

# **End-point assessment plan for the Harbour Master apprenticeship standard**

•	Level of this end point assessment (EPA)	Integrated
ST0765	6	No

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## Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Harbour Master apprenticeship standard. It is for end-point assessment organisations (EPAOs) who need to know how EPA for this apprenticeship must operate. It will also be of interest to Harbour Master apprentices, their employers and training providers.

Full time apprentices will typically spend 48 months on-programme (before the gateway) working towards the occupational standard, with a minimum of 20% off-the-job training. All apprentices will spend a minimum of 12 months on-programme.

The EPA period should only start, and the EPA be arranged, once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, all of the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPAO.

All pre-requisites for EPA assessment methods must also be complete and available for the assessor as necessary.

As a gateway requirement and prior to taking the EPA, apprentices must complete all approved qualifications mandated in the Harbour Master occupational standard.

#### These are:

English and Mathematics at level 2

For level 3 apprenticeships and above apprentices without English and mathematics at level 2 must achieve level 2 prior to taking their EPA.

The EPA must be completed within an EPA period lasting typically 6 months, beginning when the apprentice has passed the EPA gateway.

The EPA consists of 3 discrete assessment methods.

The individual assessment methods will have the following grades:

#### Assessment method 1: Project Report & Presentation with questioning

- Fail
- Pass
- Distinction

#### Assessment method 2: Professional Discussion underpinned by Portfolio

- Fail
- Pass

#### **Assessment method 3:** Written Exam

- Fail
- Pass
- Distinction

Performance in the EPA will determine the overall apprenticeship standard and grade of:

- Fail
- Pass
- Merit
- Distinction

## **EPA** summary table

On-programme (typically 48 months)	Training to develop the occupation standard's knowledge, skills and behaviours.
End-point Assessment Gateway	<ul> <li>Employer is satisfied the apprentice is consistently working at, or above, the level of the occupational standard.</li> <li>English/mathematics Level 2</li> </ul>
	The employer must provide the EPAO access to the relevant organisational processes and procedures, as required, to support the professional discussion to ensure the apprentice meets their requirements during EPA.
	Apprentices must complete:
	<ul> <li>Portfolio of evidence for the Professional Discussion</li> <li>Terms of Reference and Initial Project Plan for the Project</li> </ul>
End Point Assessment (which would typically take 6	Assessment Method 1: Project Report & Presentation with questioning
months)	With the following grades:
	• Fail
	Pass     Distinction
	Assessment Method 2: Professional Discussion underpinned by Portfolio
	With the following grades:
	<ul><li>Fail</li><li>Pass</li></ul>
	Assessment Method 3: Written Exam
	With the following grades:
	• Fail
	<ul><li>Pass</li><li>Distinction</li></ul>

## Length of end-point assessment period:

The EPA must be completed within an EPA period lasting typically 6 months, beginning when the apprentice has passed the EPA gateway.

Any supporting material required for the EPA should be submitted at the gateway

If an EPA assessment method is failed, it should be resat/retaken within the typical EPA period and inline with the requirements set out in this assessment plan.

## Order of assessment methods

The assessment methods can be delivered in any order.

The result of one assessment method does not have to be known before an apprentice starts the next one.

## **Gateway**

The EPA period should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, that is to say they have achieved occupational competence. In making this decision, the employer may take advice from the apprentice's training provider(s), but the decision must ultimately be made solely by the employer.

In addition to the employer's confirmation that the apprentice is working at or above the level in the occupational standard, the apprentice must have completed the following gateway requirements prior to beginning EPA:

English and mathematics at level 2.

For those with an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language.

For Project Report & Presentation with questioning:

• The apprentice will be required to submit a brief summary of what the project will cover in a Terms of Reference (ToR) which will include an initial project plan agreed by the employer. The ToR and initial project plan will typically be no more than 500 words.

The Apprentice will be expected to carry out initial background research to inform the project and their plan for delivery, details of which should be included in the ToR and initial project plan. The apprentice's Manager/Mentor will typically support the Apprentice in their choice of workplace project.

The ToR and initial project plan must be submitted at the Gateway and are not assessed components of the project. The EPAO will be required to review the ToR and initial project plan to ensure project suitability and scope. The EPAO should confirm within two weeks of gateway acceptability of the project.

For Professional Discussion underpinned by Portfolio, the apprentice will be required to prepare and submit a portfolio of evidence mapping experience against those KSBs that are being assessed by this method, details as follows: -

- the portfolio of evidence itself is not assessed; it is used to inform questioning for the Professional Discussion
- the format and structure of the portfolio should be agreed between the employer, the apprentice
  and the EPAO (e.g. hard copy or on-line), however, the content must be sufficient to evidence
  that the apprentice can apply the knowledge, skills and behaviours required as mapped to this
  assessment method
- there must be at least one piece of evidence relating to each knowledge, skill and behaviour mapped to this assessment method. One piece of evidence can be referenced against more than one knowledge, skill or behavioural requirement. It is expected that there will be typically 15 pieces of evidence.
- the portfolio should contain written accounts of activities that have been completed and referenced against the knowledge, skills and behaviours, supported by appropriate evidence,

including photographic evidence and work products, such work instructions, safety documentation, company policies and procedures as appropriate to the activities. Progress review documentation, witness testimonies, and feedback from colleagues and/or clients should also be included. The apprentice's Manager/Mentor will typically support the development of the portfolio in accordance with company policy and procedures, although the end-point assessment organisation will provide further guidance on the content.

- the portfolio of evidence should not include any methods of self-assessment. Any employer
  contributions should focus on direct observation of evidence (for example witness statements)
  of competence rather than opinions.
- the evidence provided must be valid and attributable to the apprentice; the Portfolio of evidence must contain a statement from the employer confirming this.

For the Professional Discussion the employer will need to provide the EPAO with access to relevant organisational processes and procedures, so the assessor is able to refer to these when the apprentice makes reference to these. Apprentices should not be judged solely against any organisational processes and procedures, the independent assessor must ensure that it's the KSBs mapped to the professional discussion which are graded against.

#### For Written Exam:

• no specific requirements

# Assessment methods Assessment Method 1: Project Report & Presentation with questioning (This Method has 2 components.)

Method 1 Component 1: Project

#### **Overview**

The Project is compiled after the apprentice has gone through the Gateway process.

The Project should be designed to ensure that the apprentice's work is relevant to their role and allows the relevant KSBs to be demonstrated for the EPA.

The rationale for this assessment method is:

Harbour Masters work in many varied settings, from small marinas to large ports. Irrespective of the scale and type of workplace setting, all Harbour Masters will be involved in challenging lengthy projects, during which Harbour Masters will draw on a range of complex knowledge, skills, and behaviours to deliver harbour solutions for a range of business reasons. The project will offer flexibility to the Apprentice to demonstrate the KSBs that would naturally occur in their organisation, where they will be working on challenging Harbour projects that could, for example, bring forward a proposal for a change in marine services, or introduce new local legislation in response to a maritime problem such as vessel traffic. By challenging project, we mean projects that will require the Apprentice to recall advanced knowledge and understanding whilst simultaneously dealing with a sizeable number of interacting factors which will require critical analysis and evaluation.

The project will deliver a Report followed by a Presentation in a professional manner, which Harbour Masters regularly demonstrate in their role, where they present complex information to a range of audiences through various modes.

A project is the best approach to asses competence, as it would be difficult to replicate the working environment in a valid way, would take too long to observe, be impracticable nor cost effective, and employers would doubt the occupational competence of an individual not assessed in this way.

The project report and presentation with questioning will be graded holistically as 1 method.

#### **Delivery**

The EPAO will provide guidance to the employer and apprentice prior to Gateway regarding what constitutes a suitable Project for this Assessment Method. For example, this guidance will set out that the Project should be based upon a topic that is related to the apprentice's role within the business and has the potential for real business benefit.

The apprentice will conduct their Project and submit their Project Report to the EPAO after a maximum of 14 weeks, starting from when the EPAO has signed off the ToR and initial project plan.

The employer will ensure the apprentice has sufficient time and the necessary resources, within this period, to plan and undertake the Project.

Whilst completing the Project, the apprentice should be subject to the supervision arrangements outlined below:

The Project must be completed over a 14-week period, in between normal work duties. This reflects realistic working practice. The employer must allow the apprentice a total of 5 weeks (meaning the equivalent of 25 working days and 8 hours per working day) within the 14-week period in order to research and complete their Project, write their report and presentation. It is the employer's responsibility to check-in with the apprentice at least twice to discuss progress and assure themselves that the apprentice's Project is solely their own work. The subsequent presentation is a further opportunity for the Independent assessor to directly test the evidence, assuring themselves it is the apprentice's own work.

All projects should have measures of success and be, in principle, of benefit to a Harbour Authority. It may be based upon the following scenarios:

- a specific problem, e.g. building a new quayside to accommodate larger vessels
- a recurring issue, e.g. ballast water volume, discharge frequency, ship safety and operational issues aligned with regional characteristics to address ecological risk
- an idea / opportunity, e.g. developing a new marina alongside an existing port

The chosen project must as a minimum cover the following:

- describe the principle features necessary for an effective port marine safety, security and environmental management system including:
- the regulatory principles under which the harbour operates and the powers available to you as the Harbour Master
- identify and evaluate the port marine risks that need to be managed
- the policies and control measures that you would put in place to manage those risks
- the methods of monitoring effectiveness that you would employ

The Project will require the apprentice to show how they apply sound judgement and consider all variables in making their recommendations, taking into account commercial, legislative and practical issues.

The Project will be conducted as set out here:

Apprentices must produce a Project report during the EPA period, which will be the basis of a presentation to the independent assessor, with follow up questioning immediately after the presentation.

The Project report must be 8,000 words (+ or - 10% variance is permitted) excluding tables, figures, references and annexes. The Project report must be submitted to the EPAO 2 weeks prior to the presentation to allow the independent assessor to review the contents and prepare for the questioning component.

The Project report should be in the form of a paper based or electronic report.

As a minimum, all Project reports should include:

- An introduction
- The scope of the project (including key performance indicators)
- A project plan
- Analysis of the information provided and research undertaken
- Findings and how outcomes can be achieved

Recommendations and conclusions

The Project report must also map, in an appendix, how it evidences the relevant KSBs for this assessment method, which is excluded from the word count.

When the Project report is submitted, the employer and the apprentice should verify the submitted work is that of the apprentice via employer sign-off.

#### **Marking**

The independent assessor will review and assess the Project report in a timely manner, as determined by the EPAO, and without extending the EPA unnecessarily. Similarly, all quality control processes will also be conducted in a timely manner, as determined by the EPAO. Following submission, the EPAO will, in consultation with the employer arrange for the Presentation with questions and answers. The assessor must be given 2 weeks in which to assess the project report and prepare questions for the presentation as necessary.

#### Required supporting material

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method's requirements
- Marking materials and marking scheme
- Examples of projects

#### Method 1 Component 2: Presentation

#### **Overview**

Apprentices will prepare and deliver a presentation that appropriately covers the KSBs assigned to this method of assessment.

The presentation will be based on the Project report submitted and will cover:

- A summary of the Project
- Explanation of how and why specific conclusions were reached
- Improvements / recommendations
- Critical evaluation of the Project

The presentation will be completed and submitted to the EPAO at the same time as the project report. Therefore the presentation must be submitted after a maximum of 14 weeks starting from when the EPAO has signed off the ToR and initial project plan.

The presentation will be presented to an independent assessor face-to-face on a 1-1 basis.

The rationale for this assessment method is:

The presentation is the opportunity for the Independent Assessor to probe the Project to test the Apprentice's understanding and to cover any areas that require clarification.

#### **Delivery**

The presentation and questions and answers will last for 60 minutes. Within this timeframe it is anticipated the presentation will typically last 20 minutes and the question and answers will typically last

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40 minutes. The assessor has the discretion to increase the time of the presentation by up to 10% to allow the apprentice to complete their last point.

The independent assessor will ask a minimum of 10 questions at the end of the presentation. Questions will be generated by the assessor based on their assessment of the report and presentation, however the EPAO must provide a sample question bank to assist in the development of assessor generated questions.

To deliver the presentation, the apprentice will have access to:

- Presentation software
- Flip-chart
- Notes
- Computer

The presentation will be conducted as follows:

The presentation is conducted in person and the independent assessor will ensure the presentation is audio recorded. During the presentation, the independent assessor will remain silent. The presentation will be followed by questions which will be those generated by the independent assessor themselves in response to both the project report and also the presentation they have just seen, to further probe KSBs, question gaps or seek clarification.

The independent assessor will ask a minimum of 10 questions. Questions and responses must be recorded by the independent assessor.

The independent assessor will make all grading decisions.

#### Venue

EPAOs must ensure that the presentation and questioning elements are conducted in a suitable controlled environment in any of the following:

- Employer's premises
- Other suitable venue selected by the EPAO (e.g. a training provider)

The venue should be a quiet room, free from distraction and external influence.

#### Support material

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method's requirements
- Marking materials and marking scheme
- Audio-recording equipment
- Sample question bank

## Assessment Method 2: Professional Discussion underpinned by Portfolio (This Method has 1 component.)

#### Method 2 Component 1: Professional discussion

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#### **Overview**

This assessment will take the form of a professional discussion which must be appropriately structured to draw out the best of the apprentice's competence and excellence and cover the KSBs assigned to this assessment method. It will involve questions that will focus on coverage of the KSBs assigned to this method.

The professional discussion can take place in any of the following:

- employer's premises
- •a suitable venue selected by the EPAO (e.g. a training provider's premises)

The rationale for this assessment method is:

A Harbour Master's jurisdiction covers a very broad range of duties and responsibilities and a professional discussion underpinned by a portfolio is an efficient way of covering a disparate range of KSBs that may not occur in the project or written exam. The purpose of the Professional Discussion is to determine the extent to which the apprentice understands the requirements of the role and can corroborate their KSBs with examples from their portfolio of evidence. The portfolio of evidence itself will not be assessed; but will be used by the apprentice to exemplify their responses to the questions asked by the independent assessor during the Professional Discussion. This method of assessment gives the independent assessor the opportunity to explore KSBs in detail and ensure all relevant competency elements are evidenced. It is also the most effective way of determining competence in the behavioural elements of this occupational standard.

#### **Delivery**

The independent assessor will conduct and assess the Professional Discussion, which is a 1:1 discussion between the apprentice and the Independent Assessor.

The Professional Discussion will last for 90 minutes. The independent assessor has the discretion to increase the time of the professional discussion by up to 10% to allow the apprentice to complete their last answer. Further time may be granted for apprentices with appropriate needs in line with the EPAOs Reasonable Adjustment Policy.

During this method, the independent assessor can use questions taken from an EPAO question bank or those generated by themselves.

The professional discussion will be conducted as set out here:

The Portfolio will be submitted to the EPAO at the gateway. The Independent Assessor will ask a minimum of 10 questions which can be taken form an EPAO question bank or be those generated by the assessor based on their review of the portfolio. The apprentice may refer to their portfolio during the professional discussion. The independent assessor will ensure that the professional discussion is audio recorded. This evidence may be used in the event of an appeal.

The independent assessor must use the assessment tools and procedures that are set by the EPAO to record the professional discussion.

The independent assessor will make all grading decisions.

#### Venue

The professional discussion should take place in a quiet room, free from distractions and influence.

#### Other relevant information

A structured specification and question bank must be developed by EPAOs. The 'question bank' must be of sufficient size to prevent predictability and review it regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. The specifications, including questions relating to the underpinning knowledge, skills and behaviours, must be varied yet allow assessment of the relevant KSBs.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

Independent assessors must be developed and trained by the EPAO in the conduct of professional discussion and reaching consistent judgement.

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method's requirements
- Marking materials
- A question bank of sample questions. The question bank should be of sufficient size to prevent
  predictability and be reviewed regularly (at least once a year) to ensure the questions are fit for
  purpose.
- Audio-recording equipment

#### Assessment Method 3: Written Exam (This Method has 1 component.)

#### Method 3 Component 1: Written Exam

#### **Overview**

The rationale for this assessment method is:

Apprentices must undertake a written exam to assess the knowledge assigned to this assessment method. A knowledge test is an efficient way of establishing knowledge recall of the apprentice Harbour Master and is appropriate given the considerable range of fact-based understanding that is required for occupational competency. A written exam allows accurate assessment of the knowledge not likely to be evidenced in the Professional Discussion nor Project. The written exam will enable the apprentice to draw on their knowledge and experiences in order to demonstrate occupational competence through the scenarios presented and ensure consistency and validity of assessment.

#### **Test Format**

The test can be:

- Computer based
- Paper based

It will consist of 5 questions.

These questions will consist of:

Questions based on scenarios requiring short, structured answers

#### **Test administration**

Apprentices must have a maximum of 200 minutes to complete the test, including reading time.

The test is closed book which means that the apprentice cannot refer to reference books or materials. Any materials required for the test e.g. a calculator if required, will be provided by the EPAO

Apprentices must take the test in a suitably controlled environment that is a quiet space, free of distractions and influence, in the presence of an invigilator. The invigilator may be the independent assessor. The EPAO is required to have an invigilation policy that will set out how the test/examination is to be carried out. This will include specifying the most appropriate ratio of apprentices to invigilators to best take into account the setting and security required in administering the test/examination.

The EPAO is responsible for ensuring the security of testing they administer to ensure that the test remains valid and reliable (this includes any arrangements made using online tools). The EPAO is responsible for verifying the validity of the identity of the person taking the test.

This assessment method will be carried out as follows:

The exam will be scenario based, with the material not pre-seen by the apprentice before commencement of the test. Each scenario will be no more than 1500 words and should have no more than five pages of appendices of supporting data evidence which can include for example, tables, graphs, photographs or other data. The scenarios should be themed around two of the four core areas of the Harbour Master occupation:

- Vessel movement in Port
- Marine safety management
- Other marine functions
- General management

There will be 5 questions, based on two scenarios which will require extended answers. There is no word limit per answer with instead the limitation being time alone. Each question will be equally weighted. EPAOs must ensure the examination is available for apprentices within the typical EPA period, allowing for assessment and marking to take place. EPAOs must ensure that apprentices have different questions and scenarios in the case of re-sits or re-takes. The EPAO is responsible for setting and marking the exam and constructing a marking guide. Prior to administering the exam, the paper and answer guide must be reviewed by an external examiner appointed by the EPAO to assure external benchmarking and consistency.

The EPAO must verify the suitability of the venue for taking the test and the identity of the person taking the test.

#### Marking.

Tests must be marked by independent assessors employed by the EPAO following a marking guide produced by the EPAO. The EPAO will ensure that the test paper is set in line with the regulations of the EPAO, assuring that the paper is valid and reliable. The EPAO is responsible for setting and marking the examination paper and construction of the answer marking guide. There are 20 marks available for each of the 5 questions, totalling 100 marks i.e. the questions are equally weighted. There is no minimum score requirements per question required for a pass, apprentices will be required to meet the minimum pass mark for the written exam as a whole in order for a pass to be awarded for this assessment method. Partial credit will be awarded to partial responses. Any missing answers must be assigned 0 marks.

The pass marks for this assessment method are as follows:

Grade	Minimum mark	Maximum mark
Fail	0	69
Pass	70	83
Distinction	84	100

#### **Question and resources development**

Questions must be written by EPAOs and must be relevant to the occupation and employer settings. It is recommended that this be done in consultation with employers of this occupation. EPAOs should also maintain the security and confidentiality of their questions when consulting employers. EPAOs must develop 'question banks' of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the questions they contain, are fit for purpose. The EPAO will develop a 'bank of scenarios and a 'bank of test questions' which will reduce the predictability of questions. In the event of re-sits or re-takes the apprentice will be presented with different scenarios and test questions.

#### Required supporting material

As a minimum EPAOs will produce the following material to support this method:

- A test specification
- Sample tests, scenarios and marking schemes
- Live tests, scenarios and marking schemes
- Analysis reports which show areas of weakness for completed tests/exams and an invigilation policy.
- Calculator or other materials as determined by the EPAO as being required for the test

## Weighting of assessment methods

All assessment methods are weighted equally in their contribution to the overall EPA grade.

## **Grading**

## **Assessment method 1: Project Report & Presentation with questioning**

KSBs	Fail	Pass	Distinction: all of the following:
Marine Safety Management	Does not meet the	Develops and uses marine enforcement policies and procedures whilst demonstrating	Implements either new or enhanced harbour services that exceeds the
K2 K3 K7 K10	pass criteria	<ul><li>best practice (K10, B6)</li><li>Provides harbour services by implementing a</li></ul>	original brief/business requirement by having at least one quantifiable
S1 S2 S4 S7 S10 S12 S13 S15		compliant and auditable Marine Safety  Management system whilst complying with all	side benefit - for example to reduce environmental impact
B6		<ul> <li>applicable port marine policies, plans and procedures (K2, K3, K7)</li> <li>Maintains the safe passage of vessels by communicating with relevant stakeholders to operate and amend a fully functional marine safety management system based on evidential research (S1, S2)</li> <li>Identifies and applies for new powers to facilitate safe and efficient port marine activities (S4)</li> <li>Establishes a process for the provision of timely navigational safety information and warnings to preserve the safe passage of vessels (S10)</li> <li>Develops, reviews and amends an integrated Response Plan for port emergencies and a Port Counter-Pollution Plan in consultation with affected stakeholders (S12, S13)</li> </ul>	Implements new powers applied for as required to facilitate port marine activities (S4)

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Vessel Movement in port K24 K25 K27 K30 S14 S16, S17 S18 S19 S22 B1 B2 B3	<ul> <li>Produces plans (including documented findings and recommendations) in line with accepted practice and circulates to stakeholders as necessary (S7, S15)</li> <li>Establishes and scopes out port pilotage services and vessel traffic services based on formal navigational risk assessment (S14, S17)</li> <li>Applies and justifies alternative risk management measures where a pilotage service and vessel traffic service has been identified as unnecessary (K24, K25, S16, S18)</li> <li>Establishes procedures and rules to be followed when administering pilots and the operation of: <ul> <li>a pilotage service and</li> <li>vessel traffic service or local port information service</li> <li>in consultation with stakeholders, and communicates findings and outputs to stakeholders affected (K27, K30, S19, S22)</li> </ul> </li> <li>Works independently and accepts personal responsibility for their own work, delivering to specified deadlines and to the required level of quality (B1, B2, B3)</li> </ul>	Implements a working port pilotage and/or vessel traffic service based on formal navigational risk assessment. Where this is determined to not be required this must be justified and evidenced via stakeholder engagement and agreement (S14, S17)
General Management K47 S31	<ul> <li>Explains the typical port marine operations and activities undertaken in the physical environment (for which the Harbour Master has responsibility and authority) and identifies those which may impact on safety (K47)</li> </ul>	Implements an evidence based change that addresses either the resourcing structure or the skill levels required to deliver a safe and efficient service within their Harbour authority (S31)

Assesses operational needs to identify the resourcing structure and skill levels required to deliver a safe and efficient service (S31)	
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## **Assessment method 2: Professional Discussion underpinned by Portfolio**

KSBs	Fail	Pass
Marine Safety Manage	Does not meet the	Explains the required process to commission and implement an independent internal and independent external audit (K6)
K6 K11 K14 K16 K17 K19	pass	
K21	criteria	Explains how to collect evidence, take statements and initiate criminal prosecutions in-line with national regulations (K11)
S3 S5 S6 S8 S9 S11 S40		
B4 B5 B7 B8		Explains how to use formal risk assessment to establish the need for activities including (but not limited to) surveying, dredging and wreck recovery, and explains an example of when they have conducted a risk assessment to identify hazards associated with land-side activities (K16, S40))
		Describes the powers and working practices of statutory and other organisations concerned with responding to port emergencies or a pollution incident, and explains how to develop and maintain relationships with these organisations (K19, K21)
		Explains how to conduct investigations, collect evidence and propose remedial recommendations based on report findings, and how corrective measures are monitored (K14,S6, S8)
		Evaluates an implemented system for formally reviewing the suitability of local and nationally conferred legislation (S3)
		Explains Enforcement Policy in accordance with statutory and local powers and industry good practice including collecting, preserving and documenting evidence, as well as taking enforcement action and initiating criminal prosecution (S5)

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	Explains how to manage, maintain and inspect aids to navigation and justify the techniques used to achieve this (S9)
	Explains how to conduct a hydrographic survey, communicate information to affected stakeholders and maintain records of hydrographic and hydrological surveys (S11)
	Describes the methods they use in order to maintain a team culture where people work together and feel able to question decisions (B5, B7)
	Explains an example of a decision they took in order to lead and respond effectively to a vessel in emergency while simultaneously maintaining their own company's reputation by adopting a safety-first approach (B4, B8)
Vessel Movement in port	Explains how to manage a pilotage service suitable to the port, including required compliance with pilotage regulations, guidance and codes (S20)
S20 S21 S23 S24 S25 S26	Explains the process required to implement a vessel traffic or local port information service suitable to the port, taking account of local context, regulations, guidance and codes (S23)
	Explains when and how to evaluate procedures and rules for administering pilots and operating a pilotage service as well as reviewing a vessel traffic or local port information service (S21, S24)
	Evaluate the risks linked with dangerous and polluting substances and dangerous vessels (S25)
	Explains how to manage and/or monitor other marine services (e.g. towage and mooring) (S26)
Other port marine functions	Explains port activities likely to have an impact on the environment and the consequences which could arise from those activities (K32)
K32 K35 K36 K38 K39	Explains the conservation measures a port might use to protect the environment within its jurisdiction and the risk and mitigation effect of these measures (K35, S28)
S27 S28 S29 S30 S41	Describes the typical format, content and issues addressed in maintenance and capital dredging policies and plans (K36)

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	Evaluates an example of when they have designed and run a port security exercise, including the operating procedures and administration involved in developing a local port security plan and necessary policies (K38, K39, S29)
	Explains an example of when they have managed port security and cooperated with enforcement and other relevant agencies to comply with regulatory security requirements to deliver port security (S30)
	Explains how to develop, operate, evaluate and amend a port environmental safety management system (SMS) including the management of maintenance and capital dredging and port waste (S27, S41)
General port marine	Explains how a marine department is typically established and managed (K40)
Management K40 K45	Explains the principles and practice of change management, quality management, customer service, business networking and project management relevant to their organisation (K45)  Explain how to manage employees including recruitment, training, development, performance management
S32 S33 S34 S35 S36 S37 S38 S39	and succession planning; including how to communicate with employees, customers and workforce representatives (S32, S33, S37)
	Explains when and how they have established and managed a port marine budget and how they have ensured projects are achieved on time and within budget (S34, S39)
	Evaluates how to contribute to quality management processes relevant to port management and how change processes can be planned and implemented within their jurisdiction (S35, S36)
	Explains when they have promoted the port in business and other forums (S38)

## **Assessment method 3: Written Exam**

KSBs	Fail	Pass
meet the	Does not meet the	K1 Correctly identifies the relevant international and national regulations, codes of practice and guidance relating to marine safety management.
K1 K4 K5 K8 K9 K12 K13 K15 K18 K20 K22	pass criteria	K4 Describes the techniques they employ when evaluating evidence in order to support their judgement when making decisions on marine safety within their Harbour authority. This could mean, for instance, balancing evidence about tide, weather, vessel traffic and historic incidents.
		K5 Identifies approaches to oral and written communication which are appropriate to the target audience and uses occupational terminology.
		K8, K9 Explains the process for updating all relevant National and international marine legislation, local legislation and by-laws applicable to a port.
		K12 Describes an appropriate enforcement option meaning prosecution is discounted.
		K13 Explains how to compliantly report a marine accident or incident.
		K15, K18, K20 – Evaluates how marine conservancy and pollution emergencies or incidents are affected by relevant legislation, regulation, codes of practice and guidance, and the extent to which the port is obligated to cooperate such incidents to relevant organisations.
		K22 Identifies a suitable process for ensuring business continuity within the Harbour authority. This could mean, for instance, how to maintain marine safety at all times by balancing available resources with predicted vessel traffic.
Vessel Movement in port K23 K26 K28 K29 K31		K23, K26, K29 Evaluates how issues relating to pilotage, vessel traffic services and navigation are affected by Harbour powers and practice, together with all relevant regulation, codes ,guidance and affected stakeholders.
		K28 Explains the procedures for promoting and conducting pilotage directions
		K31 Explains the nature, purpose, powers and working practices of statutory and other organisations that may be concerned with vessel traffic services

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Other marine functions	K33 Describes the correct type and classification of port environmental and conservational features	
K33 K34 K37	K34 Correctly identifies the licenses and consents needed relating to the management of the port environment.	
	K37 Explains how port security issues relate to all relevant regulations, codes of practice and guidance	
General Management	K41 Identifies the impacted stakeholders and workforce representatives in the marine organization	
K41 K42 K43 K44 K46	K42 K46 Explains how marine employees are affected by relevant employment/health and safety regulations, guidance and codes	
	K43 Analyses the principle revenue and expenditure streams of the port and the contribution made to port business by the marine function. Identifies the key factors that could impact on financial performance.	

## **Overall EPA grading**

All EPA methods must be passed for the EPA to be passed overall.

Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

Assessment method 1 – Project & Presentation	Assessment method 2 - Professional Discussion with portfolio	Assessment method 3 – Written exam	Overall grading
Pass	Pass	Pass	Pass
Any grade	Any grade	Fail	Fail
Any grade	Fail	Any grade	Fail
Fail	Any grade	Any grade	Fail
Distinction	Pass	Pass	Merit
Pass	Pass	Distinction	Merit
Distinction	Pass	Distinction	Distinction

## Roles and responsibilities

Role	Responsibility
Apprentice	complete the on-programme element of the apprenticeship     prepare for and complete the EPA
Employer	<ul> <li>support the apprentice to achieve the KSBs outlined in the standard to their best ability</li> <li>determines when the apprentice is working at or above the level outlined in the standard and is ready for EPA</li> <li>select the EPAO</li> <li>confirm arrangements with EPAO for the EPA (who, when, where) in a timely manner</li> <li>ensure apprentice is well prepared for the EPA should not be involved in the delivery of the EPA</li> </ul>
EPAO	As a minimum EPAOs should:  • appoint administrators/invigilators and markers to administer/invigilate and mark the EPA  • provide training and CPD to the independent assessors they employ to undertake the EPA  • have no direct connection with the apprentice, their employer or training provider i.e. there must be no conflict of interest

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	<ul> <li>have processes in place to conduct internal quality assurance and do this on a regular basis</li> <li>organise standardisation events and activities in accordance with this plan's IQA section</li> <li>organise and conduct moderation of independent assessors' marking in accordance with this plan</li> <li>have, and operate, an appeals process</li> </ul>
Independent assessor	As a minimum an Independent assessor should:  • be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest  • hold or be working towards an independent assessor qualification e.g. A1 and have had training from their EPAO in terms of good assessment practice, operating the assessment tools and grading  • have the capability to assess the apprentice at this level  • attend the required number of EPAOs standardisation and training events per year (as defined in the IQA section)
Training provider	As a minimum the training provider should:  • work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined in the standard and monitor their progress during the on-programme period  • advise the employer, upon request, on the apprentice's readiness for EPA prior to the gateway  • Plays no part in the EPA itself

## **Internal Quality Assurance (IQA)**

Internal quality assurance refers to the requirements that EPA organisations must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPA organisations for this EPA must:

- appoint independent assessors who have knowledge of the following occupational areas:
   The assessor must have formal experience of discharging the role of a Harbour Master in
   United Kingdom waters. For absolute clarity, by "Harbour Master" we mean any of the following
   Harbour Master, Dock Master, Deputy Dock Master, Deputy Harbour Master, Assistant
   Harbour Master, Assistant Dock Master, Pilot Operations Manager, Vessel Traffic Services
   Manager, Marina Manager.
- appoint independent assessors who are competent to deliver the end-point assessment and who meet the following minimum requirements:
  - o The assessor must hold any recognised assessor qualification at level 3 or above.
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- have robust quality assurance systems and procedures that support fair, reliable and consistent assessment across the organisation and over time.

- operate induction training and standardisation events for independent assessors when they
  begin working for the EPAO on this standard and before they deliver an updated assessment
  method for the first time
- Assessors must attend standardisation events on a regular basis, no less than once a year for this Apprenticeship Standard.

## Re-sits and re-takes

Apprentices who fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

An apprentice who fails an assessment method, and therefore the EPA in the first instance, will be required to re-sit or re-take any failed assessment methods only.

Any assessment method re-sit or re-take must be taken during the maximum EPA period, otherwise the entire EPA must be taken again, unless in the opinion of the EPAO exceptional circumstances apply outside the control of the apprentice or their employer.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to merit/distinction or merit to distinction.

Where any assessment method has to be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of pass, unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

## **Affordability**

Affordability of the EPA will be aided by using at least some of the following practice:

- · online assessment
- · using an employer's premises

## **Professional body recognition**

Professional body recognition is not relevant to this occupational apprenticeship.

## Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making reasonable adjustments for this apprenticeship standard. This should include how an apprentice qualifies for Reasonable Adjustment and what Reasonable Adjustments will be made. The adjustments must maintain the validity, reliability and integrity of the assessment methods outlined in this assessment plan.

## Mapping of knowledge, skills and behaviours (KSBs)

## **Assessment method 1: Project & Presentation**

#### Knowledge

**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

K7 Principles of change control and auditable record keeping

K10 How to develop and operate marine enforcement policies and procedures

**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

K27 How a pilotage service is typically administered

K30 How a vessel traffic service is typically administered

**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
- **S4** Identify and apply for new powers as needed to facilitate safe and efficient port marine activities
- **S7** Communicate findings and proposals to appropriate stakeholders
- **\$10** Develop a comprehensive method for the provision of timely and accurate navigational safety information and warnings to maintain the safe passage of vessels
- **\$12** 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
- **\$13** 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
- **\$14** Determine the need for, and scope of, port pilotage services based on a formal, navigational risk assessment

- **\$15** Produce documented findings and recommendations in line with accepted practice. Circulate findings and outputs to affected stakeholders
- **\$16** Identify and implement suitable and sufficient alternate navigational risk management measures where a pilotage service is assessed to be unnecessary
- **\$17** Determine the need for, and scope of, vessel traffic services based on a formal, navigational risk assessment
- **\$18** Identify and implement suitable and sufficient alternate navigational risk management measures where a vessel traffic service is assessed to be unnecessary
- **\$19** 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
- **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
- **S31** Assess operational needs to identify the resourcing structure and skill levels required to deliver a safe and efficient service

#### **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
- **B6** Implements best practice in technical and safety management

## Assessment method 2: Professional Discussion underpinned by Portfolio

#### Knowledge

- K6 How to commission and implement an independent internal and an independent external audit
- **K11** How to collect evidence, take statements and initiate criminal prosecutions in-line with national regulations
- **K14** How to conduct systematic, well-documented investigations and produce remedial recommendations based on report findings
- **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
- **K19** The powers and working practices of statutory and other organisations that may be concerned with responding to a port emergency or pollution incident

- **K21** How to develop and manage effective relationships with statutory and other organisations (including the media) involved in an emergency or pollution incident
- **K32** What port activities are likely to have an impact on the environment, and what adverse consequences could potentially arise from those activities
- **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
- 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
- **K45** The principles and practice of effective change management, quality management, customer service, business networking and project management

#### Skills

- **S3** Implement a system for formally reviewing the appropriateness and effectiveness of local and nationally conferred legislation at pre-defined periods
- **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
- **S8** Implement and monitor remedial action appropriate to incident findings
- **S9** Manage the provision, maintenance and inspection of aids to navigation
- **S11** Ensure accurate hydrographic surveys are undertaken, communicate the information to affected stakeholders and maintain accurate hydrographic and hydrological records
- **\$20** 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
- **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
- **\$26** Manage (and/or monitor) the safe and effective provision, of other marine services such as towage and mooring
- **\$27** 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
- **S32** Manage employees, including (but not limited to):- recruitment and selection training professional development performance management succession planning
- **\$33** Develop and implement effective employee communications, including dialogue with workforce representatives
- \$34 Develop and manage a port marine budget
- \$35 Plan, lead and implement change within the Harbour Master's jurisdiction
- \$36 Contribute to quality management processes relating to port management
- \$37 Deliver effective customer service relating to port management
- **S38** Promote the port in business and other forums
- \$39 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**

- **B4** Leads by example, demonstrating impeccable safe behaviours at all times
- B5 Encourages team effort and develops an interdependent culture
- **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

#### **Assessment method 3: Written Exam**

#### Knowledge

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

- **K8** National and international marine legislation applicable to ports
- K9 Local legislation, bylaws and direction applicable to ports and the processes for updating these
- K12 Enforcement options available as an alternative to prosecution
- K13 Current regulatory reporting requirements and guidance relating to marine accidents/incidents
- **K15** Current international and national regulations, codes of practice and guidance relating to marine conservancy
- **K18** Current international and national regulations, codes of practice and guidance relating to emergencies and pollution incidents
- **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
- **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
- **K26** The powers and working practices of a Competent Harbour Authority and other organisations that may be concerned with pilotage services
- **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
- **K31** The nature, purpose, powers and working practices of statutory and other organisations that may be concerned with vessel traffic services
- 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
- **K37** Current international and national regulations, codes of practice and guidance relating to port security
- **K41** Who the stakeholders and workforce representatives are in the marine organization
- 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
- **K46** Current international and national regulations, codes of practice and guidance relating to health & safety in the workplace