

Skills Strategy 2023 – 2028

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UKMPG



**BRITISH PORTS
ASSOCIATION**

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PSS SKILLS STRATEGY 2023

WHERE ARE WE NOW

Port Skills and Safety (PSS) is the ports industry's body for safety and skills and its members represent the overwhelming majority of port operations, in and around the UK. It was established to develop and promote port and harbour related skill standards to stay at the forefront of training and skills innovation and development. It also aims to provide opportunities for discussion and dissemination of information relating to skills and taking action on any proposed legislation.

PSS is owned equally by the British Ports Association (BPA) and United Kingdom Major Ports Group (UKMPG) and its remit as defined in its Articles of Association as being:

- *To promote health safety, good workplace mental health and good working practices in ports and harbours*
- *To develop and promote port and harbour related skills standards*
- *To engage widely with Academia and other relevant Maritime, Health and Safety organisations in order stay at the forefront of safety, training and skills innovation and development*

Historically, PSS has focused its skills remit around Health & Safety skills, National Occupational Standards (NOS), port qualifications and apprenticeship development. It has collaborated with other associations including Maritime Skills Alliance, Maritime UK, UKMPG, BPA and UK Harbour Masters Association.

This focus has meant the organisation did not always look at skills in a broad sense, including the wider skills required in ports (outside of H&S), professional development, or the future skills needs of ports and their workers; suggesting that skills is the 'small S in PSS'.

This has resulted in many similar but unconnected projects, and lack of a single clear lead for skills in ports, a point made most clearly in the Maritime Skills Commission [Future Ports Workforce](#) report, commissioned by UKMPG.

WHERE WE WANT TO BE

Port Skills and Safety should be the natural home for coordinating port skills projects, in the same way the organisation is for Health and Safety projects. In order to achieve this, PSS believes it must adopt the same holistic approach to skills as it does to safety. This means not looking at skills in isolation. PSS does not simply collect data on incidents and accidents in ports, we provide safety audits; share best practice and lessons learnt and develop safety guidance so that members can improve their safety data. For skills this means collaborating with other partners in the sector to understand careers needs, map current and future skills requirements and, where necessary, develop training programmes.

This five-year plan demonstrates how PSS can truly take the lead on skills in the ports sector, focussing on all the elements that support a strong, future-proof, highly skilled workforce. This includes understanding ports and long-term careers needs for both new entrants and those currently employed in it, promoting the sector by developing skills which allow port workers to maximise their employment opportunities and help train the workforce to stay safe.

PSS does not intend to do this alone or undermine the years of work that has already taken place in these areas. One of PSS's strongest assets is facilitating information sharing and promoting best practice. Therefore, PSS will seek to bring together and work together with all those organisations and projects currently supporting the ports skills agenda to provide a single voice on ports skills. This work will be led by the themes agreed by industry and be delivered alongside the BPA, UKMPG and the Maritime Skills Commission.

Importantly, PSS will continue to ensure that it is the central body in terms of improving and developing port sector qualifications, whether they be on National Occupational Standards, for port apprentices, or specific qualifications such as the Harbour Masters Certificate and Marine Pilot Certificate. Equally, PSS will be a central resource to share training activities and promote cost effective solutions.

HOW WE WILL GET THERE

This work has already begun and as a direct result of a short series of member surveys, PSS has identified that members see the following areas as the main priorities for PSS:

- Collaboration and sharing ideas
- Competency framework and role standardisation
- Accredited courses
- Apprenticeships and graduate programmes

Through the creation of the Port Skills Group, collaboration is already underway, with a picture being developed of the huge number of best practice activities in existence. These remaining three priorities will be explored and developed as part of the work scheme detailed below, which is laid out according to the UK Government's Maritime 2050 Strategy's priorities.

Inspiring People

Careers Assessment: Maritime UK has been promoting careers throughout the UK re-branding the sector to make it more attractive and engaging for young people via Maritime UK Week, careers fairs, activities, website, case studies, etc. It is not the intention for PSS to promote or attend all career events but to work in partnership with MUK, BPA and UKMPG to ensure that potential port workers know what skills they need to enter and progress in the sector. PSS will highlight the positive benefits and progression routes, and monitor the success of this promotion.

Careers activity appears to be particularly strong in some regions and BPA already attends a number of the bigger events. In other areas, ports are conducting their own activities in their local communities. However, data on the specific skills needs of specific roles does not exist for all areas of port sector, and it is difficult to measure engagement to determine outcomes.

→ Under the umbrella of Maritime UK; PSS, BPA and UKMPG will work collaboratively to promote careers and assess the future skills needs of the sector.

→ PSS will look to add to the existing materials that highlight the opportunities that exist across UK ports by outlining what skills, qualifications and training might be needed to enter and progress in the sector.

Careers engagement: Engagement with schools, colleges and universities is taking place but data is not available. Work experience programmes are happening but there is not a joined-up approach. There is evidence of internships and work experience programmes, but again no data so it is unknown what percentage of ports take part in this.

→ PSS will conduct research and build a picture of the engagement activities ports are undertaking to develop a database of opportunities for new joiners.

Education and training routes: Further Education, Higher Education, and technical qualifications exist as a route to careers in ports but there is not a definitive and up to date list of all courses and providers. T levels do not exist for port specific roles. Appendix 1 gives levels of education and training in England - T levels sit within level 3.

→ PSS will conduct research to build a list of all qualification routes into port careers.

Careers information: PSS's main supporting organisations [BPA](#) and [UKMPG](#) both have careers information on their websites and neither point to PSS as the main resource for port skills, qualifications or development.

The [National Careers](#) website contains limited information on working in ports and only displays a Port Operative role before directing visitors to the PSS website for more about working in ports and harbours. [British Marine](#) has a section on careers in marine including information on marine apprenticeships but this does not include the port apprenticeships.

→ PSS will dedicate a section of its website to promoting port skills, jobs, careers, qualifications and training information, and other resources for port and harbour careers information. PSS will work with other organisations promoting careers and encourage them to link to this information.

New initiative: [Generation Logistics](#) is a new initiative targeting individuals to make them curious about a career in Transportation and Logistics. BPA, UKMPG and Maritime UK are involved as partners until at least July 2023.

→ PSS will monitor the impact of Generation Logistics, and work with UKMPG, BPA and Maritime UK to determine PSS's potential involvement in the future.

Expanding the Talent Pool

Diversity: Maritime UK is delivering forums and events through its Diversity in Maritime programme and the BPA have been providing diversity and inclusivity briefings.

→ PSS will support and promote Maritime UK and BPA events and where suitable share resources with members.

Skills and Training

Data is currently unavailable for the port sector to evaluate overall engagement with apprenticeships, qualifications and graduate programmes.

→ PSS will conduct research and build a picture of the use that ports are making of the qualifications and apprenticeships (standards and frameworks) available

Apprenticeships: Education and Skills Funding Agency (ESFA) data does not segregate ports from Transportation and Logistics, so it has not been possible to distinguish which apprenticeships the sector is using or evaluate the level of engagement.

Port specific apprenticeships: Figures provided by International Association of Maritime Institutions (IAMI) for port specific apprenticeship standards, highlight the low uptake of these apprenticeship standards. The Port Operative level 2 also has a very low number of completions considering it is typically a 12-month programme.

Title	Cumulative registrations (to 31.10.21)	Active apprentices	Completed assessments
Port Operative level 2	150	81	33
Port Marine Operations Officer level 3	16	5	10
Marine Pilot level 5	13	4	7
Harbour Master level 6	0	0	0

Early discussions with ports suggest that internal training programmes have taken precedence over the Port Operative apprenticeship. It appears to not fit well enough for some ports and an additional pathway may be required to make it more useful. Other ports either use contractors or have stated that their port operatives need to be operationally running within a much shorter timeframe than the apprenticeship allows.

More work is needed to establish data on apprenticeship frameworks in use by Scotland, Wales and Northern Ireland.

→ PSS will develop a Skills Dashboard to gather data and monitor the use of apprenticeships. This will allow early identification of apprenticeships that are not being used and serve as a mechanism to gather feedback. PSS will review the port specific apprenticeship standards in close and comprehensive consultation with the sector.

Engineering apprenticeships: Engineering apprenticeships are being used by ports. Early conversations indicate that there is growing difficulty sourcing colleges and training providers with the specialities to deliver these apprenticeships to the required standard consistently. This is an issue that is likely to escalate due to a shortage of skilled engineering tutors and education being unable to compete with industry salaries.

→ PSS will establish links with Engineering UK and other associations that have a synergy with PSS that could benefit the sector.

Technical certificates: Diplomas, extended diplomas, certificates are available. Awarding body Excellence, Achievement & Learning Limited (EAL) withdrew Level 2 Certificate in Port Operations due to low uptake and other technical qualifications are at risk of this. IfATE is reviewing whether mandatory qualifications should be in apprenticeship standards and if this is implemented during the review, it could increase their use.

Competency and assessment: National Vocational Qualifications (NVQs) and Scottish Vocational Qualifications (SVQs) are in use but in relatively small numbers. Awarding body Scottish Qualifications Authority (SQA) has already withdrawn the SVQ Level 3 Supervision of Port Operations. Institute for Apprenticeships and Technical Education (IfATE) maintains that NVQs or SVQs should not be mandatory in apprenticeship standards, and this has seen a decrease in numbers for the qualifications.

There has been interest expressed in a competency framework to bring about standardisation within the sector. There has been some discussion around the complexity of this. NVQs and SVQs exist for this purpose and to provide individuals with national certification to prove competency. Internal competency assessments also exist within some ports. There have also been calls for PSS to accredit internal training programmes.

- PSS will gather more data on the use of qualifications and training among ports and promote them to members to improve the skills of the sector.
- PSS will set up Skills Audits to help organisations gather data around skills and diversity, identify any gaps and provide recommendations.
- PSS will investigate whether a standardised CPD programme for the sector would be viable. Appendix 2 shows an example of a programme that Thames Skills Academy has developed in conjunction with and for a small group of employers.

Career Progression

Career pathways: There is no evidence of a common ports career pathway map to help individuals see all roles that are available in ports and harbours or how they could progress upwards or sideways. There are videos on the Maritime Careers website although these do not cover all roles and do not demonstrate progression routes.

- PSS will produce a Career Pathway map to help the development of talent pools. Appendix 3 shows an example of how this could work.

Social Framework

Professional careers: Recent UKMPG Polling on Public Attitudes to Freight and Logistics (Dec 2021) states that just over 10% of parents and grandparents would be proud to have their children choosing a career as a port worker.

Recruitment issues: Port worker roles still rely heavily on manual tasks resulting in a male dominated workforce. Recruitment is challenging across all sectors and this can only increase it by effectively isolating half of the population. It should be noted that PPE/PPC for women has not been seen or offered in any of the four ports visited to date.

- PSS will work with all maritime stakeholders and members to support the development of jobs, skills and careers information for new entrants and career progression.

Future Skills

Industry 4.0 is changing the way we work, and it presents huge opportunities. There is a focus on automation to increase safety and efficiencies as well as decarbonisation and green technologies to improve sustainability. New technologies mean that jobs will become less manual, and the skills required of the workforce will change. This will require upskilling and retraining of the existing workforce. It will help address some of the recruitment challenges by attracting a more diverse mix of applicants to fill new roles in digital, electronics and sustainability.

New technology and training require large expense and time researching suppliers and costs. Decarbonisation, wind turbines, solar power, ground source heat pumps, electric vehicles, simulator training, etc., - the sharing of information and pooling resources could help.

[The UK Government's Ten Point Plan for a Green Industrial Revolution](#) published in November 2020 states that advancing offshore wind alone could deliver up to 60,000 jobs by 2030. To help meet this need there may need to be new apprenticeships and training programmes. An increased awareness campaign of the careers available, as happened in rail for HS2 and in aeronautical following the pandemic, will be necessary.

Green Technologies apprenticeships are already in existence such as Maintenance and Engineering Technician (Wind Turbine route) and other supportive occupations such as Data Analyst and Cyber Security. These will support the changes in automation and big data though more may need developing.

- PSS will work with other associations and experts to keep members informed of new technologies and developments and the potential impact on skills needs.
- PSS will use its strengths in facilitation and collaboration to create a supplier list to help members pool resources and negotiate rates on training and equipment.
- PSS will identify opportunities for training courses and apprenticeships, including accredited simulator training courses.

New initiative: The Maritime Skills Commission is planning to work with the NSAR to provide data analysis and a Skills Intelligence Modelling to the current and future skills within the sector.

- PSS will partner with the Maritime Skills Commission to deliver stage one of a project to provide data on the current jobs and skills within ports.
- Based on the data received, PSS will consider funding further stages of the Skills Intelligence Modelling proposal to develop projections on future skills needs.

Potential future project: A National Skills Academy (NSA) exists for rail, construction, food and drink, energy, health, etc., There have already been calls for an NSA for Maritime in Barrow and this could gather momentum with the national shipbuilding strategy and with BAE heavily involved in the region. Whether as an NSA or otherwise, PSS has the potential to move toward designing and/or offering industry specific training courses, competency and assessment and accrediting internal training for ports and becoming an End Point Assessment Organisation (EPAO) for apprenticeships should the demand be there. All are possible but require further investigation and would set PSS strongly as the lead in the sector whilst generating additional income streams. In the longer term this could become its own training centre if demand is created.

Appendices

Appendix 1: Levels in the Education and Training System in England, Northern Ireland and Wales against Scottish Equivalent levels

Quals in England, NI & Wales	UNIVERSITY		Scottish Credit & Qual Framework
LEVEL 8	Doctorate PhD		LEVEL 12
LEVEL 7	Master's Degree MA, MSc, MPhil		LEVEL 11
LEVEL 6			LEVEL 10/9
LEVEL 5	University Degree BA, BSc	Foundation Degree FdA, FdSc	LEVEL 8
LEVEL 4			LEVEL 7
LEVEL 3	A Level A2 AS	L3 Extended Diploma (National Diploma)	LEVEL 6
LEVEL 2	GCSE Grades 9-7	L2 Diploma (First Diploma)	LEVEL 5
LEVEL 1	GCSE Grades 6-1	L1 Diploma (Foundation)	LEVEL 4
ENTRY LEVEL 3	Key Stage 3	E3 Diploma (Foundation)	LEVEL 3
ENTRY LEVEL 2	Key Stage 2		LEVEL 2
ENTRY LEVEL 1	Key Stage 1		LEVEL 1
	SCHOOL / 6 TH FORM	F.E. COLLEGE	

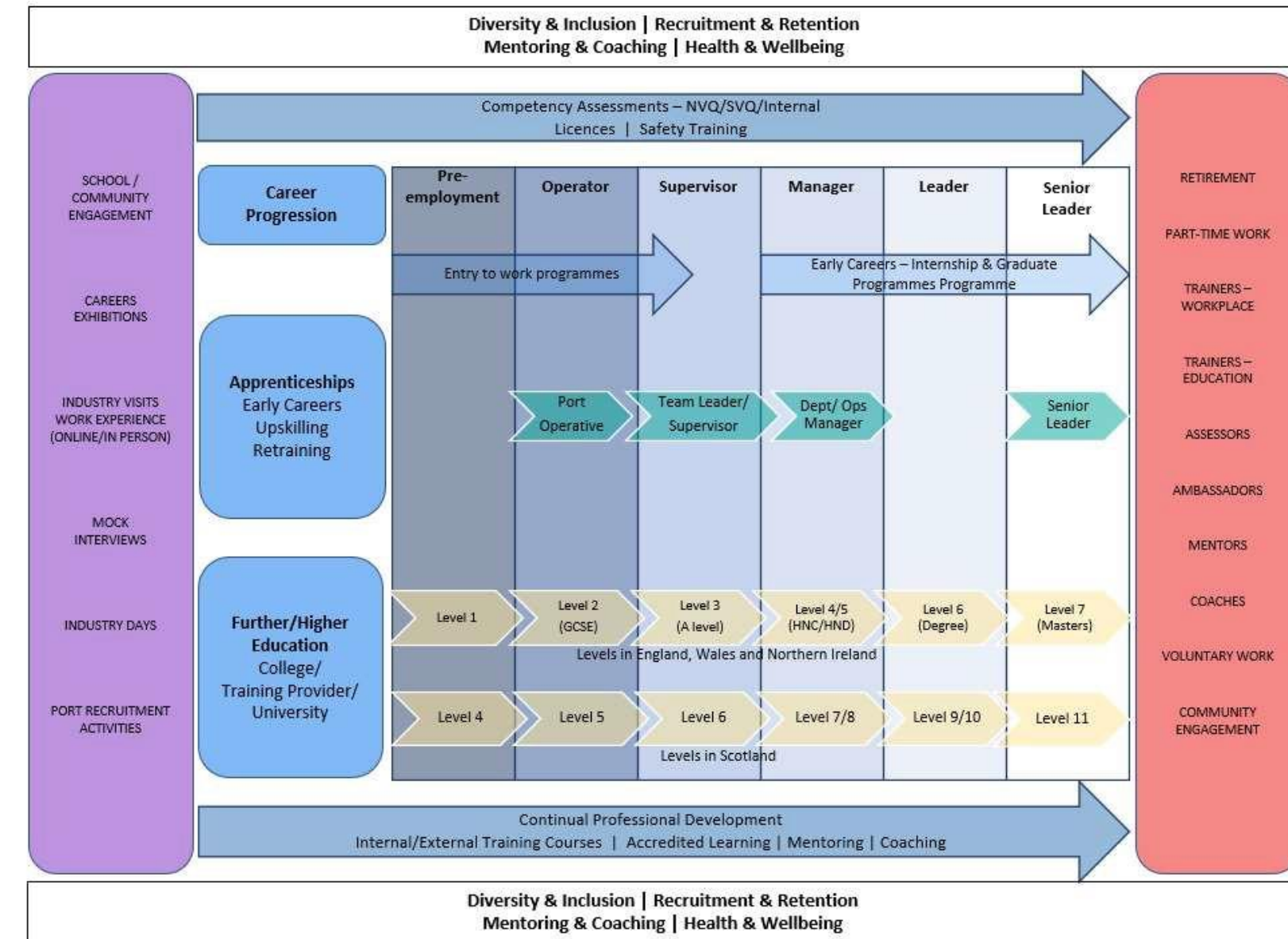
Appendix 2: Standardised CPD Programme example – Thames Skills Academy

This document provides the detail of the Thames CPD Programme. Participants are required to achieve a minimum of 150 points across the three categories of Mandatory Courses; Accredited Training; and Skills & Experience during each 5-year CPD period. Additional points accrued by undertaking higher grade safety courses may be used as credit against the requirement for Accredited Training. Additional points achieved in the Mandatory Course and Accredited Training categories cannot be used in lieu of points gained in Skills & Experience. Should participants wish to undertake alternative courses from those listed below then a request should be made to the CPD Governance Committee at thamescpd@thamesacademy.london . If accepted, points will be awarded at the rate of 5 points per half day/10 points per full day of training. For more information on the Thames CPD programme, go to: www.ThamesCPD.co.uk or email ThamesCPD@thamesacademy.london ; or call 01322 917 553.									
Mandatory Courses		Accredited Training				Skills & Experience			
The following courses are to be completed by all participants over each 5 year period. Additional points will be given at the rate of 10 points per day for higher grade safety courses completed.		Each participant must gain a minimum of 50 points from the below course list over each 5 year period. Additional points gained in Mandatory Courses may be used in lieu of Accredited Courses obtained below.				Each participant must attain a minimum of 50 points from the below activities over each 5 year period.			
	Points	MCA	Points	Navigation & Radar	Points	Experience	Points		
MCA STCW Elementary First Aid	15	MCA STCW Proficiency in Security Awareness	10	SQA Radar certificate	30	Experience (5 points for every 5 years served to a maximum of 20 points)	20		
MCA STCW Fire Prevention and Fighting or equivalent standard	15	MCA STCW Proficiency in Designated Security Duties	10	SQA Operate Non ECDIS Chart Systems	30	Tripping on a different industry sector vessel (Full Day 7 hours)	10 (max 20 points)		
MCA STCW Personal Survival Techniques	15	MCA STCW Personal Safety & Social Responsibilities	10	Small Ships Navigation & Radar - recognised by WBCODE	50	Attendance at relevant PLA, MCA or TFL meeting or event	1pt/hr (max 5 points)		
		MCA STCW Crowd Management	10	H & S		Skills			
Achieved once when gaining STCW certification		MCA STCW Crisis Management and Human Behaviour	15	COSHH	10	Taking part in multi-agency exercise	5 (max 10 points)		
MCA/STCW Medical First Aid (2.5 day)	25	MCA STCW HELM (Operational level)	30	Manual Handling	10	Local Knowledge Trip and training	10		
MCS/STCW Fire Safety Course (3 day)	30	MCA STCW HELM (Management level)	30	Confined Space Training (1 day)	15	Riverside Personal Safety	10		
		MCA Signals Exam	5	Confined Space Training (3 days)	30	Handling Difficult People and Conversations Training Course	10		
Master STCW only		MCA Master 200 (incl 500,000 & unlimited)	30	PPE - Safe Use and Inspection of Lifejackets	10	EPIC (Tideway)	10		
MCA/STCW Survival craft and Rescue Boats	15	MCA Approved Engine Course Part 1 (AEC1)	30	IOSH - Working Safely	15	Equality, Diversity and Disability Training	10		
MCA/STCW Advanced fire fighting	15	MCA Approved Engine Course Part 2 (AEC2)	30	Ship Oil Pollution Emergency Plan (SOPEP)	10	Taking part in TSA (and other) Webinar teaching programme - must be safety focused	1pt/hr (max 10 points)		
MCA STCW Fire Prevention and Fighting or equivalent standard	15	RYA		Endorsements		Attendance of TSA's Regulatory Visits Programme (including visits to the Met Police, London Fire Brigade, RNLi and PLA)	5 points per visit (max 10 points)		
MCA STCW Personal Survival Techniques	15	RYA Advanced Powerboat (Commercially Endorsed)	20	Cargo - General - Endorsement	30	Attendance of Company H&S Meeting	1pt/hr (max 5 points)		
		RYA Day Skipper Theory (Commercially Endorsed)	30	Chemical Cargoes Endorsement	30	Training covering: ISM/DSM/SMS; collision regulation; chartwork; local regulations; PLA survey work and findings; meteorology; passage planning; IO skills from Sim trip; Accident investigation; Report writing;	1pt/hr (max 10 points)		
		RYA Day Skipper Practical (Commercially Endorsed)	30	Dredging Endorsement	30	Mental Health - Samaritans Safer Thames Intervention			

CONSTRUCTION TRADES CAREER POSSIBILITIES AND PROGRESSION



Appendix 4: Skills in the Career Lifecycle



Appendix 5: Actions and Timeline

Actions	Commence Date	Completion Date
PSS will support and promote Maritime UK, BPA and UKMPG skills, careers and diversity events and share resources with members.	2023 Q1	Ongoing
PSS will work with other associations and experts to keep members informed of new technologies and developments and the potential impact on skills needs.	2023 Q1	Ongoing
PSS will establish links with Engineering UK and other associations that have a synergy with PSS that could benefit the sector.	2023 Q1	Ongoing
PSS will partner with the Maritime Skills Commission to commission stage one of the Skills Information Modelling project to provide data on the current jobs and skills within ports.	2023 Q1	2023 Q4
PSS will identify opportunities for training courses and apprenticeships, including accredited simulator training courses.	2023 Q1	Ongoing
PSS will review each port specific apprenticeship standards in close and comprehensive consultation with the sector.	2023 Q2	2025 Q4
PSS will conduct research to build a list of all qualification routes into port careers.	2023 Q2	2024 Q2
PSS will monitor the impact of Generation Logistics, and work with UKMPG, BPA and Maritime UK to determine PSS's potential involvement in the future.	2023 Q3	TBC
PSS will look to add to the existing materials that highlight the opportunities that exist across UK ports by outlining what skills, qualifications and training might be needed to enter and progress in the sector.	2023 Q3	2024 Q4
PSS will develop a Skills Dashboard to gather data and monitor the use of apprenticeships. This will allow early identification of apprenticeships that are not being used and serve as a mechanism to gather feedback.	2023 Q3	2024 Q4
PSS will use its strengths in facilitation and collaboration to create a supplier list to help members pool resources and negotiate rates on training and equipment.	2023 Q3	2024 Q2
PSS will work with all maritime stakeholders and members to support the development of jobs, skills and careers information for new entrants and career progression.	2023 Q3	Ongoing
PSS will gather more data on the use of qualifications and training among ports and promote them to members to improve the skills of the sector.	2023 Q4	2025 Q1

PSS will conduct research and build a picture of the use that ports are making of the qualifications available.	2023 Q4	2024 Q3
PSS will dedicate a section of its website to promoting port skills, jobs and careers, aiming to become the hub for port and harbour careers information. PSS will work with other organisations promoting careers and encourage them to link to this information.	2023 Q4	2024 Q1
PSS will set up Skills Audits to help organisations gather data around skills and diversity, identify any gaps and provide recommendations.	2024 Q1	Ongoing
Based on the data received in stage one of the Skills Information Modelling, PSS will consider funding further stages of the Skills Intelligence Modelling proposal to develop projections on future skills needs.	2024 Q2	TBC
PSS will produce a Career Pathway map to help the development of talent pools.	2024 Q2	2025 Q2
PSS will investigate whether a standardised CPD programme for the sector would be viable.	2024 Q4	TBC
PSS will identify opportunities for new port training courses and apprenticeships.	2025 Q1	2026 Q1