Co-funded by the European Union

SEA4SHORE
Seafarers Experience Appealing For Shore

Project number: LV01-KA220-VET-000166919

VET Report

for SEA4SHORE

2024

Revision History [not for public deliverables]

Date	Version	Author	Changes
24/06/2025	1.0	German De Melo, Agustin Martin	Draft
26/06/2024	2.0	Ugurcan Acar, Furkan Kaya, Inguna Simane, Dagne Prikule, Dani Mahovic, Matej Super, Rima Mickiene, Faustina Miceikiene, Aris Chronopoulos, Irene Gkotsi	Review & Feedback
28/06/2024	3.0	German De Melo, Agustin Martin	Final

Current version: 3.0

Project Details:

Title: Seafarers Experience Appealing For Shore
Acronym: SEA4SHORE
Start Date: 01/03/2024
End Date: 28/02/2026
Coordinator: Riga Technical University

SEA4SHORE Consortium

- Riga Technical University (Contractor)
- MARITIME INNOVATORS (Turkey)
- Lithuanian Maritime Academy (Lithuania)
- University of Rijeka (Croatia)
- IDEC (Greece)
- UPC (Spain)

Project participants

The following participants from the project partners have taken an active part in the work leading to the elaboration of this document, even if they might not have directly contributed writing parts of this document:

- Manuela Gabric (UoR)
- Đani Mohović (UoR)
- Ugurcan Acar (Maritime Innovators)
- Inguna Simane (RTU)
- Rima Mickiene (LMA)
- German De Melo Rodriguez (UPC)
- Aris Chronopoulos (IDEC)

Contents

SEA4SHORE Consortium 3

Project participants 3

Introduction 6

VET REPORTS 6

LATVIAN MARITIME ACADEMY OF RIGA TECHNICAL UNIVERSITY 6

Challenges and opportunities related to the career transition for seafarers to shore-based jobs in Latvia. 6

Job availability at sea, changes in maritime technologies, and evolving regulations in Latvia 7

Transferable skills and qualifications for land-based occupations in the view of Vocational Education and Training 8

Current training programs, certifications, and workshops designed for seafarers transitioning to shore-based careers 10

Career transition support in Latvia 10

Potential career pathways for seafarers in Latvia 11

Seafarers' qualifications that are transferable in Latvia 12

Problems and barriers in the seafarers' transition to shore base jobs in Latvia 13

Career support improvements needed in Latvia 15

EU wide view on seafarers' career transition support 16

Lithuanian Maritime Academy 19

Challenges and opportunities related to the career transition for seafarers to shore-based jobs in Lithuania. 19

Job availability at sea, changes in maritime technologies, and evolving regulations in Lithuania 19

Transferable skills and qualifications for land-based occupations in the view of Vocational Education and Training 20

Current training programs, certifications, and workshops designed for seafarers transitioning to shore-based careers 21

Career transition support in Lithuania 21

Potential career pathways for seafarers in Lithuania 22

Seafarers' qualifications that are transferable in Lithuania 22

Problems and barriers in the seafarers' transition to shore base jobs in Lithuania 23

Career support improvements needed in Lithuania 24

EU wide view on seafarers' career transition support 25

UNIVERSITY OF RIJEKA, FACULTY OF MARITIME STUDIES, RIJEKA, CROATIA 26

Challenges and opportunities related to the career transition for seafarers to shore-based jobs in Croatia. 26

Job availability at sea, changes in maritime technologies, and evolving regulations in Croatia 27

Transferable skills and qualifications for land-based occupations in the view of Vocational Education and Training 27

Current training programs, certifications, and workshops designed for seafarers transitioning to shore-based careers 28

Career transition support in Croatia 28

Potential career pathways for seafarers in Croatia 29

Seafarers' qualifications that are transferable in Croatia 29

Problems and barriers in the seafarers' transition to shore base jobs in Croatia 29

Career support improvements needed in Croatia 29

EU wide view on seafarers' career transition support 29

FACULTY OF NAUTICAL STUDIES OF BARCELONA-UPC FOR REPORT VET 30

Challenges and opportunities related to the career transition for seafarers to shore-based jobs in Spain. 30

Job availability at sea, changes in maritime technologies, and evolving regulations in Spain 30

Transferable skills and qualifications for land-based occupations in the view of Vocational Education and Training 31

Current training programs, certifications, and workshops designed for seafarers transitioning to shore-based careers 32

Career transition support in Spain 32

Potential career pathways for seafarers in Spain 32

Seafarers' qualifications that are transferable in Spain 36

Problems and barriers in the seafarers' transition to shore base jobs in Spain 37

Career support improvements needed in Spain 37

EU wide view on seafarers' career transition support 38

Conclusion 38

Introduction

This report examines the growing need for seafarers to transition into shore-based careers and the role of Vocational Education and Training (VET) in facilitating this process. It outlines current VET programs, skills development opportunities, and recommendations for strengthening career pathways for seafarers seeking employment outside the maritime industry.

VET REPORTS

LATVIAN MARITIME ACADEMY OF RIGA TECHNICAL UNIVERSITY

Challenges and opportunities related to the career transition for seafarers to shore-based jobs in Latvia.

Transitioning from a seafaring career to a shore-based job in Latvia presents several challenges, despite the demand for maritime professionals in ports, logistics, and shipping industries. Here are some of the key obstacles seafarers may face:

- **Lack of shore-Based experience**. Many shore-based roles require experience in business, administration, or technical management, which seafarers of lower ranks may lack. Also shore based employers often prefer candidates with previous office or shore-based work experience.
- **Need for additional education & certifications.** Some shore-based jobs (e.g., marine insurance, shipbroking, maritime law, port management) require specialized degrees or certifications beyond a seafarer's traditional qualifications. Certifications like STCW are essential for shipboard roles but may not be sufficient for shore-side careers.
- **Salary differences.** Seafarers, especially officers, often earn higher salaries at sea compared to shore-based jobs. Shore-based positions in Latvia may not offer the same financial benefits, making the transition difficult**.**
- **Adapting to a different work environment**. Seafarers are used to structured schedules and a hierarchical work culture onboard. Shore-based jobs require different skills like office communication, teamwork, and business decision-making.
- **Limited job availability in niche maritime roles**. Some maritime roles (e.g., fleet management, ship surveying) have limited openings in Latvia. Many shipping and logistics companies have regional headquarters elsewhere, limiting high-level career opportunities locally.
- **Competition from non-seafarers**. Seafarers may compete with business graduates and experienced shore-based professionals for managerial roles. Some employers may prioritize candidates with office-based experience over maritime experience.
- **Psychological & lifestyle adjustments**. A career at sea involves travel and work around the word, while shore jobs are more routine and office-based. Some seafarers struggle with adjusting to a 8-to-5 work schedule after years of long sea voyages.

Seafarers in Latvia have various opportunities to transition into shore-based careers, particularly in port management, logistics, maritime safety, ship surveying, and education. However, some roles require additional training, certifications, or academic qualifications.

Key sectors and opportunities:

- **Port & shipping industry**. Roles in port operations, ship management, and marine logistics are in demand. Major employers include Riga Freeport, Ventspils Freeport, and Liepāja Port.
- **Maritime safety & compliance**: Opportunities in ship surveying, maritime law enforcement, and regulatory roles with organizations like the Latvian Maritime Administration. Certifications such as ISM, ISPS, and marine surveying are beneficial.
- **Maritime education & training**: Teaching roles at Latvian Maritime Academy (LJA) and Novikontas Maritime College.Instructors for STCW courses, ship handling, and marine engineering are in demand.
- **Logistics & supply chain management**: Seafarers can transition into freight forwarding, customs operations, and shipbroking. Additional training in transport economics and supply chain management may be required.
- **Technical & engineering roles**: Marine engineers can work in ship maintenance, classification societies, and energy sectors.

Job availability at sea, changes in maritime technologies, and evolving regulations in Latvia

- **Reduced job availability at sea.** Across the maritime industry, automation and digitalization have contributed to a shift in job roles. Advances in navigation, remote monitoring, and vessel automation often mean that fewer crew members are needed on board modern ships. This global trend can influence the Latvian maritime labor market. As vessels become more technologically advanced, there is an increasing demand for highly specialized roles—such as those involving data analysis, IT support, and technical maintenance—rather than traditional seafaring roles. Workers who have traditionally been employed at sea may face reduced availability of positions that require fewer crew members, prompting a need for re-skilling or up-skilling programs. Market competition and economic cycles also play a role. Shipping companies continually evaluate operational costs, and with newer technologies allowing for leaner operations, there can be a reduced demand for conventional crew roles. Latvia, being part of the wider European market, may experience these dynamics along with regional labor shifts in the maritime sector.

- **Changes in Maritime Technologies**. Modern vessels now incorporate advanced navigation systems, remote diagnostics, and even partial automation. Technologies such as electronic chart

display and information systems (ECDIS), automatic identification systems (AIS), and sophisticated engine management systems are becoming industry standards. For Latvian maritime operators, this translates into a shift from labor-intensive tasks to technology-focused operations. There is a growing emphasis on cleaner energy sources and sustainable practices in shipping. Developments such as hybrid propulsion systems, alternative fuels (like LNG or even hydrogen), and energy-efficient designs are becoming increasingly common. These technologies not only address environmental concerns but also optimize operational costs, indirectly influencing workforce needs and operational practices.
New maritime technologies improve safety through real-time monitoring, predictive maintenance, and enhanced communication systems. While these advances contribute to safer maritime operations, they also require mariners and port authorities in Latvia to adapt to new systems and protocols, which may involve comprehensive training and updated certification processes.

- **Evolving Maritime Regulations in Latvia.** As a member of the EU, Latvia is subject to evolving European maritime regulations that cover areas like safety, environmental protection, and labor standards. This means that Latvian regulations are continually updated to align with broader EU policies—ranging from stricter emissions standards to enhanced safety protocols on board vessels. Recent regulatory changes have increasingly focused on reducing maritime pollution and enhancing the safety of both crew and cargo. Latvia, with its strategic Baltic Sea access, has been adapting its regulations to ensure that its ports and vessels meet these higher standards. Such measures may include stricter controls on ballast water management, emissions, and waste disposal. Evolving regulations may lead to changes in operational practices. For instance, while safety and environmental measures are beneficial in the long run, they might initially lead to increased operational costs. This can further drive the push towards automation and the adoption of advanced technologies, potentially affecting traditional job roles at sea. For Latvian maritime professionals, this means staying abreast of regulatory changes and possibly pursuing further training to remain competitive in a transforming industry.

Transferable skills and qualifications for land-based occupations in the view of Vocational Education and Training

Vocational Education and Training (VET) offers a structured framework that can help seafarers diversify their skill sets, making their qualifications and experience valuable in both maritime and land-based sectors. Here are several ways in which VET supports this transition:

- Bridging Maritime Skills with Land-Based Requirements
    - Technical Competence: Many maritime roles require technical, mechanical, and navigational skills. VET programs often build on these competencies by offering courses that translate maritime expertise into skills applicable to industries like logistics, engineering, and technical services.

- Regulatory and Safety Knowledge: Seafarers are well-versed in safety protocols and regulatory standards. VET programs can extend this knowledge to cover workplace safety, quality control, and environmental compliance in land-based settings, which are highly valued in many industries.

- Development of Transferable Soft Skills
  - Problem Solving and Adaptability: Life at sea develops a strong sense of problem-solving under pressure and adaptability to new situations. VET initiatives reinforce these soft skills and integrate them with modern business practices, enhancing seafarers' appeal in managerial and operational roles on land.
  - Teamwork and Communication: Effective communication and teamwork are crucial both on board and in office environments. Training programs often include modules in leadership, communication, and customer service, helping seafarers transition into roles like project management or supervisory positions.
- Recognition of Prior Learning and Qualification Upgrading
  - Competency-Based Certifications: VET systems typically recognize prior learning and work experience. For seafarers, this means that their years at sea can be formally accredited, reducing the need to repeat foundational courses and fast-tracking them into specialized programs.
  - Modular and Flexible Learning: The modular nature of VET allows seafarers to pursue additional qualifications while still working. Online and blended learning options offer flexibility, enabling them to gradually acquire new certifications in fields like logistics, supply chain management, or technical maintenance.
- Tailored Programs for Career Transition
  - Industry-Specific Training: Some VET programs are designed in collaboration with industry partners to address the specific needs of sectors where maritime professionals' skills can be effectively transferred. This targeted training ensures that the curriculum is closely aligned with the demands of the labor market.
  - Career Counseling and Support Services: Beyond technical training, VET programs often provide career counseling, job placement assistance, and mentoring. These services help seafarers navigate the job market, identify transferable skills, and understand how to leverage their maritime experience in a new career path.

VET empowers seafarers by building upon their existing skills and experiences, while simultaneously providing new qualifications that meet the needs of land-based industries. By emphasizing both hard technical skills and soft skills, recognizing prior experience, and offering flexible, industry-relevant training pathways, VET creates a robust bridge for seafarers seeking sustainable career transitions beyond the sea.

Current training programs, certifications, and workshops designed for seafarers transitioning to shore-based careers

RTU Department of Continuing Education offers a variety of courses for individuals to expand their knowledge, increase competitiveness in line with labor market demands, as well as to raise their qualifications in accordance with their personal interests and the level of education previously obtained.

RTU offers the opportunity to apply for individual study courses from licensed study programs as a listener, attend continuing education courses organized by faculties and institutes, or develop and provide courses necessary for raising employees' qualifications in collaboration with companies, tailored to the specifics and needs.

There is a great variety of courses to choose from. Some of the courses available are the following: Port cargo flow management, Global market and supply chains, Business logistics, Transport commercial operations, Business logistics, Multimodal cargo transportations, Organization of terminal and warehouse operations, Dangerous goods transportation, Legal organization of transport services, Freight forwarding logistics, Digital transformation of logistics processes, Organization of international procurement. Environmental impact assessment, Environmental technologies, Renewable energy resources, Project Quality and Risk Management, Environmental Compatibility and Risk Analysis, Special Electrical Machines for Robotic Systems, Smart Electric Transport Management and Design, Fundamentals of Electrodynamics, Fundamentals of Power Supply, Chemical Substance Management and Environmental Protection, Fire Expertise, etc.

Career transition support in Latvia

In Latvia, several key partnerships have emerged to support seafarers transitioning to land-based careers. These collaborations bring together maritime organizations, training providers, and employers to create comprehensive pathways for skills recognition, re-skilling, and qualification upgrading. While the exact landscape may evolve, some of the notable partnerships include:

- Maritime education and training institutions:
  - RTU Latvian Maritime Academy & Specialized Training Centers: These institutions offer accredited courses that build on seafarers' technical expertise, integrating modern modules in digital technologies, safety management, and regulatory compliance.
  - Riga Technical University (RTU): RTU collaborates with maritime training providers to convert sea experience into recognized qualifications for land-based employment.
- Governmental and regulatory bodies:
  - Ministry of Transport: This body aligns national training standards with EU directives, ensuring that maritime qualifications are internationally recognized and relevant to evolving industry needs.

- Maritime Administration: Working with educational institutions, it updates curricula to reflect current safety and environmental best practices essential for both sea and land roles.

- Maritime industry associations and maritime organizations:
  - Latvian Chamber of Shipping: Acts as a bridge between the maritime sector and potential employers, facilitating tailored training programs that address the needs of both environments.
  - European Maritime Networks: Participation in EU projects (e.g., initiatives by the European Maritime Safety Agency) brings expertise and funding for programs that emphasize transferable skills and career transition.
- Employers and Port Authorities:
  - Port of Riga and Port of Ventspils: These major port authorities partner with training providers to offer apprenticeship and on-the-job training programs, giving seafarers practical experience in logistics, operations, and management.
  - Private Shipping and Logistics Companies: These employers offer mentorship and targeted re-skilling programs, collaborating with vocational education providers to facilitate smooth career transitions.
- Private Training Providers and International Collaborations:
  - Partnerships with globally recognized maritime training organizations ensure that certifications are portable and meet international standards. These collaborations often blend on-site practical sessions with online learning, allowing continuous professional development during career transitions.

Potential career pathways for seafarers in Latvia

Seafarers in Latvia can leverage their maritime experience to transition into a variety of fulfilling land-based careers. Here are potential pathways:

- Logistics and Supply Chain Management: Roles such as supply chain coordinator, freight forwarding manager, or warehouse operations specialist utilize deep knowledge of shipping routes, cargo handling, and operational logistics.
- Shipping and Fleet Management: Transitioning to positions like operations manager, vessel manager, or port operations coordinator allows former seafarers to oversee maritime logistics, fleet scheduling, and port services.
- Marine Engineering and Technical Maintenance: With their technical background, seafarers can work as marine engineers, ship maintenance specialists, or in offshore engineering projects to ensure vessel and equipment reliability.

- Safety Training and Risk Management: Their extensive safety experience makes seafarers ideal candidates for roles such as safety trainers, risk management consultants, or health and safety officers, where they can develop and implement safety protocols in various industries.
- Environmental Consultancy: As environmental regulations tighten, roles in environmental impact assessment, sustainability planning, and marine environmental monitoring are emerging, where seafarers can contribute practical insights into greener practices.
- Maritime Education and Training: Experienced seafarers can become instructors or trainers at maritime academies or vocational training centers, sharing their expertise with the next generation of maritime professionals.
- Regulatory and Compliance Roles: Familiarity with international maritime regulations positions seafarers well for roles in policy advising, compliance monitoring, or maritime law within governmental bodies or private firms.
- Maritime IT and Digitalization: With increasing digitalization of maritime operations, opportunities exist in digital transformation roles, remote operations management, or IT support where hands-on knowledge of onboard systems is a strong asset.
- Technical Sales and Customer Support: Seafarers can also transition into roles focused on technical sales or customer support for maritime equipment and technology providers, leveraging their practical experience to guide customers effectively.
- Insurance and Risk Assessment: Their expertise is valued in marine insurance companies and risk assessment firms, where roles may involve claim evaluations, underwriting, and risk analysis.
- Port and Terminal Operations: Working in major ports like Riga or Ventspils, seafarers can take on positions managing cargo handling, terminal operations, and logistics, applying their on-board experience to efficient port management.
- Entrepreneurship: Many seafarers choose to start their own businesses, such as maritime consultancy practices, specialized training centers, or service companies, turning their extensive experience into innovative commercial ventures.

Each of these pathways allows seafarers to utilize the specialized skills acquired at sea while acquiring new competencies for the land-based job market. Through targeted training, accreditation of prior experience, and industry partnerships, transitioning into these roles becomes a viable and rewarding career move in Latvia.

Seafarers' qualifications that are transferable in Latvia

In Latvia, several industries regularly actively recruit seafarers, leveraging their maritime expertise and offering clear career transition pathways:

- Shipping & Logistics: Seafarers are valued for their knowledge of cargo handling, navigation, and supply chain dynamics. Positions include logistics coordinators, shipping operations managers,

and fleet managers. Key qualifications typically include maritime certifications (e.g., STCW, GMDSS) along with additional training in logistics or business administration.

- Port Operations: Major ports like Riga and Ventspils seek professionals with hands-on maritime experience for roles in cargo management, terminal operations, and port logistics. Essential qualifications include practical maritime safety knowledge and operational logistics expertise, sometimes supplemented by technical certifications in port management or engineering.
- Marine Engineering & Technical Maintenance: Transition opportunities exist as marine engineers or technical maintenance specialists, particularly in offshore projects. Employers look for degrees or certifications in marine, mechanical, or electrical engineering, along with specialized training in engine operations or maritime electronics.
- Safety Training, Risk Management & Environmental Consultancy: Seafarers' strong safety and risk management backgrounds make them ideal for roles in safety training, risk assessment, and environmental consultancy. Additional qualifications might include certifications in occupational health and safety, environmental management systems, or risk assessment training.
- Maritime IT & Digitalization: As operations become more digital, there's increasing demand for professionals managing advanced navigation systems, ECDIS, and data analytics. Employers favor candidates who combine maritime experience with IT or computer science training, often supported by short courses in digital maritime technologies.

Summary of Qualifications and Requirements:

- Maritime Certifications: Such as STCW, GMDSS, and documented sea service records.
- Additional Training: Depending on the sector, training in logistics, engineering, safety, IT, or environmental management is beneficial.
- Practical Experience: Onboard experience is a strong asset, particularly when complemented by tailored VET programs bridging sea-based skills to land-based roles.
- Continuous Development: Modular and bridge courses help seafarers update their skills in line with evolving industry standards.

These sectors highlight how Latvia capitalizes on the unique skill sets of seafarers by providing opportunities that build on existing expertise, while VET programs and industry partnerships offer the necessary additional qualifications for a smooth transition to land-based careers.

Problems and barriers in the seafarers' transition to shore base jobs in Latvia

Seafarers in Latvia face several significant barriers when transitioning to land-based careers:

- Lack of recognition of maritime qualifications. Maritime qualifications and certifications often follow specialized standards that do not always align with those required in land-based sectors. This can lead to:

- Certification gaps: Employers in industries such as logistics, management, or engineering may be unfamiliar with maritime credentials, leading them to undervalue a seafarer's experience.
- Transferability issues: Even though many maritime skills are transferable, the absence of a direct correspondence between maritime and land-based qualifications means seafarers often need to pursue additional education or certification to meet industry-specific requirements.

- Difficulty acquiring relevant shore-based experience. Transitioning from a maritime environment to a land-based setting involves more than just a change in work location—it requires adaptation to different operational practices and corporate cultures. Key challenges include:
  - Limited exposure: Seafarers typically accumulate experience in environments that emphasize technical and operational skills specific to maritime settings, which may not directly apply to many land-based roles.
  - Networking challenges: The maritime sector often involves tight-knit communities with limited exposure to broader, land-based professional networks. This lack of local contacts can restrict access to job opportunities, mentoring, and career guidance.
  - Experience mismatch: Employers frequently seek candidates with direct, relevant experience in the specific land-based role. Seafarers may find themselves needing to start in lower-level positions or internships to gain the necessary practical experience, which can be a daunting prospect after years at sea.
- Limited access to training opportunities. Effective career transition depends heavily on accessible, targeted training programs designed to bridge the gap between maritime and land-based work. However, several obstacles persist:
  - Geographical limitations: Training programs or centers focused on career transitions may be concentrated in major urban areas, making them less accessible for seafarers from smaller towns or rural regions.
  - Financial barriers: The cost of additional training and certification can be prohibitive, particularly for individuals who may not have substantial savings after long periods at sea.
  - Need for tailored programs: There is often a shortage of curricula that specifically address the unique skill sets of seafarers. Generic training programs may fail to fully leverage maritime experience, leaving seafarers underprepared for the specific demands of land-based roles.

Addressing these barriers requires coordinated efforts among maritime organizations, educational institutions, and government agencies. Initiatives could include the development of bridge courses that acknowledge maritime experience, structured internship and mentorship programs to provide shore-

based exposure, and expanding affordable, regionally accessible training programs. By tackling these challenges, Latvia can better support seafarers in transitioning to rewarding and sustainable land-based careers.

Career support improvements needed in Latvia

To better meet the needs of seafarers in Latvia, several targeted improvements in VET (Vocational Education and Training) can be proposed:

- Flexible, tailored programs:
  - Modular courses: Develop modular curricula that allow seafarers to choose topics relevant to their experience and career goals, such as logistics, marine engineering, or safety management.
  - Bridging courses: Design specialized bridge courses that recognize maritime certifications and experience, facilitating the translation of sea-based skills into recognized land-based qualifications.
  - Customized Content: Collaborate with maritime experts and industry partners to tailor content that addresses the specific challenges and opportunities faced by seafarers transitioning to shore-based roles.
- Hybrid learning formats:
  - Blended learning: Combine online theoretical instruction with practical, in-person workshops or simulations. This approach accommodates the unpredictable schedules of seafarers while ensuring hands-on learning experiences.
  - Mobile learning platforms: Develop mobile-friendly platforms that allow seafarers to access course materials, webinars, and assessments anytime, anywhere, making continuous learning more accessible during voyages or shore leaves.
  - Virtual labs and simulations: Incorporate advanced virtual reality (VR) or simulation tools to provide realistic training scenarios in a safe, controlled environment.
- Enhanced career counseling and support services:
  - Dedicated career centers: Establish specialized career centers within VET institutions focused on maritime professionals. These centers can offer tailored counseling, job matching, and mentorship programs to guide seafarers through their transition to land-based roles.
  - Industry networking events: Organize career fairs, workshops, and networking events that connect seafarers with potential employers in diverse sectors such as logistics, engineering, and safety consultancy.

- Lifelong learning support: Provide ongoing career counseling that not only helps with immediate transition challenges but also supports long-term career development through continuous education and professional growth opportunities.

- Strengthened industry partnerships:
  - Collaboration with Maritime Organizations: Foster closer ties between VET providers and maritime organizations, ensuring that course content remains relevant and that seafarers have access to practical training opportunities aligned with current industry standards.
  - Public-Private Partnerships: Leverage public funding and private investment to subsidize training costs, making advanced courses more affordable and accessible to seafarers.
- Increased accessibility and outreach:
  - Regional training hubs: Set up training centers in various regions to reduce geographical barriers, ensuring that seafarers from rural or remote areas can participate without needing to relocate.
  - Flexible scheduling: Offer courses at multiple times, including evenings and weekends, to accommodate the diverse work schedules of seafarers.

Implementing these improvements would create a more adaptable, accessible, and supportive VET system in Latvia. This system would not only recognize and build upon the specialized skills of seafarers but also equip them with the comprehensive, transferable competencies needed to thrive in a variety of land-based roles.

EU wide view on seafarers' career transition support

- Germany's Dual Education System: Germany's dual system combines apprenticeships with vocational training, integrating on-the-job experience with classroom learning. This model ensures that workers receive practical, immediately applicable skills while also earning a formal qualification. The close collaboration between employers, vocational schools, and government bodies helps workers transition seamlessly into new sectors, even when their previous skills require updating or adaptation.
  - Its key features include:
    - Integrated Learning: Apprentices spend part of their time working at a company and the remaining time attending vocational schools. This combination ensures that theoretical knowledge is continuously reinforced with real-world experience.
    - Close Industry Collaboration: Businesses and vocational schools work together to design curricula that meet the current needs of the labor market. Employers

are actively involved in the training process, which helps to tailor skills precisely to industry requirements.

- Structured Apprenticeships: The system is built around formal apprenticeship programs that last typically two to three years. These programs are well-structured, with clearly defined learning objectives, regular evaluations, and final examinations that lead to recognized qualifications.
- Emphasis on Practical Skills: A significant portion of training is practical, with apprentices working in real business environments. This hands-on approach develops job-specific skills and increases immediate employability upon graduation.
- High Employability: Graduates of the dual system are highly valued by employers due to their practical experience and smooth transition into the workforce. The system's close ties with industry contribute to low youth unemployment rates in Germany.
- Government and Stakeholder Support: The dual education system is supported by strong governmental policies and funding, ensuring standardized quality across regions. Trade unions, employers' associations, and educational institutions collaborate closely to maintain high training standards.
- Flexibility and Adaptability: The dual system is continuously updated to respond to technological advancements and evolving market needs. This adaptability ensures that the skills acquired remain relevant in a rapidly changing economic landscape.
- Recognition and Quality Assurance: Qualifications obtained through the dual system are nationally recognized and respected, providing apprentices with clear career pathways and opportunities for further education or advancement in their fields.

- Nordic Bridge Programs for Seafarers: In countries like Norway and Finland, bridge programs have been developed specifically for seafarers transitioning to land-based careers. These initiatives recognize maritime experience and tailor courses in logistics, marine engineering, safety management, and environmental consultancy. The programs also incorporate career counseling and mentoring, linking former seafarers with opportunities in port operations, shipping management, and maritime consultancy.
  - Key Features of this Program:
    - Recognition of Maritime Experience: The core of these programs is the acknowledgment of the skills and competencies seafarers have already acquired. By granting academic credits or exemptions for prior maritime training

and experience, these initiatives allow seafarers to bypass redundant course work and fast-track their transition into relevant fields.

- Tailored Curriculum: The programs typically offer specialized courses that bridge maritime skills with land-based job requirements. This might include modules in logistics, maritime safety management, environmental compliance, or technical maintenance. The curriculum is often designed in close collaboration with industry experts to ensure that it meets current labor market demands.
- Flexible Learning Formats: Understanding the unique schedules of seafarers, these programs often adopt flexible learning models. They combine online courses, blended learning, and face-to-face workshops. This flexibility ensures that participants can continue their education without sacrificing current employment or other commitments.
- Career Counseling and Mentorship: Nordic Bridge Programs include robust support services such as career counseling, mentorship, and networking opportunities. These services guide seafarers through the process of identifying suitable land-based roles, adapting their CVs, and connecting with potential employers in sectors like logistics, port operations, or maritime consultancy.

Lithuanian Maritime Academy

Challenges and opportunities related to the career transition for seafarers to shore-based jobs in Lithuania.

The integration of seafarers into the shore-based job market comes with several challenges.
Firstly, salary differences between seafarers and shore-based employees are significant. Wages at sea are often higher due to demanding working conditions, additional benefits, and allowances. As a result, transitioning to shore-based jobs may seem financially unattractive. Additionally, there is uncertainty regarding career growth—at sea, career progression follows a clear hierarchical path, whereas in shore-based companies, structures can be more flexible or less defined, making it difficult for seafarers to navigate career advancement.
Secondly, the unclear applicability of seafarers' qualifications limits their transition to shore-based sectors. Seafarers possess technical, managerial, and emergency response skills, but these are not always formally recognized in the shore-based labor market. There is a lack of systematic qualification equivalencies, often requiring additional training or certifications. Moreover, employers may not fully understand the competencies of seafarers, leading to difficulties in matching their skills with shore-based job requirements.
Another issue is the difference in workplace culture. Seafarers are accustomed to strict hierarchy and clearly defined responsibilities, whereas shore-based companies tend to have more flexible organizational structures. This can create adaptation challenges. Additionally, there is a lack of specialized support programs to help seafarers transition into new professions, provide mentorship, and offer practical training opportunities.

Possible Solutions:
• Develop clearer career transition pathways to show how seafarers can shift to shore-based jobs with the necessary training.
• Expand VET (Vocational Education and Training) programs to provide missing skills.
• Increase awareness among employers about the competencies of seafarers.
• Offer financial incentives or subsidies to encourage seafarers to enter the shore-based labor market.
• Create specialized consultation programs that provide support for transitioning from a maritime to a shore-based career.
These steps would facilitate the integration of maritime academy graduates into shore-based industries and ensure long-term career sustainability for seafarers.

Job availability at sea, changes in maritime technologies, and evolving regulations in Lithuania

Each year, the number of seafarers in Lithuania is steadily decreasing, and the seafaring community is aging. Statistical data show that the number of young people choosing maritime professions decreases by approximately 10 percent annually. This trend is partly related to the changing modern environment and the youth's perception of career opportunities in the maritime sector. Globalization, technological advancements, and evolving labor market demands lead more young people to choose professions that offer greater job stability, better social security, and the possibility to avoid long periods away from family. Additionally, maritime professions are often perceived as physically and psychologically demanding, further reducing their attractiveness among young people. This situation poses challenges both for employers in the maritime industry and for educational institutions striving to attract new generations to this sector.
Significant changes are taking place in the maritime technology sector in Lithuania, particularly in the development of renewable energy. A plan is in place to establish the first offshore wind farm in the Baltic region with a capacity of approximately 700 MW, capable of generating up to 3 TWh of electricity per year. This project will not only contribute to clean energy production but also create new jobs in marine engineering and related sectors.
Offshore Wind Energy Regulations

• The Ministry of Energy of the Republic of Lithuania shapes offshore wind energy policy and regulates related legislation. It organizes tenders and oversees the issuance of permits for investors.
• The National Energy Regulatory Council (VERT) ensures that offshore wind energy projects comply with electricity market rules. It regulates electricity tariffs and monitors market competitiveness.
• Technical Regulations for Connecting Wind Power Plants to the Electrical Grid: Defines requirements for offshore wind farms connected to the national electrical grid.
• Baltic Sea Wind Park Development Projects: Lithuanian Ministry of Energy information regarding offshore wind energy development, including legislation governing project tenders for wind farm developers.
• European Marine Renewable Energy Strategy: A European Parliament resolution outlining the strategy for marine renewable energy, which influences Lithuania's wind energy regulations.
• Global Wind Organisation (GWO) Standards: Widely applied in the wind energy sector to ensure worker safety and operational efficiency. In Lithuania, GWO standards are recognized and required for offshore wind turbine technicians, as well as supply and crew transfer vessel crews.
These regulations and policies establish the legal framework for activities in ports, logistics, and offshore wind energy sectors in Lithuania, ensuring safety, efficiency, and sustainability.
The regulation of maritime activities in Lithuania is continuously being improved to ensure safety and environmental protection. For example, the requirements for workplace arrangements on fishing vessels set specific safety and health standards in this sector. Additionally, the Lithuanian Marine Environmental Protection Act regulates activities at sea to prevent pollution and ensure the sustainable use of marine resources.

Transferable skills and qualifications for land-based occupations in the view of Vocational Education and Training

Vocational Education and Training (VET) plays a crucial role in helping seafarers transition to shore-based careers by equipping them with transferable skills and industry-recognized qualifications. Given their extensive experience in technical, operational, and managerial roles at sea, seafarers can leverage VET programs to adapt their expertise to land-based sectors such as logistics, maritime administration, engineering, and safety management.

Expansion of Deck Sailors' Professions

Deck sailors who work exclusively on ships face challenges when transitioning to land-based jobs, as their professional experience is not always directly applicable. Therefore, VET (Vocational Education and Training) programs should be supplemented with new specializations that provide them with broader employment opportunities. Suggested additional courses include:

- Welder – Providing industrial welding qualifications applicable in manufacturing, construction, and repair industries.
- Turner, Fitter – Enabling sailors to work in mechanical engineering and metal processing fields.

Opportunities for Mechanics and Electromechanics

Marine mechanics and electromechanics have broader employment opportunities in the land-based sector, as their competencies often align with engineering, industrial maintenance, and energy sector standards. VET programs could be enhanced with:

- Industrial equipment maintenance training, allowing employment in manufacturing companies.
- Automation and robotics basics, encouraging sailors to integrate into smart industries.
- Renewable energy technology **courses**, providing skills for working in wind turbine maintenance.

Additional Qualifications for Cargo Handling Equipment

To improve their employment prospects on land, sailors could acquire additional qualifications for working with cargo handling equipment. VET programs should include professional training hours for port and cargo handling machinery, issuing relevant certifications:

- Rigger – Working with cargo securing and lifting in ports, cargo handling companies, and logistics firms.

- Mooring operator – A specialized qualification for ship mooring and maneuvering operations in ports.
- Forklift and reach truck operator – Authorizing work with warehousing and logistics equipment in industrial, port, and logistics companies.
- Crane operator – Enabling work in port, construction, and manufacturing sectors.
- Logistics, transport, and warehouse operations management – Providing knowledge about port operations, cargo transportation, and document management.

Integration of Electricians into the Land-Based Market

Marine electromechanics have better integration opportunities into the land-based job market, especially if their qualifications are supplemented with an energy sector certification. For this purpose, VET programs could offer:

- High and low voltage electrical equipment maintenance courses.
- Certification according to land-based electrical engineering standards.
- Training in industrial electrical networks.

Current training programs, certifications, and workshops designed for seafarers transitioning to shore-based careers

A similar to number Q5.

Career transition support in Lithuania

Key partnerships in Lithuania for maritime career transition support include:

LINDENAU Training Center: Continuing Vocational Education Programs (50 Course Volume in Credits)

- Renewable Energy Equipment Installer, Level IV qualification according to the qualification framework
- Welder
- Freight Forwarder
- Maritime Port Cargo Logistics Specialist
- Heating, Ventilation, Air Conditioning (HVAC) System Installer

Wind Turbine Training:

Global Wind Organisation (GWO) Courses:

MB Globalūs Mokymai, Rietavas, Lithuania

- Certified GWO training provider offering courses in first aid, manual handling, fire safety, working at heights, and sea survival.
- **GLOBALWINDSAFETY.ORG**

UAB Vinda LT, Klaipėda, Lithuania

- Provides GWO training, including basic safety training for onshore and offshore workers, as well as individual modules such as first aid, manual handling, fire safety, working at heights, and sea survival.

Baltic Training Center, Klaipėda, Lithuania

- Offers GWO basic safety training for both onshore and offshore workers, covering five key modules: first aid, manual handling, fire safety, working at heights, and sea survival.

Global Training, Klaipėda, Lithuania

- Certified GWO training provider offering offshore basic safety training, including five modules: sea survival, working at heights, first aid, manual handling, and fire safety.

Potential career pathways for seafarers in Lithuania

In Lithuania, seafarers have various opportunities to transition into shore-based careers. However, some positions require additional certification and specialized training. There is a high demand for professionals in port logistics,

maritime safety, and shipping operations, particularly in port operations management, ship surveying, and maritime law enforcement.

In government institutions, seafarers can work in specialist and managerial positions within the Ministry of Transport and Communications, the Lithuanian Transport Safety Administration (LTSA), and Klaipėda State Seaport Authority. They can also become port masters, port state control inspectors, and flag state officers. Additionally, former seafarers find roles in the Coast Guard Service, working as rescue vessel captains, vessel traffic system (VTS) operators, and maritime safety specialists.

In private maritime companies, there is a growing need for experienced captains and engineers in shore-based positions. Common roles include ship superintendents, technical inspectors, fleet operations managers, and marine insurance specialists. Many captains gain valuable experience in maritime operations management, enabling them to transition into managerial roles. They can work as shipping operations managers, cruise line managers, marine insurance specialists, or maritime law experts, overseeing vessel movements, cargo transportation, risk assessment, and legal disputes.

Over the past decade, Lithuania's private logistics sector, related to seaport activities, has expanded, leading to increased demand for professionals in port operations, cargo logistics, and terminal management. Many former seafarers successfully move into roles such as stevedoring managers, cargo planners, and port logistics coordinators. Some also pursue careers in maritime education, becoming lecturers or training instructors in maritime academy and professional training centers.

Lithuania has initiated the development of a 500 MW offshore wind farm in the Baltic Sea, marking a significant step towards increasing the country's renewable energy capacity. This project is expected to drive economic growth and create new business opportunities in the maritime, logistics, and port industries. In response to this development, port companies in Klaipėda are adapting to new types of cargo, specializing in the handling and logistics of offshore wind turbine components. The growing demand for large-scale wind energy infrastructure has led to increased investments in port storage, lifting equipment, and specialized handling operations to accommodate wind turbine blades, towers, and nacelles.

Simultaneously, shipping companies are expanding their fleets to support offshore wind operations. There is a rising demand for crew transfer vessels (CTV) and supply vessels to facilitate offshore wind farm construction and maintenance. As a result, the maritime sector is actively recruiting crew transfer vessel personnel, supply vessel crews, and small vessel operators to support the expanding offshore wind industry.

This shift presents new career opportunities for seafarers and maritime professionals looking to transition into shore-based or offshore renewable energy-related roles, reinforcing Lithuania's position as a key player in the Baltic region's offshore wind development.

With the right qualifications and experience, seafarers can build fulfilling shore-based careers in Lithuania's maritime, logistics, and offshore wind energy industries.

Seafarers' qualifications that are transferable in Lithuania

In Lithuania, several industries actively recruit seafarers, utilizing their technical skills, resilience in challenging work conditions, and experience in operations management. The key sectors include:

- **Logistics and Transportation** – Port terminals, freight forwarding companies, and warehousing centers seek employees with knowledge of cargo management and transportation organization. Required qualifications: transport management, logistics, or warehousing certifications.
- **Shipping and Port Management** – The Klaipėda State Seaport Authority and maritime transport companies hire port dispatchers, pilots, and ship agents. Required qualifications: studies in shipping or marine engineering, additional specialized training.

- **Marine Engineering and Technical Maintenance** – Ship repair and maintenance companies, such as Vakarų Baltijos Laivų Statykla (Western Baltic Shipyard), employ mechanics, electromechanics, and welders. Required qualifications: welding, mechanical, or electrical engineering certifications.
- **Renewable Energy (Wind Turbine Maintenance)** – Due to the growing wind energy sector, more seafarers are finding employment in wind turbine maintenance, especially in the Baltic Sea region. Required qualifications: Global Wind Organisation (GWO) safety training, rope access, and electrical equipment maintenance courses.
- **Safety Training and Maritime Expertise** – Maritime training centers and certification organizations seek instructors capable of teaching maritime safety, survival, and technical skills. Required qualifications: pedagogical training, experience in the maritime industry.
- **Environmental and Maritime Consultancy** – Marine environmental organizations and sustainable shipping initiatives employ specialists with expertise in marine pollution control and maritime la. Required qualifications: education in environmental management or maritime law.

These sectors provide seafarers with opportunities to transition successfully into shore-based careers while leveraging their experience and skills.

Problems and barriers in the seafarers' transition to shore base jobs in Lithuania

Barriers Faced by Seafarers Transitioning to Land-Based Careers in Lithuania

Seafarers in Lithuania encounter several challenges when transitioning to shore-based careers. Some of the most significant barriers include:

1. Lack of Recognition of Maritime Qualifications

Many maritime qualifications and certifications are not directly recognized in shore-based industries. This creates difficulties for seafarers when applying for jobs, as employers may not understand the value of their skills and experience. For example:

- Marine engineers may struggle to have their skills recognized in industrial engineering fields.
- Certificates obtained at sea may not be equivalent to those required for land-based positions, requiring additional training.

2. Difficulty in Acquiring Relevant Shore-Based Experience

Seafarers often have extensive technical skills, but their experience is gained in a maritime setting, making it hard to prove their competency in land-based industries. Challenges include:

- Lack of direct experience with industrial engineering or logistics operations onshore.
- Employers preferring candidates with previous experience in shore-based work environments.
- Limited job offers that recognize transferable maritime skills.

3. Limited Access to Training Opportunities

While some training programs exist, seafarers may struggle to access relevant courses that would help them transition to land-based roles. Key issues include:

- A lack of specialized retraining programs tailored for former seafarers.
- High costs of acquiring additional certifications.
- The need to complete lengthy training programs before being eligible for certain jobs.

4. Competitive Job Market and Career Shift Challenges

Seafarers transitioning to land-based careers often compete with professionals who have been working in those fields for years. Key challenges include:

- Career level adjustment – Seafarers with years of experience at sea may need to start from entry-level positions onshore.
- Age-related employment difficulties – Older seafarers may find it harder to transition to a new field.

Solutions and Recommendations. To overcome these challenges, the following actions could help:

- Recognition of maritime qualifications within national education frameworks.
- Specialized vocational training programs for transitioning seafarers.
- Collaboration with industry partners to create employment pathways.
- Financial support for retraining and certification programs.

By addressing these barriers, seafarers in Lithuania could transition more smoothly into shore-based careers, utilizing their valuable skills in various industries such as logistics, energy, engineering, and safety management.

Career support improvements needed in Lithuania

To better meet the needs of seafarers transitioning to shore-based careers, Lithuania's Vocational Education and Training (VET) system could be improved through the following initiatives:

1. Development of Flexible and Tailored Training Programs

- **Modular courses** – Introduce short, competency-based training modules that allow seafarers to gain relevant skills without committing to long-term studies.
- **Recognition of prior learning (RPL)** – Implement a system where seafarers' work experience and maritime certifications can be partially credited toward new qualifications.
- **Industry-aligned programs** – Develop customized training in logistics, engineering, and energy sectors, ensuring better alignment with industry demands.

2. Hybrid and Online Learning Formats

- **Online and blended learning** – Offer distance learning options, allowing seafarers to begin training while still working at sea and continue upon returning to shore.
- **Practical workshops with flexible scheduling** – Provide weekend or evening sessions for active seafarers or those working in rotational jobs.

3. Career Counseling and Job Placement Support

- **Dedicated career counseling centers** – Establish advisory services to help seafarers identify career paths, upskilling opportunities, and transition strategies.
- **Collaboration with industry partners** – Develop internship and mentorship programs with logistics companies, industrial firms, and renewable energy providers to give seafarers hands-on experience in shore-based jobs.
- **Job fairs and networking events** – Organize career transition events where employers meet former seafarers and recognize their transferable skills.

4. Financial Support for Training and Certification

- **Government-funded retraining programs** – Introduce state subsidies or grants to help cover the cost of upskilling for seafarers looking to enter new fields.
- **Employer-sponsored learning** – Encourage maritime and industrial companies to co-fund training for employees shifting to shore-based roles.

By implementing flexible, industry-oriented training, hybrid learning models, and career support services, Lithuania can create a smoother transition for seafarers into land-based professions, helping them apply their skills in logistics, engineering, renewable energy, and technical maintenance sectors.

Examples:

To improve vocational education and training (**VET**) for seafarers transitioning to land-based careers in Lithuania, the following **specific initiatives** could be implemented:

1**. New Specialized Training Programs for Seafarers**

- Lithuanian Maritime Academy (LMA) Expansion
    - Introduce a fast-track program for marine engineers to transition into industrial maintenance roles, covering automation, hydraulics, and mechanical systems.

- Offer short-term courses on ship-to-shore logistics to help seafarers move into port management or logistics coordination jobs.

- Klaipėda Vocational Training and Technology Center (KPTMC)
  - Create a Marine Electromechanics to Industrial Electrical Technician conversion course, focusing on electrical system installation and maintenance.
  - Develop HVAC system maintenance courses targeted at former seafarers, as many marine engineers already have experience with similar systems.

2. Hybrid and Online Learning Options

- GWO (Global Wind Organisation) Online Theory + Practical Workshops
  - Provide online safety and theoretical training for seafarers interested in wind turbine maintenance, with hands-on practicals in Klaipėda or Rietavas.
  - Partner with UAB Vinda LT and Baltic Training Centre to offer flexible certification programs.
- Port Operations Training
  - Lithuanian Transport Safety Administration could collaborate with port companies to develop an online course for port operations, cargo handling, and warehousing.

3. Career Transition Support and Job Placement Services

- Marine-to-Industry Career Center
  - Establish a dedicated career advisory office at the Lithuanian Maritime Academy (LMA), offering:
    - Job matching services with logistics, transport, and energy companies.
    - CV and interview preparation workshops tailored for former seafarers.
    - Networking events with industry leaders looking to hire marine professionals.
- Internship and Apprenticeship Programs
  - Introduce 6-month transition internships in companies like Vakarų Baltijos Laivų Statykla, Orion Global Transport, KN Energy and DFDS Logistics to give seafarers practical shore-based experience.
  - Partner with renewable energy firms (e.g., Ignitis Group, Green Genius) to place former marine engineers in wind turbine maintenance training programs.

4. Financial Support for Retraining

- Government-Funded Transition Programs
  - The Lithuanian Ministry of Economy and Innovation could introduce subsidized retraining courses for former seafarers in sectors like:
    - Renewable energy (wind turbine maintenance, solar panel installation).
    - Logistics and supply chain management.
    - Industrial automation and electromechanical systems.
- Seafarer Retraining Scholarships
  - Offer partial tuition coverage for marine professionals enrolling in engineering, energy, and logistics training at Kaunas University of Technology (KTU), Vilnius Tech, and Klaipėda University.

EU wide view on seafarers' career transition support

We do not any examples.

UNIVERSITY OF RIJEKA, FACULTY OF MARITIME STUDIES, RIJEKA, CROATIA

Challenges and opportunities related to the career transition for seafarers to shore-based jobs in Croatia.

Depending on the level of education and previous seafaring experience various career opportunities are available.

- Nautical tourism-related roles- Skippers, marina personnel (there are 50+ marinas in Croatia)
- Maritime education centres – there is a considerable number of maritime education centres which employ ex-seafarers as instructors for STCW and other courses
- Maritime high schools – there are six high schools in Croatia which include, in their programme, maritime related careers.
- Maritime Faculties – position of an Assistant (start of a researchers career – phD programmes in higher education institutions).Currently there are four faculties in Croatia
- Maritime pilotage – pilot position in various ports in Croatia
- Shipping agencies – shipping agent career
- Crewing agencies – administrator or recruitment specialist
- Inspectors, surveyors – various positions include: ITF inspectors, Port state control inspector, Croatian register of shipping surveyor
- Harbor master office – various positions (SAR, administrators, etc.)
- Shipping companies – superintendent, fleet managers, crew managers
- Port authority – various positions
- Vessel traffic service – operators
- Shipyard positions
- Air, Maritime and Rail Accident Investigation Agency

There are several challenges in workplace transition (sea to shore) in Croatia.

- Seafarers do not have a clear “path” from sea to shore, there is a lack of information

for the possibilities of transition from sea to shore

- The salaries at sea are still much higher than those on shore. For this reason many seafarers stay onboard until they are financially secured and decide to transfer to shore in the later stages of their career,
- For some of the available jobs, the demand is much lower than the supply (the job openings are rare)

- For the position of a skipper, there is a seasonality factor, that is the work is available during summer months
- STCW certifications are essential for onboard careers and roles like skipper or marine pilot. However, the skills and knowledge these certifications validate appear to have little or no relevance for transitioning to certain other careers.
- While personnel onboard is acquiring relevant experience regarding port operations, there could be a preference for job candidates with logistics qualifications

Job availability at sea, changes in maritime technologies, and evolving regulations in Croatia

- **Reduced job availability at sea** — Job availability in the maritime industry fluctuates based on market conditions. While periods of reduced openings may occur, the current market shows a good number of opportunities for seafarers across various roles.
- **Changes in Maritime Technologies** - Maritime technologies are evolving at a rapid pace, with innovations regarding decision support tools (and in the future autonomous ships, remote monitoring systems, etc.) and improvements on already implemented systems, that have the potential to transform the industry. These developments aim to improve safety, reduce operational costs, and increase efficiency. However, as vessels become more automated the demand for onboard crew could decline even further in the future. While new roles may emerge to manage and maintain these technologies, seafarers might need to adapt by acquiring new skills to stay competitive in an evolving job market.
- **Evolving Maritime Regulations in Croatia.** As a member of the EU, Croatia follows evolving European maritime regulations that address safety, environmental protection, and labor standards. As part of this alignment, Croatian regulations are regularly updated to reflect EU policies — from stricter emissions standards to improved onboard safety protocols. As well as EU, Croatian regulation follows and complies with the rules and regulations brought by IMO (that is, the conventions brought by the organization)

Transferable skills and qualifications for land-based occupations in the view of Vocational Education and Training

VET can support seafarers by:

- making certified courses which could then be used for the easier transition from sea to shore
- to advocate shore recognition of STCW certification which a seafarer successfully attended
- bridging the gap between sea and shore personnel

Current training programs, certifications, and workshops designed for seafarers transitioning to shore-based careers

Some of the programs that could provide additional value for seafarers which are transferring from sea to shore are as follows:

- Dronexplore - Basic - Training for Unmanned Aircraft Systems Control
- Dronexplore – Specific - Training for Unmanned Aircraft Systems Control
- Bridge Resource Management Assessment
- Instructor for TRANSAS NTPro 5000 with Navi-Sailor MFD
- Pilot Manoeuvring Simulation Training
- Magnetic Compass adjustment Training
- Remotely Operated Underwater Vehicle Training (ROV)
- Security awareness training for all port facility personell
- Training for linesmen
- VTS operator
- VTS supervisor
- Train the Simulator Trainer and Assessor

Beside the above-mentioned programmes, our faculty also designs custom made programs.

Career transition support in Croatia

Faculty of maritime studies has several partnerships for various purposes, some of the partners include:

- Rijeka port authority
- Ministry of defence of the Republic of Croatia
- Shipyard Uljanik
- Maersk Croatia
- Pronav ship management
- Star yachting
- Zorović maritime services
- Seaflag shipmanagement
- CMA CGM

- Vectrino j.s.c.

The partnerships include collaboration on various projects, but at this point the goal of career transition is not defined

Potential career pathways for seafarers in Croatia

Already listed in Q1 under opportunities.

Seafarers' qualifications that are transferable in Croatia

Indutries: Already listed in Q1 under opportunities

Qualifications and Requirements:

For governmental agencies: Public officials state exam

In private companies: In house training (company dependant)

Problems and barriers in the seafarers' transition to shore base jobs in Croatia

Already listed in Q1 under challenges.

Career support improvements needed in Croatia

Already listed in Q3.

EU wide view on seafarers' career transition support

N/A

FACULTY OF NAUTICAL STUDIES OF BARCELONA-UPC FOR REPORT VET

Challenges and opportunities related to the career transition for seafarers to shore-based jobs in Spain.

First of all, we would like to make some reflections on the profession of merchant seaman, both in the nautical and engineering specialties. It must be taken into account that a merchant ship is a floating city which has the same needs and services as a city, such as sanitary services, electricity generation, air conditioning, propulsion, communications, loading and unloading, drinking water generation, navigation safety, firefighting, survival at sea, and a long etc.

For all of the above, the ships are manned by people with high technical and technological knowledge in accordance with the STCW Convention fundamentally and others no less important.

During the development of their profession on board ships, they are self-sufficient, since the proper functioning of the ship and the maritime adventure depends exclusively on them, since there is no assistance at sea, as is the case in land-based companies that enjoy all the services they need.

The union of theoretical and practical knowledge, acquired during his theoretical training in the corresponding Universities and the practices on board ships during his training period and subsequent professional development, make him acquire soft and hard skills that no other technical and technological career has.

Merchant seamen in the deck specialty, with their acquired knowledge and skills, have direct access to any of the companies in the maritime sector, even without needing an extension of knowledge to do so, for example: pilot, forwarder, ship agent, harbour Master, etc.

Merchant seamen in the engineering specialty, with their theoretical and practical knowledge and their skills acquired on board ships, are especially required by companies in the maritime sector and all types of technologies, shipyards, nuclear power plants, cogeneration plants, etc., in most of them without having to expand their knowledge.

Job availability at sea, changes in maritime technologies, and evolving regulations in Spain

Maritime transport transports 90% of the goods, raw or processed materials, that are transported in the world, that is, more than 12 billion metric tons. Of these goods, 70% corresponds to energy and food, which marks the importance of maritime transport, which makes it strategic for any country.

These goods are transported by a global fleet of approximately 65,000 vessels of all specialties, Bulkcarrier, LNG, Cruises, Ferry, Containers, Tankers, Chemicals, General cargoes, etc.

75% of the world fleet is flagged to the European Economic Area, Liberia and Panama, with ships under the flags of the European Economic Area being the largest fleet and vessels flying the flags of Liberia and Panama are largely ships of European shipowners.

If we analyze the world fleet year after year, we see that even if larger ships are built and new technologies are applied, they still require crew members with soft and hard knowledge and skills for their safe operation.

Data from the Social Institute of the Navy of Spain indicate that the profession of seafarers is deficient and that even with a small fleet, not all the positions of officers on board ships flying the Spanish flag are filled and citizens of other countries have to be used.

The fact that new constructions are built with new technologies helps the shipboard staff, but they do not replace them at all.

The digitalisation of maritime transport is still in its infancy and is only applied to some ships. However, some navigational aid and ship security equipment is digitized, such as GPS, ECDIS and others, but this has not meant a decrease or reduction in ship crews.

Transferable skills and qualifications for land-based occupations in the view of Vocational Education and Training

The professional development on board merchant ships of seafarers and the knowledge acquired in their universities of origin make them qualified personnel to carry out any work in land-based companies, whether within the maritime sector or in the productive industrial sector.

The similarity of knowledge that seafarers have with professionals in the terrestrial industry and the maritime sector, in addition to the soft and hard skills they have acquired as professionals in the maritime sector, occupying different levels of responsibility, mean that they can be incorporated naturally into the jobs that the terrestrial industries offer them.

It may seem that there is a great difference between the jobs on land in the maritime sector and those in the land industry, nothing could be further from the truth, since the functions to be performed as captain or engineer or bridge and engine officers, have in most jobs on land, no less than 70% coincidence, which allows the incorporation of sea professionals into the Terrestrial industry in an immediate and natural way.

In Spain, sea professionals are required by the Land industry at the end of their studies at maritime universities and with a little experience on board merchant ships as deck or engine students.

Current training programs, certifications, and workshops designed for seafarers transitioning to shore-based careers

At the Faculty of Nautical Studies of Barcelona there is a Master's program, typical of the University called "Master in Shipping Business" this Master is not only open to seafarers who want to join the maritime terrestrial sector, but also to other university professionals who also want to work in the maritime sector such as broker, consignee, freight forwarder, director of maritime operations, etc. This Master's Degree has been taught since 1998 to the present.

Our university offers other Master's courses for the incorporation of merchant seamen into other productive sectors on land. The Master's courses we refer to are: Hidrogen technologies, Executive supply chain management operations and logistics, organization and engineering of productions of industrial plants

Also, postgraduate courses such as port operations, average surveyor and arbitrators are taught.

Career transition support in Spain

As far as the education and training of the students of our University is concerned, we have student exchange agreements, through the ERASMUS+ programme, with many universities in the European Union that are included in the ERASMUS+ student exchange programme.

With regard to agreements with companies for the incorporation of merchant seamen into land companies, our university has a job bank, through its website, in which the different jobs are offered, both on board merchant ships and in the maritime land or industrial sector.

The Faculty of Nautical Studies of Barcelona holds a workshop twice a year with all the companies in the maritime, terrestrial and industrial sector, with students and professors to exchange needs and knowledge between them. The result is so positive that a high percentage of students and professionals of the sea reach agreements to join their companies.

Potential career pathways for seafarers in Spain

1. Merchant Marine.

The role of **Captain or Pilot of the merchant navy** is fully defined, both by tradition and by the STCW-95 convention, and in Spain by Royal Decree 973/2009, of June 12, which regulates the professional qualifications of the merchant navy, which establishes the following as the Captain's attributions:

a) Command of ships dedicated to any type of navigation without limitation of tonnage.
b) Enroll as an officer in its different categories in any type of ship.
c) Exercise professionally in all activities linked to its profession.

The duties of the **1st Class Pilot** , according to the RD itself, are:

a) Act as first officer of the bridge or as bridge officer on civilian ships without limitation.
b) Act as captain of civilian ships of gross tonnage not exceeding 500 GT in navigations close to the coast. For the command of fishing vessels, the legislation in force will apply.
c) May act as captain of civilian ships of gross tonnage not exceeding 6,000 GT. To do this, they must prove a period of embarkation of not less than 36 months as a bridge officer. This period may be reduced to not less than 24 months if they prove professional practice as captain or first officer of the bridge during a period of embarkation of at least 12 months.

The responsibilities of the **2nd Pilot** , according to the RD itself, are:

a) Act as a Deck Officer on civilian ships without limitation or as a First Deck Officer on merchant ships of gross tonnage not exceeding 3,000 GT.
b) May act as Captain of merchant ships of gross tonnage not exceeding 500 GT on voyages close to the coast, provided that he has been a Deck Officer for a period of embarkation of not less than twelve months.

2. Other activities in the maritime sector , such as:

- Insurers.
- Protection and Compensation Clubs.
- Surveyors and Vetting.
- Classification Societies.
- Shipyards, Dock Captains, Sea Trials.
- Nautical Needle Compensators.
- Specialized banking and naval financing.
- Auxiliary industries (Habilitating, painting, etc.).
- Maritime consultants and Damage adjusters.
- Official Schools.
- Shipping companies.
- Shipping Associations.
- Boarding Agencies.
- Port operators.
- Dredging and port towing.
- Recreational ports.

3. Business management.

The experience acquired in ship management has great application in all types of private companies, such as commercial managers or managers, human resources managers, etc.

4. Security.

A small proportion of graduates carry out functions in activities related to security,

- Fire brigades.
- Port police.
- Occupational Risk Prevention

5. Logistics.

The activity of freight forwarders, international trade and customs agencies also employs a small part of these graduates.

6. Public administration.

- General Directorate of the Merchant Marine.
- Maritime Captaincies.
- Piloting.
- Port Authorities.
- Social Institute of the Navy.
- Directorate General of Fisheries.
- Fisheries Inspection.
- Customs Surveillance Service.
- SASEMAR (Maritime traffic control, Maritime rescue and rescue).
- Maritime Administration of the Autonomous Communities.
- Meteorological Services.
- Air Traffic Control.
- Navy.
- Fishermen's Guilds and Fish Markets.
- Self-employed professional. Numerous activities of those listed in the preceding

The main professional profiles associated with the Degree in Marine Technologies and the skills for each are as follows:

MERCHANT NAVY ENGINEERING OFFICER:

Skills necessary for the control, management, operation and redesign in the construction and exploitation phase of systems intended for ship propulsion, and for all the technical and safety applications essential for transporting, conserving and handling all kinds of goods.

MANAGEMENT AND COORDINATION OF PRODUCTION, OPERATION, MAINTENANCE AND REPAIR ACTIVITIES OF ENERGY AND INDUSTRIAL INSTALLATIONS:

Skills necessary for the management and coordination of the aforementioned activities.

WRITING AND DEVELOPMENT OF TECHNICAL PROJECTS AND REPORTS:

Necessary skills for the drafting and development of projects for new facilities or those aimed at the construction, reform, repair, conservation, installation, assembly or exploitation, carrying out measurements, calculations, valuations, appraisals, expert reports, studies, reports, and other related work on energy and industrial maritime facilities, in their respective cases, both as a main or accessory matter, as long as their nature is related to the content of the degree.

INSPECTION AND CERTIFICATIONS OF CIVILIAN VESSELS:

Necessary skills to carry out inspections of ships in service related to compliance with international conventions, without exception in their content. Monitoring and supervision of all inspection activities relating to:

- Operation and maintenance of marine energy installations.
- Special facilities and provisions to prevent pollution of the marine environment.
- The ship's propulsion and steering equipment, main propulsion engines, as well as all its services and auxiliary equipment.
- The ship's main electrical power generation equipment and its auxiliary services.
- All other devices, elements, materials and equipment on the ship that influence the safety conditions or the prevention of pollution of the marine environment.

MANAGEMENT, DIRECTION AND ORGANIZATION:

Necessary skills for the direction, control, organization, coordination and management of all kinds of industries or operations related to Marine Technologies and management of all activities related to the marketing of the products of the aforementioned companies.

QUALITY, ENVIRONMENT, MARITIME SAFETY AND OCCUPATIONAL RISK PREVENTION:

Competencies related to quality, environment, maritime safety and prevention of occupational risks necessary for the development of specific management plans, coordination and monitoring thereof, carrying out measurements, calculations, assessments, appraisals, expert reports, studies and reports with full responsibility within the systems integrated in the company.

Therefore, the sectors where graduates in Marine Technologies can work:

- **Naval sector: Ships and shipping companies**
    - Measurements, appraisals, valuations, expert opinions, studies and reports within the field of Marine Technology
    - Prospection and exploitation of marine resources. Marine research
    - Operation and maintenance of ships, platforms, plants and other marine systems
    - Repair and construction of ships, platforms, plants and other marine systems
- **Naval sector: Administration**
    - Inspection
    - Prevention of occupational risks.
    - Classification and quality assurance companies
- **Energy sector**
    - Cogeneration plants
    - Thermoelectric power plants
    - Air conditioning
    - Petrochemical plants
    - Energy and environmental management
- **Mechanical and industrial construction sector**
    - Machinery and mechanical systems, both static (structures) and dynamic (machines), hydraulic and energy systems
    - Industrial maintenance and technical processes in general
    - Development of technical projects
    - Construction management of industrial plants
    - Industrial production
    - Materials

Seafarers' qualifications that are transferable in Spain

In relation to the companies that hire merchant seamen, we have to say that the shipping companies, for many years, for unclear reasons, decided to abolish the human resources department, transferring that important department to external companies for the recruitment of merchant seamen, turning

them into pure mercenaries, because by belonging to the company in which they were sailing, there was no link between the worker and the company.

In addition, this situation has harmed seafarers, since, in this situation of hiring for boarding campaigns, they have lost all union strength and part of their salary is taken by the hiring company, with which they do not have a permanent employment relationship, but intermittently, every time a boarding contract is produced.

In Spain there are few shipping companies, which do not enjoy great appreciation by seafarers, who have no choice but to use them if they want to embark.

We have news that in the International Maritime Organization, IMO, shipping companies are not very well regarded, because by not creating a business relationship between the shipping company and the worker, in addition to not selecting the best, but those that best suit them, it can cause safety problems on board.

Problems and barriers in the seafarers' transition to shore base jobs in Spain

First of all, it must be taken into account that the academic degree is recognized by its own country, that is, it is official or belonging to a University. This is the most important requirement, the official recognition of their academic degree, which within the European Union, they have the obligation for all member countries to accept the academic and professional degrees of each member country.

The merchant seaman certificate is also recognized by the European Maritime Safety Agency, EMSA, which gives added value to seafarer certificate holders.

As far as Spain is concerned, merchant seafarers, in general, have no problem changing to jobs in land companies, because due to their high qualification of knowledge and soft and hard skills, they are sought after by many companies in the maritime land and industrial sector.

In our opinion, although merchant seafarers are highly appreciated in the maritime land and industrial sector, we believe that there is a great need for some tool to guide merchant seafarers on the industrial sectors in which their knowledge and skills are required.

Career support improvements needed in Spain

With regard to the vocational training of seafarers, it should be borne in mind that, due to its universal nature, it must be governed by the STCW Convention, that its contents serve for the acquisition of knowledge and skills exclusively for navigation, which restricts the seafarer to work exclusively in the maritime sector of navigation. that is, to work on board the ship, which, although it is a quasi-complete training, is not the training that includes or embraces most jobs in the maritime sector.

Therefore, the curricula for seafarers, in addition to those corresponding to the STCW Convention, should incorporate subjects that give the seafarer a broader vision of the maritime sector and not only the knowledge corresponding to navigation, both for deck and engineering professionals.

Notwithstanding the above, maritime governments and universities should promote continuous training for merchant seafarers and their incorporation into the maritime terrestrial and industrial sectors due to their knowledge and skills.

EU wide view on seafarers' career transition support

In this question, I refer to what was said in question 7. There are quite a few countries in the European Union and beyond that have considered the high value of seafarers' knowledge and skills and have incorporated them into companies in the maritime, land and industrial sector.

Conclusion

Across Latvia, Lithuania, Croatia, and Spain, the SEA4SHORE analysis highlights both common challenges and unique circumstances in seafarers' transitions from shipboard roles to shore-based jobs. **Key challenges** are strikingly similar across all four countries. Seafarers often face a **significant gap in salary and benefits** when moving ashore, as sea-going positions (especially for officers) tend to pay higher wages than equivalent jobs on land. This financial disincentive can delay career moves until late in one's working life. In addition, many **maritime qualifications are not automatically recognized** or understood by land-based employers. Seafarers frequently discover that their certifications (e.g. STCW licenses) and years of experience **do not align with civilian job requirements**, forcing them to obtain additional training or start in lower-level positions to prove their capabilities. A **lack of formal pathways and information** about career transition is another barrier; for example, Croatia reports an absence of clear "sea-to-shore" guidance or established transition programs, leaving individuals to navigate the change on their own. Seafarers also must adjust to a very different work culture and routine: the move from a regimented shipboard life to the more varied pace of office or industrial work can require new soft skills and mindset shifts. Finally, **limited shore-side openings in maritime hubs** can constrain opportunities. In smaller markets like Latvia, high-level maritime jobs (e.g. fleet managers, ship surveyors) are relatively few, while in Croatia certain roles such as marina skipper are seasonal and available mainly during peak tourism months. These challenges underscore a clear need for structured support to help mariners reposition their careers on land.

Despite the obstacles, the findings show that seafarers bring **valuable transferable skills and experiences** that are in demand on shore. Technically, a merchant vessel is like a "floating city" where crew oversee everything from navigation and cargo handling to power generation and safety management. Accordingly, veteran seafarers develop **strong technical competencies** in engineering, operations, and maintenance that can directly apply to industries such as port logistics, shipping management, offshore energy, and shipbuilding. For instance, **marine engineers** often transition with little retraining into shore jobs in shipyards, power plants, or industrial maintenance, since their hands-on expertise with mechanical and electrical systems is highly relevant. Likewise, deck officers possess knowledge in navigation, cargo operations, and regulations that readily transfer to roles like port captain, vessel traffic service operator, marine safety inspector, or maritime pilot. Seafarers are practiced in teamwork and communication (from working in multicultural crews), decisive problem-

solving under pressure, and adapting to rapidly changing situations such as weather or emergencies. These attributes – leadership, discipline, crisis management – are highly prized by land employers in management, training, and safety roles. However, the country reports indicate that the **translation of maritime skills to land-based language** is not always straightforward. Employers may not fully recognize how a captain's decision-making or an engineer's troubleshooting ability can benefit a shore team. This reinforces the need for programs that **bridge the knowledge gap**, formally **convert maritime qualifications into civilian equivalents**, and raise awareness in industry about the rich skill set ex-seafarers offer.

The role of **Vocational Education and Training (VET)** systems is pivotal in easing these transitions, and the four countries' VET institutions are beginning to adapt to mariners' needs. Currently, each country's maritime academies and training centers provide some courses and certifications relevant to going ashore, but their scope and accessibility vary. In Latvia, for example, the Riga Technical University's maritime faculty and others offer continuing education courses in fields like logistics, supply chain management, and environmental technology that are directly useful for former seafarers. These programs help mariners acquire missing pieces of knowledge (such as business finance or ICT skills) and update their qualifications for land jobs. In Lithuania, the Maritime Academy is expanding offerings towards emerging sectors – a response to new opportunities like offshore wind energy – and proposes **fast-track conversion courses** (for instance, retraining marine engineers for onshore industrial maintenance) and **Global Wind Organisation (GWO) safety training** for those aiming at wind farm jobs. Croatia's Faculty of Maritime Studies in Rijeka provides numerous specialized short courses (e.g. in operating drones, ROVs, simulator training, VTS operations) which can enhance a seafarer's skill profile for technical shore positions. In Spain, the approach is more deeply institutionalized: the Nautical Faculty of Barcelona (UPC) runs long-standing Master's programs (such as a Master in Shipping Business, and others in hydrogen technologies or logistics) that are **designed to broaden seafarers' expertise** for roles in maritime business, advanced technology, and the industrial sector. These educational initiatives illustrate the VET system's current role as a bridge – providing modular learning, new certifications, and career guidance – but also highlight gaps such as the need for greater flexibility in delivery and better alignment with industry demands. Not all seafarers can easily attend lengthy courses due to work rotations, and not all programs fully credit the professional experience seafarers already possess. Therefore, enhancing VET (through methods discussed in the recommendations) will be key to a more responsive support system.

Encouragingly, there is a wide array of **shore-based career pathways** already being pursued by ex-seafarers in all four countries, which both the mariners and stakeholders can look to as models. Many of these pathways stay within or close to the maritime sector, taking advantage of domain knowledge. **Ports and shipping companies** are major employers of former ship crews: in the Baltic States, ports like Riga, Ventspils, and Klaipėda hire ex-seafarers as port operators, marine superintendents, ship agency managers, and pilotage staff. In Croatia, with its extensive coastline and 50+ marinas, **nautical tourism** is a prominent avenue – experienced officers find work as charter skippers, marina directors, and yacht maintenance managers supporting the booming tourist season. Another common route is into **maritime education and training**: every country noted demand for instructors in maritime academies, simulators, and safety courses, where veteran seafarers can pass on their expertise to new generations. Beyond

traditional maritime roles, seafarers are transitioning into **logistics and supply chain management** (leveraging their understanding of global trade and cargo operations), into **regulatory and administrative roles** (such as maritime authorities, inspection services, or coast guards), and into the **broader industrial sector**. Spain's experience in particular shows that qualified seafarers are **highly sought by the industrial and energy sectors** – from shipyards and marine engineering firms to power plants and even tech companies – due to the substantial overlap in technical skills and the strong work ethic seafarers possess. Indeed, Spanish stakeholders report that many maritime university graduates move almost directly into land-based industry jobs after a stint at sea, underlining the effective demand for their skill set. At the same time, new opportunities are emerging. In Lithuania, the planned development of large **offshore wind farms** in the Baltic Sea is creating an intersection between maritime and renewable energy careers, with new jobs for crew transfer vessel operators, wind turbine maintenance technicians, and offshore project managers – roles well-suited to those with seafaring and engineering backgrounds. Each country demonstrates that, when supported with the right training and guidance, seafarers can **diversify into a broad range of shoreside professions** – from **maritime tourism in Croatia to green energy in Lithuania, from port logistics in Latvia to the wider industrial arena in Spain** – enriching these sectors with their unique experience. The shared insight is that seafarers' adaptability and expertise form a strong foundation for second careers, and with improved structures in place to overcome existing barriers, their transition can be a win–win: offering seafarers sustainable employment on land while supplying high-demand skills to various land-based industries.

Recommendations for Policy and Training Programs

To ensure smoother transitions and better career outcomes for seafarers moving into shore-based roles, a coordinated effort is needed from policymakers, VET institutions, industry, and maritime organizations. Below are actionable recommendations, organized by key focus areas, aimed at addressing the challenges identified and leveraging opportunities in each country.

1. Enhance VET Design and Delivery for Transitioning Seafarers

- **Modular, Flexible Courses:** Maritime training institutes and vocational colleges should **develop modular curricula** that allow seafarers to pick and choose courses relevant to their targeted career path. For example, short modules in *port management*, *marine engineering maintenance*, or *logistics operations* can top up a seafarer's existing expertise without requiring a full multi-year degree. Modular design enables personalized learning plans – an ex-navigator might take business and IT courses, whereas an ex-engineer might focus on project management and advanced technical skills.
- **Hybrid and Online Learning:** Implement **hybrid learning formats** that blend e-learning with hands-on practice. Given seafarers' often unpredictable schedules and time spent away at sea, courses should be available through online platforms and flexible timing. Developing mobile-friendly learning apps and offering evening/weekend workshops will make continuous training accessible **while seafarers are still on rotation**. Practical components can be delivered through

short, intensive in-person sessions or modern simulation tools (e.g. engine room simulators, virtual reality scenarios) to ensure competencies are properly acquired.

- **Contextualized Curriculum Content:** VET providers need to **tailor course content** to directly bridge maritime experience with shore-side requirement. This could involve collaborating with maritime experts to create "bridge courses" – for instance, converting navigational expertise into a certified course in logistics and supply chain, or translating naval engineering know-how into an industrial equipment maintenance qualification. By aligning learning outcomes with the **specific knowledge gaps** seafarers face, the training becomes immediately relevant and avoids duplication of what mariners already know.

2. Improve Certification and Qualification Recognition

- **Map Maritime Qualifications to Land Frameworks:** National education authorities and certification bodies should establish clear **equivalency maps** that link maritime certifications (such as STCW licenses, marine engineering tickets, etc.) with comparable shore-based qualifications. This could mean, for example, recognizing that a ship's chief engineer has already met many requirements for a land-based technical engineering role or granting partial credit towards an advanced diploma in industrial maintenance. By **formally crediting seafarers' prior learning and sea service**, VET programs can place them in fast-track programs rather than starting from scratch.

- **Update and Expand Conversion Courses:** Where direct recognition isn't possible, create **conversion or top-up courses** that specifically address the missing pieces. For instance, offer a concise course for former deck officers on national labor law and business practices to qualify them for managerial posts, or a course for former ratings to obtain licenses in forklift operation or shore crane handling. These programs should lead to civilian certifications that **complement maritime experience** – effectively translating a mariner's skill set into the language of civilian employers.

- **Advocate for STCW and Degree Recognition Internationally:** Policymakers at the national and EU level should push for greater **mutual recognition** of maritime professional qualifications across different sectors. Within the EU, all member states are obliged to accept each other's professional degrees, and this principle should extend to accepting seafarer certifications for shore jobs where applicable. Building on European frameworks, countries can work with organizations like EMSA (European Maritime Safety Agency) to ensure that a merchant mariner's license or a maritime academy degree is understood and valued by employers in logistics, emergency management, offshore energy, and other fields. In practice, this might involve publishing guidelines for HR departments on interpreting maritime credentials, or adding maritime qualifications into national qualification frameworks so they are **on par with typical vocational certificates**.

3. Strengthen Industry and Government Collaboration

- **Public-Private Partnerships for Training:** Governments should launch initiatives that bring together maritime academies, vocational institutes, and private companies to co-design

transition programs. **Public-private partnerships** can help ensure training content meets real industry needs and can also provide funding to reduce costs for trainees. For example, a partnership might involve a port authority and a technical university jointly creating a retraining course for port logistics, with the Ministry of Education subsidizing tuition and the port guaranteeing internships for graduates. Such collaboration tightens the feedback loop between what employers seek and what training is provided.

- **Employer Engagement and Internships:** Encourage maritime and allied industries (shipping firms, ports, logistics companies, energy firms, etc.) to actively participate in seafarer transition efforts. This could include **structured internship or apprenticeship programs** that give seafarers short-term shore experience in a company, mentorship by an experienced shore-side professional, or industry-sponsored "return to shore" scholarships. Employers benefit by tapping into a pool of disciplined, skilled workers, while seafarers gain that critical first inland experience in a supportive setting. Governments and industry associations can facilitate this by providing tax incentives or recognition for companies that hire and train ex-seafarers.

- **Regular Industry–Academia Dialogues:** Mirroring a best practice from Spain, institutes should organize **biannual workshops or career fairs** where companies from maritime, logistics, tourism, and industrial sectors meet with seafarers and maritime students. These networking events build connections, allow employers to articulate skill needs, and let seafarers showcase their experience beyond a CV. They often lead directly to job placements or collaborative projects. Government bodies (like maritime administrations or labour ministries) can support these events to make them large-scale and inclusive, possibly as part of national maritime days or blue economy strategies. The outcome is a stronger **community of practice** in which everyone – educators, employers, and workers – is aligned on helping maritime professionals find quality jobs on shore.

4. Expand Career Support and Job Matching Mechanisms

- **Dedicated Career Transition Services:** Establish **career support centers specifically for seafarers** at maritime universities, training academies, or within seafarer unions. These centers should offer one-on-one career counselling, skill mapping, and assistance in preparing CVs and interview skills for a civilian context. Importantly, they can maintain **job placement programs** or partnerships with employment agencies to connect ex-seafarers with open positions in shore industries. A "marine-to-shore" career office could also host mentorship programs, pairing transitioning seafarers with those who have already made successful transitions as guides.

- **Online Job Portals and Alumni Networks:** Develop an **online job portal** (or enhance existing maritime job boards) dedicated to shore-based opportunities for those with seafaring backgrounds. Spain's experience with a university-run job bank for maritime graduates can be emulated more widely, potentially at a European level. Such a platform would aggregate openings in relevant fields (port operations, marine insurance, offshore construction, etc.) and allow employers to specifically search for candidates with sea experience. In parallel, fostering an alumni network of former seafarers in various industries can create a support system – through forums or social media groups – where advice, referrals, and peer support are shared.

- **Ongoing Guidance and Lifelong Learning:** Career support shouldn't end once a seafarer lands their first shore job. VET institutions and maritime authorities should provide **long-term upskilling roadmaps**, encouraging continued professional development. This could mean offering returning workshops or advanced courses a few years into the new career, or simple check-ins to help with any integration issues. By treating career transition as a gradual process rather than a one-time switch, support services can help ex-seafarers climb the ladder on land just as they did at sea, turning initial shore placements into lasting, upwardly mobile careers.

5. Leverage Country-Specific Opportunities

Every country should tailor its programs to harness the unique economic opportunities that align with seafarers' skills:

- **Latvia:** *Port Logistics and Maritime IT* – Latvia should capitalize on its busy Baltic ports and growing digitalization in shipping. This means **strengthening training pipelines into port authorities and logistics firms**, and incorporating modules on digital skills (e.g. port management software, electronic navigation systems) for ex-crew members. Close cooperation between the Latvian Maritime Academy and major ports like Riga can create apprenticeships in port operations and **mid-career courses in maritime ICT**, ensuring that ex-seafarers fill roles in port logistics, customs brokerage, and even emerging fields like maritime cybersecurity.

- **Lithuania:** *Offshore Wind and Renewable Energy* – With Lithuania embarking on large-scale offshore wind farm projects, policies should **integrate seafarers into the offshore renewable energy workforce**. This could involve developing specialized certifications (in partnership with Global Wind Organisation standards) for seafarers to become wind turbine technicians, offshore project supervisors, or crew transfer vessel operators. Government energy agencies and the maritime academy can jointly run programs so that a chief engineer or able seaman transitioning ashore can, with additional training, join the booming wind energy sector. By aligning maritime retraining with green industry needs, Lithuania both addresses a skills shortage and provides seafarers with cutting-edge career options.

- **Croatia:** *Nautical Tourism and Coastal Development* – Croatia's vibrant tourism and yachting industry offers an **ideal second career avenue** for former seafarers. To make the most of this, the VET and tourism authorities should create recognized vocational qualifications for roles such as *marina manager, yacht charter skipper, tour boat captain,* or *marine tourism operations manager*. Experienced seafarers already have the seamanship and safety knowledge; targeted courses can add hospitality, customer service, and business skills to fully prepare them for these roles. Additionally, considering the seasonality, programs could help seafarers **diversify within the tourism sector** (for example, training as maritime museum guides or port facility managers for the off-season). By professionalizing the nautical tourism career track, Croatia can both improve service quality and give seafarers a stable pathway into its largest coastal economic sector.

- **Spain:** *Industrial and Maritime-Tech Sectors* – Spain should continue and expand initiatives that funnel maritime professionals into the broader industrial and tech sectors. This means maintaining strong links between maritime universities and industries like shipbuilding,

maritime engineering, energy production, and logistics tech. **Scaling up successful programs** – such as the Master in Shipping Business and other specialized postgraduate courses at UPC Barcelona – to other maritime faculties in Spain (and even across Europe) will increase the pool of seafarers qualified for high-demand jobs in manufacturing, engineering maintenance, and supply chain management. Moreover, national policymakers could support exchange programs and secondments, where, for example, a naval engineer from the merchant fleet spends time at a renewable energy company or a manufacturing plant to gain experience. Emphasizing the message that **"marine skills are industrial skills"** will encourage more firms in the industrial sector to recruit ex-seafarers and more mariners to see land-based industry as a natural extension of their career.

In conclusion, implementing these recommendations will require coordinated action but stands to benefit multiple stakeholders. Seafarers gain new opportunities for stable, rewarding employment on shore; industries get access to a talent pool renowned for technical proficiency and resilience; and the countries themselves retain the valuable human capital developed at sea, reinvesting it into the domestic economy. By **enhancing VET programs, recognizing maritime qualifications, forging partnerships, providing dedicated career support, and targeting country-specific growth areas**, policymakers and educators can construct a robust support system for seafarers' career transitions. This integrated approach will ensure that those who navigate the ships of Europe's economies can successfully navigate new careers on land – strengthening the maritime sector's ties with the broader labour market and contributing to economic innovation across the region.