, demonstrating impeccable safe behaviours at all times

**B5:** Encourages team effort and develops and interdependent culture

**B6:** Implements best practice in technical and safety management

**B7:** Promotes and adopts a safety culture within the organisation, where challenges are welcomed and valued

**B8:** Takes responsibility for effective problem-solving, emergency response and safeguarding the company's reputation

### **c. Units which a Learner must have completed before the qualification will be awarded and any optional routes**

IAMI do not stipulate any additional units beyond those listed in the Apprenticeship Standard that an apprentice must have completed prior to taking the qualification. Additional required units are at the discretion of the individual employers.

Units required as per this standard:

There are no mandatory units for this standard

There are no optional units or pathways for this standard

d. Other requirements which a Learner must have satisfied before the Learner will be assessed or before the qualification will be awarded

IAMI do not stipulate any additional requirements beyond those listed in the Apprenticeship Standard that an apprentice must have completed prior to taking the qualification. Additional requirements are at the discretion of the individual employers.

### 3. Assessment

a. Knowledge, skills and understanding which will be assessed as part of the qualification

All KSBs listed above

b. The method of any assessment and any associated requirements relating to it

- Project Report and Presentation
- Professional Discussion
- Written Exam

c. Criteria against which Learners' levels of attainment will be measured (such as assessment criteria or exemplars),

The assessment has been designed in accordance with the Apprenticeship End-Point Assessment plan found here:

[https://skillsengland.education.gov.uk/media/3710/st0765\\_harbourmaster\\_l6\\_assessment-plan.pdf](https://skillsengland.education.gov.uk/media/3710/st0765_harbourmaster_l6_assessment-plan.pdf)

For each assessment method, the criteria against levels of attainment will be measured are:

**Written assessment** - Where the EPA required a closed book examination, this is created by qualified and experienced assessors and the questions internally moderated. The randomly selected question paper is transmitted securely by the IAMI Admin to the employer or assessment centre nominated by them following their agreement to invigilate the assessment. The time allowance for each paper is printed on each examination paper and must be adhered to by the invigilator.

On completion of the assessment all examinations scripts will be sent on-line to the nominated assessor, together with the associated model answer and marking scheme.

The marking scheme guides the assessor (as assigned marker) on which answers are assigned what marks allocated to each paper, so that all credit worthy responses for that question are rewarded appropriately. This marking scheme is also used to determine whether a second marker is required.

Each written exam will consist of 5 equally graded questions which the apprentice can achieve a maximum of 100 marks.

The assessment grading is as follows:

- Distinction: 84-100
- Pass: 70-83
- Fail: 0-69

### **Professional discussion**

This assessment is created randomly from a bank of moderated questions contained within the IAMI question bank, the assessment is underpinned by the portfolio, the assessor may ask the apprentice to use this to assist with their answers. The assessment contains 10 questions and grading is as follows:

#### 1. Individual question grading

Distinction: 75% or over of the specimen answers provided at the pass grade plus 50% or over of the specimen answers provided at the distinction grade for that question should be given by the apprentice

Pass: over 50% of the range of specimen answers provided at the pass grade for that question should be given by the apprentice OR 50% of the pass grade answers plus at least one answer from the distinction grade.

Fail: less than 50% of the range of specimen answers provided at the pass grade for that question. For example, if four (4) specimen answers are provided and the apprentice provide only one (1) or less of these model answers then they will have failed that question.

#### 2. Assessment grading:

Distinction: where over 50% of the correctly answered questions contains answers at the distinction level, and 90% or over of the questions have a pass grade, then an overall distinction grade will be awarded.

Pass: The apprentice has demonstrated competency in the required KSBs for this standard.

Fail: The apprentice has not demonstrated competency in the required KSBs for this standard.

### **Project and presentation**

For this assessment two assessors are assigned to each apprentice. For the project IAMI will provide guidance to the apprentice on the scenario-based project report of 8,000 words that investigates a specific problem, recurring issue, and/or idea/opportunity for their employer.

On completion of the project report, each apprentice will present a 20-minute presentation on their project, then answer questions from the primary and secondary assessor.

Each assessor will attend the apprentice presentation, and each assessor will ask 10 based on their review of the project report. These questions may be supplemented by an additional question derived from the presentation. This presentation will be recorded.

Each assessor will individually assess the project and the presentation against the EPA grading criteria for Fail / Pass / Distinction, identifying where each criterion has been met for specific K, S and B for each of three assessed areas. The assessor's marks will be collated by the assigned IAMI Moderator and a post presentation meeting arranged between the assessors to decide on the final grading.

**Where any EPA can not be completed, and therefore no grade is awarded, then this must be brought to the attention of the IAMI Secretariat at [secretary@iami.org.uk](mailto:secretary@iami.org.uk)**

#### d. Specimen assessment materials

Due to the practical nature of the assessments, specimen assessment materials are not available.

### 4. Specified levels of attainment

Distinction/Merit/Pass/Fail

### 5. Qualification level

Level 6