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The European maritime community faces a major challenge in training sufficient numbers of young people to adequately supply the current and future needs of European Union Member States commercial trading fleets. There is also a huge, and growing, demand for European trained and qualified seafarers, both officers and ratings, to work in the numerous and varied industrial sectors that to some extent rely on a steady stream of seafarers qualified in accordance with the IMO Standards of Training, Certification and Watchkeeping Convention (STCW).

This research project – the Career Mapping Update 2013 (CM2) – initiated by the European Community Shipowners’ Associations (ECSA) and the European Transport Workers’ Federation (ETF), and funded by the European Commission, is aimed at addressing these challenges full-on. The terms of reference stressed the need for practical solutions to problems seafarers might face in their career mobility and progression both at sea and between positions at sea and on shore and the need to address barriers to career mobility for all seafarers, ratings as well as officers. It is hoped that the findings and the recommendations contained in this Final Report have achieved these objectives and will provide, for consideration by the European social partners and the Commission, a range of measures designed to address the various problems highlighted in this Report.

This research project could not have been completed without the active and enthusiastic input of nearly 2,000 trainees, active and ex-seafarers of all nationalities, shipowners and maritime trade unions, maritime organisations, maritime education and training institutions, commercial training and recruitment companies as well as a great range of individuals who generously offered their advice and guidance. The result is the most extensively researched project of its kind that has ever been undertaken.

Highlighted throughout this Report are comments made by real seafarers and real ex-seafarers in their questionnaire responses. These encapsulate many of the issues raised by the research and they add weight to the recommendations which have been made to address the problems that have been revealed.

The names of the individual contributors or organisations who agreed to be interviewed as part of this research, or who contributed in other ways, are listed in Appendix 3 of this Report. Their generous advice and wisdom is warmly acknowledged.

Particular thanks are also due to members of the Project Team, who are acknowledged in this Report and whose assistance and support has been invaluable.

The views and recommendations expressed in this report are, of course, my own and do not necessarily represent the official views of the organisations that have commissioned this study. Therefore this report, in no way, impinges on the ETF and ECSA policies which can only be set by the respective memberships of both organisations.

David Dearsley
Project Team Leader
Executive Summary,  
Key Findings and Synopsis of Project Recommendations

1.1 Executive Summary

1.1.1 The terms of reference for this Career Mapping Update (CM2) research included updating the original 2004/5 Career Mapping Reports and providing career path maps for several EU Member States omitted from the earlier report. But most importantly, it was stressed that the research should identify barriers to mobility and career progression at sea and between sea and shore jobs for all seafarers and should suggest possible practical measures to address these barriers.

1.1.2 Barriers to career mobility and progression may be both real e.g. the need for specialised qualifications before certain shore jobs can be obtained, and perceived e.g. “There are no jobs available ashore for ex-seafarers”. So it was regarded as essential that the views of active seafarers (i.e. seafarers currently serving at sea) about the barriers they perceive in their future careers should be examined in some depth, as well as the views of ex-seafarers about the real barriers they actually faced when coming ashore.

1.1.3 In addition to active seafarers and ex-seafarers, it was regarded as desirable to seek the views of trainee seafarers as to their career expectations, and a range of other institutions which would interact with seafarers during the course of their careers whether as training providers, specialist maritime recruitment companies, regulators or potential employers. Obviously, the views of members and affiliates of the two sponsoring bodies, the European Community Shipowners’ Associations (ECSA) and the European Transport Workers’ Federation (ETF), were also of major importance in collecting evidence to support the findings of the project.

1.1.4 It was decided from the outset that use of social media should be a cornerstone of the project. This medium is increasingly where people interact, chat, blog or generally communicate with others of a like mind. This includes maritime trainees, active seafarers and ex-seafarers as well as maritime professionals running businesses ashore that are to some extent dependant on a supply of qualified ex-seafarers.

1.1.5 The research covered a period of nine months and the results are reported in this Final Report which has been prepared for ETF and ECSA. While the national career path mapping reports from the original 2005 report prepared by Southampton Solent University have been updated, they reveal that little has changed in the intervening period so far as seafarers career paths between sea and shore are concerned: seafarers career options are much the same as they were eight years ago.

1.1.6 However, the 2013 Update was asked to focus on identifying the barriers that limit career mobility and progression at sea and between sea and shore and to suggest practical ways to overcome these barriers. The research identified 20 Key Findings from which 10 Recommendations on ways to improve seafarers career mobility and progression at sea and between sea and shore occupations have been put forward for consideration.

1.2 Definitions

1.2.1 It should be stressed at the outset, that the terms “sea” and “shore” are not necessarily exact opposites, although they have been used as such in this Report. In deciding no longer to work at sea, such as on deep sea merchant ships, a seafarer might decide to accept another job where much of the working time is actually spent on ships or boats, such as on tugs, yachts, river transport, pilot boats, dredgers and inshore craft or on the growing number, variety and sophistication of vessels in the offshore sector. So for the purpose of this Report, the terms “shore-based” or “ashore” should be taken to include a wide variety
of jobs ranging from dedicated shore work in an office to jobs where the individual may spend time, even a majority of their time, on a ship, but not to include regular long haul voyages on a deep sea merchant ship.

1.2.2 In this Report a “trainee” means a person who has not yet qualified in accordance with the IMO Standards of Training, Certification and Watchkeeping Convention (STCW), some of whom may be at their pre-sea induction phase and others who might have gained some sea experience as part of their training. An “active” seafarer is one who is STCW qualified and currently serving at sea or is unemployed but actively seeking work at sea. An “ex-seafarer” is one who has served at sea in any capacity and is currently working ashore in a maritime or non-maritime occupation.

1.3 Key Findings

1.3.1 Most trainee seafarers (both EU nationals and non-EU nationals) apply for maritime training for entirely, and rather remarkably, positive reasons, and this also applies to the reasons active and ex-seafarers applied for maritime training at the outset of their careers.

1.3.2 The advantages of a future career ashore in the maritime cluster do not feature highly on the list of reasons for applying for maritime training for European seafarers (or for non-Europeans).

1.3.3 While a significant proportion of trainee seafarers state they expect to remain at sea until retirement (as would be expected), the majority expect to leave the sea before this, with most specifying 10-15 years as their seafaritime expectation, and this corresponds to seafaritime expectations of active seafarers and actual seafaritime performed by ex-seafarers before they transferred ashore.

1.3.4 Of the reasons given for intending to transfer ashore, active seafarers stressed poor social life, the time and cost of obtaining higher maritime qualifications, better long term career prospects ashore and needing a new challenge. Non-Europeans placed more emphasis on low pay and poor conditions at sea and a change in domestic circumstances.

1.3.5 For ex-seafarers, it was stressed that the reasons which were the most important when they transferred ashore were that they needed a new challenge, their domestic circumstances changed, there were better long term career prospects ashore, and it was part of their anticipated career planning.

1.3.6 With regard to on-board career mobility and progression, active seafarers did not regard promotion at sea as being too slow or a lack of job flexibility in current shipboard ranks/ratings (as specified by STCW requirements) as significant problems. Nor do there appear to be any serious discussions at national or international level of possible alternative shipboard Manning/qualification arrangements that would affect seafarers current on-board career mobility or progression aspirations.

1.3.7 However, there are some initiatives in certain EU Member States to integrate ratings into career paths at sea that may lead to upward career progression into officer ranks within a coherent training and qualification pathway.

1.3.8 When eventually transferring ashore, the large majority of trainees and active seafarers wish to remain in employment where their maritime qualifications and know-how are useful, and these views are echoed by ex-seafarers about their decision to transfer to shore employment.

1.3.9 Most active seafarers have clear ideas about the particular type of work they wish to do if they eventually transfer to shore employment rather than being content in any maritime related job.

1.3.10 Not surprisingly, the most popular shore jobs specified by seafarers were those positions most familiar to them from their sea experience, such as superintendents and operations managers, rather than other jobs in the maritime clusters they were less familiar with.

1.3.11 The most widely reported concerns European seafarers have about their future careers were that there would be few alternative jobs available at
sea or ashore, their standard of living would decline, and they would have difficulty finding information about alternative jobs.

1.3.12 In terms of what assistance would be of most help to seafarers in their future careers, active seafarers (Europeans and non-Europeans) considered that more companies offering jobs at sea for seafarers with their qualifications, a job guarantee with their current employer, more funding for study/training for shore jobs, and more information about shore job availability were the priorities.

1.3.13 For ex-seafarers the main problems actually experienced (as against the problems they thought they might experience) were that their maritime experience and qualifications were not valued, there were too few jobs available in the maritime sector for those of their age and qualifications, they needed to move home to find work, and their living standards declined. Difficulty in finding information about shore jobs was another problem frequently mentioned.

1.3.14 While few complaints were made about the need to obtain further qualifications in order to apply for many shore positions in the maritime clusters, the time and cost of such training was a major concern and the costs can be formidable. Apart from re-training costs, many, if not most, seafarers need to relocate in order to obtain work in the maritime clusters, with all of the domestic problems and costs this involves. In addition, although ex-seafarers working ashore are relatively well paid by shore standards, they usually receive less net pay than their seagoing wages and their employment conditions may not prove so attractive.

1.3.15 The main forms of help recommended by ex-seafarers to make ship/shore transition easier for seafarers were more shore recognition of maritime qualifications, more information about shore job availability, and more training courses available covering shore job requirements. More distance learning and more funding for training also ranked highly.

1.3.16 Despite the problems anticipated by ex-seafarers in finding shore-based employment, the large majority actually experienced few or no difficulties in finding appropriate jobs.

1.3.17 The range of training assistance available to seafarers to help with career progression is quite extensive, with many training courses offered by MET institutions covering STCW and related courses, some industry organisations providing courses (usually in English) relevant to work in the maritime clusters, and many commercial training course providers offering a whole range of deep-sea specific, maritime cluster specific and general educational courses (again usually in English). But such training can be expensive for the seafarers unless sponsored.

1.3.18 Many distance learning courses (also known as blended or guided learning and usually in English) are available for seafarers wishing to progress their careers at sea or in shore positions. While many of the leading commercial companies providing such courses aim for high tech, web-based systems provided to crews through company fleet-wide agreements, there are others catering more for university level or shore maritime industry-standard training courses, including assessment and accredited examinations which are targeted at individual seafarers and which are designed for use on ships without easily available broadband access.

1.3.19 Adequate and cost-effective crew access to sufficient broadband width at sea to enable complex training material to be downloaded by most seafarers (let alone use of social media to improve contact with friends and family at home to improve shipboard social life and aid retention) remains at best some 5-10 years away. While a few ships are reasonably well connected, mainly cruise ships and those in the offshore sector, and improvements in maritime satellite coverage and in innovative crew access are accelerating, free access is often restricted and user costs can be formidable. So while seafarers may well hope for more distance learning facilities to help career mobility, much on-board training for the individual will need to continue to focus, in the short term, on learning using more readily available, and cost-effective, on-board training techniques unless or until more radical solutions are found.
Seafarers work skills, technical knowledge, problem-solving ability and work ethic make them highly desirable, and in some cases essential, in shore jobs within the maritime cluster. But, many do not make the transition from sea to shore easily, particularly those who have held senior rank for some years. Seafarers moving into a shore environment need to adapt to a different working environment with different work norms, skill sets and management structures, they may also face dramatic changes in their employment conditions as well as domestic issues concerned with moving home. Some companies appear to provide mentoring and support to assist seafarers manage the transition, indeed a few now regard the sea/shore transition as an inevitable and desirable process allowing them to attract and retain the best candidates in management positions ashore. But many employers, if not most, need to make a substantial investment in this area.

1.4 Synopsis of Project Recommendations (see Section 5 for the Project Recommendations in full)

1.4.1 All careers literature intended for young people should incorporate and maximise the positive career strengths revealed by the research but should also place increased emphasis on future job opportunities ashore within the maritime cluster.

1.4.2 There should be more co-ordination and integration of maritime promotion, career progression, training and qualifications in European Member States involving all sectors of the maritime cluster to share resources, promote the strengths of the whole maritime sector to the general public, maximise political impact and encourage seafarers career mobility.

1.4.3 Ratings training and certification arrangements should be integrated into national shore vocational training structures and expanded to improve recognition and accreditation of their qualifications and assist career mobility.

1.4.4 There should be a debate on possible new maritime manning structures involving the integration of all crew members within a management and operational structure that will maximise career path mobility and job opportunities for all seafarers.

1.4.5 More schemes to recruit and train ratings with potential career paths to officer level should be developed, including upgrading training in certain watchkeeping skills to the operational level rather than support, with the appropriate certification.

1.4.6 Sources of funding to assist retention in the maritime sector, retraining seafarers for shore work, and obtaining the necessary qualifications should be explored through a research project. In particular, the research should explore a possible EU/EEA approach to maritime internet providers to provide more accessible and cost-effective broadband access for training and social purposes.

1.4.7 Distance learning and qualification courses should be upgraded and expanded ideally using broadband where possible and available but also using lower-tech training methods, including on-board assessments and covering secondary, tertiary, maritime and non-maritime courses.

1.4.8 More short training courses should be made available through distance learning or other means covering leadership, management, financial management and other skills needed for shore positions.

1.4.9 An on-line maritime career database should be established to provide European seafarers with a single, easily accessed and free of charge information source covering the availability of shore jobs, training courses and contact details.

1.4.10 Employers should be encouraged to provide more support to seafarers career ambitions, including support during the transition from sea to shore positions, though publication of advice and guidance and/or arrangement of a seminar/conference on the subject.
2.1 Background

2.1.1 The original report on maritime career paths, “The Mapping of Career Paths in the Maritime Industries” was prepared by Southampton Solent University and published in 2005. The report contained in-depth analyses of the maritime education and training systems in ten EU Member States and maps of the career paths followed by the national seafarers in each of these countries. The report identified certain barriers to maritime career progression within the European maritime sector but it was considered at the time that further research work in this area would be useful.

2.1.2 The 2005 report was the first specific analysis of European maritime career paths by professional researchers, but it was not the first review of how to improve maritime career progression at sea and from sea to shore. Although not really part of the CM2 project, it was impossible not to uncover much parallel or complementary work in this area, whether commercial ventures, work by maritime education and training institutions or other research bodies.

2.1.3 One of the first was a book, “Changing Course: A second career for the seafarer within the maritime industry”, written by the well-known maritime journalist Michael Grey and published by Fairplay Publications in 1980. By kind permission of Fairplay Publications several of the illustrations from that book are reproduced in this Report.

2.1.4 Subsequent to this, several other research projects were financed by the European Commission covering European maritime education and training, maritime recruitment and training and ways to improve social and living conditions at sea. Most recently, two projects were completed on upgrading Able Seafarers training and on providing careers advice to certain officers. Details of these research projects are provided in Appendix 4.

2.1.5 In 2012 the social partners in the European maritime sector, ETF and ECSA, decided to sponsor an update of the 2005 Career Path Mapping Report. The terms of reference for the update – CM2 - involved providing an update of the 10 national reports covered in the 2005 report and preparing 4 new reports covering EU/EEA countries not included in the original report. However, it was stressed that particular emphasis in CM2 should be placed on:

- identifying the barriers or limitations on career progression and mobility
- proposing practical solutions to the barriers and limitations
- covering both progression and mobility in jobs at sea and between sea and shore, and
- the recommendations should include ratings as well as officers.

2.2 Methodology

2.2.1 Barriers and limitations on career progression and mobility can be real barriers – the applicant is too old, lacks the necessary qualifications, lives too far from where jobs in the maritime cluster are available, does not speak the language that is needed and so on. But the barriers can also be perceived by the seafarers themselves. Perceived barriers or limitations might include “There is no way to find information about jobs ashore”, “There are very few jobs available for ex-seafarers of my age and qualifications”, or “I will never be able to settle in a shore job”.

2.2.2 The views on these perceived and real barriers, as well as the career expectations and ambitions of seafarers, can only be established by asking trainees, active and ex-seafarers themselves. The prospects of improved career progression at sea can only be ascertained by consulting regulators and training providers. The existing help available to seafarers wishing to work ashore as well as possible future developments in new training techniques involves seeking information from training providers.
and, for example, internet service providers as well as, in some cases, ship operators. And job opportunities ashore often involve interaction with those commercial entities, and others, that find or provide jobs for ex-seafarers, so their views were also important.

2.2.3 These challenges, as well as, of course, the project budgetary constraints, dictated the methodology to be employed with CM2. This involved:

> reliance mainly on use of social media to promote the project, direct potential target populations (i.e. trainees, active and ex-seafarers etc) to questionnaires and to create a dialogue with those interested and involved in maritime career progression and mobility
> use of an internet specialist data collection and analysis tool to hold the questionnaires and to manage and analyse the submitted returns
> an internet trawl for related, relevant projects and research,
> face-to-face interviews with relevant people (representatives of various maritime organisations, MET institutions, active seafarers and ex-seafarers etc) and
> phone interviews with others with a contribution to make, such as ship operators.

2.2.4 The benefits as well as the drawbacks to this approach are referred to in the Methodology Reflections in part 2.4 of this section and in Appendix 5 which deals in more detail with the ways in which social media was used in the CM2 Project.

2.2.5 As general remarks, however, the sea-based maritime community is relatively homogenous and obviously prepared to help those who wish to help them. In addition, the shore-side maritime community is relatively small, inter-connected by a web of personal contacts which makes it relatively easy to find ways to open doors to potential contributors, and overwhelmingly generous in its willingness to spend time to help in projects such as CM2.

2.3 Project Team and Management

2.3.1 The lead consultant to the project was David Dearsley, Managing Director of Dearsley Maritime Consulting, who previously co-ordinated the 2010 Project on Enhancing European Maritime Recruitment and Training. David was previously Deputy Secretary General of the International Shipping Federation and Secretary General of the International Maritime Employers Committee.

2.3.2 A small research team was established to co-ordinate the research and provide expert advice, and this involved a specialist social media company, Digital Marketing Bureau, and an independent researcher, Dr. Jane Copley of the Working Lives Research Institute. This team held a number of co-ordination meetings in London during the nine months of the project. Details of the research assistants are provided in Appendix 7.

2.3.3 In addition, the research team was greatly assisted by Allan Graveson, Senior National Secretary of Nautilus International as advisor, partly because of his great experience of maritime career mobility and also because he had been part of the research team that produced the 2005 Career Mapping Report led by Southampton Solent University.

2.4 Reflections Concerning Methodology

2.4.1 It was notable how many individuals gave their time willingly to discuss the issues raised by the CM2 Project. In many cases, being ex-seafarers themselves, they were naturally sympathetic to the aims of the project and very happy to explain their own experiences. But by no means were all of those interviewed by phone or in person ex-seafarers, although their advice was generously given and equally invaluable.
2.4.2 It was also notable how many seafarers not only completed long and quite complicated questionnaires but also responded positively to questions asking if they would be prepared to provide further information if contacted directly.

2.4.3 Perhaps one of the most novel features of the CM2 Project methodology, and a feature which proved very successful, was the use of social media to collect data for the research. A report of how the various elements of social media were used in collecting data and other aspects relevant to the CM2 Project for those who may wish to use this method in the future is attached at Appendix 5.

2.4.4 However, in brief, Linkedin Groups with maritime specialties and Twitter contacts with links to maritime issues were the principal sources used to direct members of the target populations to the survey questionnaires, to stimulate discussion about the issues involved and to publicise the project and its progress.

2.4.5 Overall, the “hit rate” of persons who checked the questionnaires after reading about them on the social media sites and both the hit-to-questionnaire completion rate and the speed of the response after reading about it was much higher than with conventional survey techniques.

2.4.6 The use of social media sites certainly proved more effective than using email messages sent to potential respondents asking them to complete the relevant questionnaire. In the case of maritime education and training (MET) institutions, for example, considerably more MET questionnaires were completed in response to messages on Linkedin and Facebook sites than in response to targeted email messages.

2.4.7 Not all of the submitted questionnaires were completed by Europeans. However, the results were analysed and where there were differences in opinion between Europeans and non-Europeans - and there were remarkably few areas of difference - these formed an interesting sub-set of the research.

2.4.8 For both trainees and serving seafarers a modest prize draw was promised to those responding to the questionnaires. This will be arranged once the Final Report is published and the results listed on the project website.

2.4.9 The downside of using these methods to contact individuals in targeted populations, is that the users of social media sites are not necessarily representative of the target populations as a whole (although this can equally apply to those who choose to complete any questionnaire). Not everyone, not all age groups and not all nationalities wish to become members of social media groups.

2.4.10 In the CM2 Project, while the age spread of respondents was very broad, the responses were biased towards:
> officers rather than ratings
> deck officers and deck ratings rather than engineers or other ranks/ratings
> those most comfortable with social use of the English language (although seafarers from every EU Member State completed questionnaires with the exception of seafarers from Estonia, Czech Republic, Hungary, Austria, Luxembourg and Cyprus)
> those in relatively senior ranks/ratings rather than juniors
> qualified seafarers rather than trainees (trainees were not anyway a prime target group for CM2, and they tend not to use Linkedin Groups for their social media interactions)

2.4.11 Despite these caveats, the use of social media in seeking the views of any target population – particularly seafarers who are scattered around the world on ships or in their home countries – has proved its worth in completing this Report. Indeed, it is difficult to conceive how such a wide-ranging survey of international target populations could achieve this level of success using traditional methods.
Section 3

National Report Updates and New National Reports

3.1 National Report Updates

3.1.1 The 2005 Career Mapping Project contained national reports for 10 EU Member States, outlining their MET systems, providing statistics about the national fleet and the number of national seafarers and an explanation of the various career paths followed by seafarers, together with a schematic diagram. These reports were compiled by the Warsash Maritime Academy research team by means of site visits and structured face-to-face and phone interviews with local experts. The CM2 Project was required to update these reports by means of correspondence and phone interviews where necessary.

3.1.2 ETF and ECSA members/affiliates were requested to provide two page updates of their respective 2005 reports to allow the CM2 Project team to merge them together with other relevant information from each 2005 report. The intention was to provide relatively short up-to-date summaries of the situation in each of the ten countries.

3.1.3 The returns from ECSA and ETF members revealed that there had been few, if any, changes to the maritime career paths of seafarers during the past eight years. The number of national flag ships, the number of national seafarers and the number of trainees had, however, changed and this data has been amended where appropriate.

3.1.4 The updated 2013 national career path reports are included in Appendix 1.

3.2 New National Reports

3.2.1 The CM2 Project was required to construct four new country reports, covering Belgium, France, Norway and Romania, that had not been included in the 2005 Report.

3.2.2 The Belgian, French and Norwegian reports were to be constructed from data submitted by the respective ETF and ECSA members/affiliates, while the Romanian report involved a site visit by the project team leader.

3.2.3 These reports, together with the respective schematic diagrams indicating national seafarers career paths, are included in Appendix 2.
Research Findings

4.1 Explanation

4.1.1 The questionnaires used for this project were long – often over twenty questions – and in several questions additional comments were invited to supplement the information. In addition, a total of nearly 2,000 questionnaires were received from trainees, active and ex-seafarers, ETF/ECSA members/affiliates and MET institutions and others. This necessitated some complex data analysis and selection of points and comments to highlight.

4.1.2 The SurveyMonkey data collection and analysis tool that was used provided both a summary analysis of the answers to the principal questions and a detailed record of each individual answer to each question.

4.1.3 The breakdown of survey returns by response category was as shown in Figure 1 below:

4.1.4 Seafarers from over 60 different countries submitted questionnaires of which some 70% were from EU Member States. Seafarers from all EU Member States submitted questionnaires with the exception of Austria, Cyprus, Czech Republic, Estonia, Hungary and Luxembourg.

4.1.5 Although this was a research project targeted at European seafarers, a significant number of non-European trainees, active and ex-seafarers completed...
the questionnaires. The views of non-European trainees, active and ex-seafarers were of interest for comparative purposes. So, in the following sections, while the data has been explained by reference mainly to European seafarers, where differences between Europeans and non-Europeans are of interest, they are referred to specifically. For example, all trainees, active and ex-seafarers, both European and non-Europeans, expressed much the same views about why they applied for training for a maritime career. But the main factors persuading seafarers to work ashore differed between active and ex-seafarers and between Europeans and non-Europeans. So the conclusions must be read with care.

4.2 Reasons For Going To Sea

4.2.1 The three most important reasons for applying for maritime training were almost precisely the same for trainees, active and ex-seafarers (and for both Europeans and non-Europeans) and they were entirely positive: it was considered to be an interesting and challenging job, the respondents liked ships and they liked travel and meeting people. By contrast, relatively passive reasons for applying for maritime training, such as a family member recommended it or a lack of other job opportunities ashore were ranked near the bottom of the priority list. The importance of the various reasons for going to sea, shown as an amalgamation of European trainees, active and ex-seafarer responses are shown in Figure 2 below. Responses from non-European trainees, active and ex-seafarers were virtually identical.

4.2.2 In a structured interview with a company specialising in cadet recruitment for both passenger and offshore vessels, the following points were made:

> more than sufficient numbers of applicants applied for deck cadetships (a position of which the public were more aware) although it was somewhat more difficult to find sufficient numbers of engineer and ETO trainees

> unlike the normal university system in the UK, the degree-level course was effectively free of charge to the trainee

> the course combined the benefits of degree-level academic recognition plus vocational training

> the company offered the “glamour” of passenger ship work for those to whom it appealed, or the hands-on, practical work on small ships for those who preferred this route.

4.2.3 For the purpose of the CM2 Project, it is particularly notable that the prospect of maritime training being a “passport to future job opportunities ashore” was one of the lowest rated of the reasons for choosing maritime training for each of the three categories of trainees, active and ex-seafarers.

4.2.4 These results contradict results from a questionnaire to ECSA members in 2010, as part of the Project on Enhancing Maritime Recruitment and Training, which found that ECSA members regarded the availability of future jobs in the maritime sector ashore as one of the top three attractions in encouraging young people to apply for maritime training.

Figure 2 - Reasons for going to sea (Source: Combined EU Ex, Active and Trainee Seafarer data)
4.2.5 The CM2 Project also included a questionnaire for ETF and ECSA members which included a question on the extent to which they regarded jobs in the maritime cluster as important in the success of national recruitment campaigns and the extent to which it featured in careers literature.

4.2.6 While a small majority of respondents either agreed or strongly agreed on the importance of the availability of shore jobs in the maritime cluster in recruitment campaigns, a significant minority either disagreed or had no opinion on the issue. In several EU Member States the possibility of future jobs in the maritime cluster did not feature in careers literature even in cases where the respondent personally considered the issue to be important as a recruitment incentive.

4.2.7 Several comments made by respondents to these survey questions are relevant to these issues:

> “it is important for a young person, perhaps even more important for women seafarers, to have an onshore job opportunity after being a seafarer”
> “we are too small a country to ensure seafarers have work positions on shore”
> “seafarers wages are significantly higher than the average salary in the country”.

4.2.8 These three comments perhaps best encapsulate the challenges and dilemmas the EU Member States face in respect of maritime career progression and mobility:

> for many young people, particularly women, the prospect of a long working life confined to a ship will not provide them with the long-term work and social stimulation they seek
> many EU Member States have far more deep sea seafarers than can be found jobs in their shore-based maritime cluster when they wish to transfer ashore to find work
> net pay differentials between sea and shore wages (i.e. after tax, travel and often relocation costs are taken into account) can result in seafarers deciding not to work ashore and/or not to relocate from where they live to where jobs in the maritime cluster are available.

4.2.9 It was also noticeable from responses to questionnaires and discussions with interviewees that with a few notable exceptions, such as Denmark, there was very little co-ordination between the deep sea maritime sector and other related parts of the maritime cluster such as fishing, ports and harbours, off-shore, wind power, yachts etc. This was particularly the case in terms of recruitment efforts, but also applied more widely to many other areas where it would be expected that greater co-operation would be beneficial, such as training and certification and efforts to attract political support for the industry. This issue is covered by a recommendation in Section 5 of this Report.

4.2.10 Although trainees may not appreciate this at the time they apply for maritime training, the research reveals that most European seafarers will transfer to work ashore and many, if not most, will find work in the maritime cluster. So while national recruitment material should emphasise the main reasons why young recruits apply for maritime training – which are strongly positive and would be the envy of most other industrial sectors – it is clearly desirable also to emphasise that a bright and rewarding future exists in maritime-related shore employment if (or most likely when) they decide to transfer ashore. This issue features as one of the Project Recommendations which are made in Section 5.

4.3 Expectations Of Time Spent At Sea

4.3.1 It is an absolute fact now, as it ever was, that most young people who undertake maritime training will not spend the rest of their careers at sea. Indeed the industry could not cope if everyone, or even most people, who went to sea stayed until retirement – promotion would be blocked, ambition stifled, recruitment would slow to a trickle and sectors in the maritime clusters ashore that depend on a steady supply of qualified ex-seafarers would atrophy.

4.3.2 While just less than one quarter of trainees stated that they expected to remain at sea until retirement, and 17% had no idea when they might leave, 35%, even at this early stage in their careers, expected to leave
the sea after 15 years of service or less. The largest proportion of those expecting to leave the sea before retirement suggested 10-15 years service as their sea service expectation as is indicated in Figure 3 below.

4.3.3 For active seafarers, the pattern is similar. Some 22% expected to remain at sea until retirement and 16% did not know when they might leave, while the remaining 62% expected to leave the sea before retirement. The most frequently mentioned period for which they expected to remain at sea (given that they had already spent some years at sea) was a further 5-10 years, with the second most frequently mentioned period being a further 2-5 years as shown in Figure 4 below.

4.3.4 Most ex-seafarers – more than one quarter – had served at sea for 10-15 years, with lesser numbers working at sea for 5-10 years followed by 15-20 years, before they left to work ashore. Many reported that they had begun thinking about transferring ashore 5 years before actually making the move. The sea service of ex-seafarers responding to the survey is shown on Figure 5 below.

4.3.5 The overwhelming majority of active seafarers expect to be at, or close to the top of, their departmental rank/rating structure at the time they come ashore e.g. Master, Chief Engineer, Bosun etc.

4.3.6 Many employers who, for the most part, invest a considerable amount of time and money into recruiting, training and motivating the seafarers they employ might be reluctant to face up to this situation. But the statistics suggest that they should realistically be planning for a maximum sea-service for most of their seafarers of 10-15 years, and they should not automatically assume that the 10-15 years sea-service will be spent exclusively with their company.

“Members (shipping companies) do not want to waste resources recruiting and training people for unrelated companies or separate sectors of the industry”

4.4 Career Mobility At Sea

4.4.1 The identification of barriers to career mobility and progression at sea was one of the specific issues CM2 was intended to address. Barriers to career mobility certainly do exist at sea, but the maritime profession is not alone in setting educational, professional
and experience limits on upward progression within the operational hierarchy.

4.4.2 The airline industry, the medical and legal professions, as well as rail transport and many others, require candidates for the more senior positions with health and safety responsibilities, as well as potential public and private legal liability implications, to attain higher educational standards than others, to obtain more qualifications at a higher level and to gain sometimes long practical operational experience before they are allowed to assume the responsibilities that go with their position.

4.4.3 In the maritime world, the specifications of the underpinning knowledge required of each operational function, the qualifications and the length of operational experience i.e. seafarers, to be gained in each position before moving to the next qualification level are specified in the IMO Standards of Training, Certification and Watchkeeping Convention 1978 as amended (STCW). This can be further complicated in situations where a charterer specifies quite precise requirements to the training, the qualifications and length of time served in the rank of the seafarers on board ships carrying their cargo.

4.4.4 In a shore position, career progression and mobility usually involve upward progression within the hierarchy for those with sufficient educational attainment and obvious ability. But it might also involve a degree of sideways mobility to ensure those thought promising gain work experience in other specialties. In addition, in shore occupations some employers deliberately use accelerated promotion streams to bring promising candidates into senior positions at an early stage in their careers.

4.4.5 But these elements of flexibility do not usually apply at sea (although there are certain exceptions which are referred to later in this Report). In most European Member States (and elsewhere), there are three main limiting factors which restrict complete freedom of mobility and career progression:

- officers and ratings are separate and distinct in terms of entry education levels, the length of training time required, as well as remuneration and the number of steps in their career paths
- there is a distinction between the deck department and the engine department, both in officer positions and as ratings
- the time needed to progress from one level to the next higher level is fixed through the STCW Convention

4.4.6 The point is made later in this section that a prime reason why many seafarers decide to transfer to work ashore is that they need a new challenge. One possible reason for the lack of career challenge is that there are relatively few steps in their career paths at sea, particularly for ratings.

"We reach the top of position too soon and the professional growth henceforth is retarded."

4.4.7 Neither active nor ex-seafarers, nor indeed ECSA or ETF members, regarded international regulations e.g. STCW, and traditional rank/rating divisions as significant barriers to career progression and mobility at sea. Indeed several of those responding to the questionnaires, and several ex-seafarers who were interviewed, suggested that manpower shortages were creating problems because seafarers were being promoted too quickly without having adequate practical experience. Trainees did consider that slow promotion was a potentially serious drawback to their future careers, but this view was not shared by others.

"Faster promotion at sea means less experience for the job and human relations. Which leads to more mistakes and accidents. On the other hand, very slow promotion kills desire to work and improve knowledge."

4.4.8 The ETF/ECSA respondents, as well as those from MET intuitions, confirmed that they were not aware of any current discussion or consideration of possible new manning arrangements for ships that would reduce some of the rigid departmental or rank/rating divisions that currently exist. There were, however, a number of discussion papers produced on this subject at the time of the review of the STCW Convention in 1995. For those interested in the subject a brief
4.4.9 The absence of current discussions over possible new manning configurations was confirmed in a structured interview with a senior IMO official, who also confirmed that, so far as he was aware, no administrations had issued alternative certificates (i.e. alternatives to standard STCW certificates) as allowed under Chapter VII of the Convention or had undertaken trials to evaluate, inter alia, “alternative methods of performing specific duties” as allowed under Regulation I/13.

4.4.10 The terms of reference for CM2 required a review of restrictions or barriers to career mobility and progression at sea. In this context it cannot be overlooked that the international regulations governing training and certification of seafarers, as well as the customary and traditional manner in which ships are manned, place substantial restrictions on career mobility even though participants in the various surveys did not consider this to be a major problem. For this reason, a recommendation to commence a dialogue on these issues is one of those made in Section 5 of this Report.

4.4.11 Although the basic limitations on upward and sideways career mobility and progression at sea – the STCW – are unlikely to change in the foreseeable future, some EU Member States have made efforts to work around this.

4.4.12 The Dutch officer training and certification system is perhaps one of the best known and most prevalent dual deck/engine qualification system, with one respondent reporting that over 90% of Dutch officers were dual qualified. This system has been tried elsewhere with mixed success and another Dutch respondent reported that the system faced problems when Dutch officers increasingly had to work alongside foreign officers with single discipline qualifications.

4.4.13 The concept of General Purpose Ratings i.e. rating qualified for both deck and engine work has also been adopted by some companies. Despite this system having been operational for more than 20 years, it does not appear to have achieved great success or widespread adoption.

4.4.14 In a few EU Member States, such as Sweden, there is encouragement – indeed almost an expectation – that many, if not the majority, of ratings will convert into becoming officers at a relatively early stage in their careers. In one or two EU Members States, such as the UK, there are funds available to help with the costs of such transition.

4.4.15 For ratings, lack of financial support for training and inadequate provision for training help at sea and ashore were mentioned by ETF and ECSA members, and the following comments were relevant:

> “ratings are often not prioritised for competency development”
> “there is no incentive to train ratings when there are limited opportunities for them”
> “job mobility for ratings is virtually non-existent as national regulations allow cheap labour from outside the EU”

4.4.16 The problem is less serious for officers than for ratings as officer training and qualifications provide a vocational training programme usually recognised at national level and, increasingly, also academic recognition of their qualifications as degree-level equivalent. Ratings in some European Member States can, however, fall into a void where their maritime training and qualifications have limited recognition ashore either in terms of the national vocational training structure or as an academic qualification.

4.4.17 However in the UK a ratings apprenticeship scheme offers one possible way forward. The scheme provides a structured career pathway for rating trainees, through to STCW certification as ratings forming part of a watch, and Able Seafarer qualifications.

4.4.18 There are a number of advantages to the scheme:

> it brings ratings training within the UK national vocational training system applicable to shore trainees in other industries
as such it potentially qualifies for state financial support for training costs
seatime requirements for those following the training system at rating level are reduced by comparison with conventional rating training
the scheme fits within a maritime sector accreditation system which includes related industries within the maritime cluster such as tugs, ports and harbours and fishing.

4.4.19 One benefit of such a scheme, of advantage to officers as well as ratings, is that certain elements of the training and certification can be harmonised, recognised and accredited by a range of related maritime sectors e.g. deep sea, fishing, tugs, pilotage, yachts, offshore, wind power service craft etc. Such an arrangement, as well as being cost-effective and allowing for shared use of training facilities, makes career mobility between the different sectors much easier.

4.4.20 However, ratings career path mobility could be improved still further if their training was expanded, and certificated wherever possible, to include certain watchkeeping skills, notably with regard to monitoring and use of equipment and machinery needed for safe watchkeeping operations, at operational level rather than only at support level. Such a system would make ratings forming part of a watch much more useful to the watchkeeping officer during busy periods and would also encourage ratings to make the transition into officer positions knowing that skills achieved during their ratings training would lead to reductions in the training time required for officer certification.

4.4.21 Ratings training is essentially vocational rather than academic. But this form of training should still be challenging, it should stretch candidates abilities to the full and it should raise their expectations about their future career prospects and possibilities rather than limit them. The suggested enhancement of ratings training, or something similar to conform to national requirements, also forms one of the Project Recommendations made in Section 5 of this Report.

4.5 Factors Influencing Decisions To Work Ashore

4.5.1 For active seafarers the perceived poor social life at sea ranked as the most important factor that would influence their decision to work ashore, closely followed by the time and cost of obtaining higher maritime qualifications, the need for a new challenge and better long term career prospects ashore. Figure 6 shows the importance attached to the reasons given for wishing to transfer ashore.

4.5.2 “Poor social life at sea” was not precisely defined: While poor internet communication with friends and family was not expressly mentioned as a problem this might be assumed to be a part of the issue. But of the issues raised the most frequent were, increased

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Figure 6 - Factors influencing decisions to work ashore (Source: EU serving seafarer data)
bureaucracy and red tape, no onboard social centre (bar), work followed by retreat into cabins as the normal daily schedule, reductions in shore leave, reductions in normal seamanship capabilities of other crew members and potential criminal liability for simple mistakes.

“Stop running the ships as if the lawyers and accountants are the Masters. Let us be sailors again instead of treating us like imbeciles and criminals.”

4.5.2 For ex-seafarers the most important factors influencing their decision to work ashore were ranked somewhat differently. The need for a new challenge was regarded as most important, followed by a change in domestic circumstances and then better long term career prospects. These factors are indicated in Figure 7.

4.5.3 It is of interest that non-European active seafarers ranked the factors influencing decisions to work ashore somewhat differently. Poor social life at sea, ranked first by European active seafarers, was ranked fourth in importance by non-Europeans, while low pay and poor conditions at sea, which European seafarers ranked as of little importance, was the third most important issue for non-Europeans.

4.5.4 It cannot be overlooked how highly ranked in the reasons for wishing to work ashore were “the need for a new challenge” and “better long term career prospects ashore”. It is possible for seafarers to reach the apex of their careers at sea, in terms of qualifications if not in actual rank or position, in their late twenty’s or early thirty’s – and for ratings significantly less. This is not an exciting career prospect for many European young people.

“If my employer really sees me as an asset and investment, the provisions should be made to further my education and skills to develop a means for shore work later.”

4.5.5 Some of the more forward-thinking shipping companies have recognised this problem and are trying to address it. These companies consider career development and progression for seafarers as both inevitable, because they appreciate that seafarers will not stay at sea for their entire career, and desirable because the seafarers can provide the core of the company’s need for specialist shore-based staff often in senior positions within the company.

4.5.6 In some of these companies, careers mentoring and support are integrated into the HR function together with publicised policies of in-house promotion into shore management positions wherever possible. Seafarers with management potential are targeted at an early stage and provided with specific training, and where possible they can rotate between sea postings and postings in one of the company’s offices ashore to gain experience.

4.5.7 One of the objectives of these policies is to encourage career mobility and progression so far as possible within the company rather than in the wider

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**Figure 7** - Factors influencing decisions to work ashore (Source: EU Ex-seafarer data)
maritime cluster. But such approaches are not entirely altruistic. A seafarer knowing that his or her employer will help with their career progression and, if possible, find a shore position for them when their time at sea comes to an end, might be expected to remain at sea for somewhat longer than might otherwise be the case.

4.5.8 A recommendation to encourage shipping companies to adopt such career development measures to assist their seafarers is included in the project recommendations set out in Section 5 of this Report.

4.6 Career Mobility and Progression Between Sea and Shore

4.6.1 As has been reported, the majority of trainees and active seafarers do not intend to remain at sea for the rest of their careers. They also have reasonably clear views of the particular job in the maritime cluster they wished to undertake as a future career, rather than just any job in the maritime cluster. Ex-seafarers expressed identical preferences with regard to the jobs they wished to find when they decided to come ashore, even though several reported that they did not always manage to secure their desired job, at least immediately. **Figure 8** shows the combined active and ex-seafarer shore job preferences.

Figure 8 - Career Mobility and progression between shore and sea (Source: Combined EU Ex and Serving Seafarer data)

4.6.2 The geographical location of the shore job was of some importance to ex-seafarers as was, to a lesser extent, the ability to use their own language, but these responses were of far lesser importance than working within the maritime cluster, particularly in a maritime shore job they had already identified.

4.6.3 Respondents who answered positively to the questionnaire that they would look for a particular maritime job rather than just any maritime job were asked to specify their preferred job. A fairly typical response would involve several options e.g. pilot, harbour master, maritime education and training, or maritime authorities, classification societies, marine surveying. Marine or technical superintendence featured highly, as did ship management and maritime HR.

4.6.4 These views are confirmed by a survey conducted by one of the commercial companies specialising in recruiting seafarers for shore employment (see **Appendix 3**). This survey found that job preferences of seafarers wishing to work ashore also most often featured jobs they were familiar with e.g. operations manager, surveyor and fleet manager featured as very attractive to between 40% and 48% of respondents, and those jobs they were unlikely to be familiar with featured at the bottom of the list of preferences e.g. lawyer and insurer featured as highly attractive to only just over 10% of respondents.

4.6.5 The positive message from these results is that, not only do employers in the maritime clusters want to employ ex-seafarers, and in many cases they need to employ them, but also that a job in the maritime cluster is precisely where most seafarers wish to end up.

“I would like a job where my training at sea could come in handy. You get a lot of experience at sea and learn to make choices at critical times. This is a skill I find very useful”

4.7 Career Assistance Needed

4.7.1 For active seafarers (both European and non-European), somewhat predictably the two issues most frequently mentioned as of most help with their future
careers were more companies offering jobs at sea and a job guarantee with their current employer. For those obviously considering transferring ashore in future, more funding for studying for shore qualifications, more information about shore jobs and more distance learning were regarded as the most useful help that could be provided. These results are shown in Figure 9.

4.7.2 Ex-seafarers were asked to report the practical difficulties they actually experienced in finding a shore job. A perceived lack of value accorded to their maritime qualifications and experience followed by insufficient jobs available for persons of their age and experience were listed as the most important difficulties they faced, followed by the need to move home to find a job and a decline in their living standards. Figure 10 shows the main difficulties ex-seafarers reported they faced when transferring ashore.

4.7.3 When asked to list the best assistance that could be provided to make it easier to work ashore, the ex-seafarers most frequently mentioned more recognition of their maritime qualifications (in the sense of more value being given to them), followed by more information about shore job availability and the provision of more training courses covering shore job requirements e.g. office administration. Figure 11 shows the responses received.

4.7.4 There is, however, some reassuring news for those contemplating transferring to work ashore. A substantial majority of ex-seafarers reported that they actually experienced few difficulties or none at all in finding work ashore in the maritime sector as shown in Figure 12.

Figure 9 - Career assistance required (Source: EU serving seafarer data)

![Career assistance required](image)

Figure 10 - Practical difficulties encountered in finding a shore job (Source: EU Ex-Seafarer respondent data)

![Practical difficulties encountered in finding a shore job](image)
4.7.5 Other research conducted as part of the CM2 Project sheds further light on the barriers seafarers face in transferring to work ashore. Views of ECSA/ETF members and affiliates were decidedly mixed in response to most questions about barriers to seafarers in finding work ashore within the maritime clusters although the lower relative pay levels ashore compared than those at sea (note the term “relative”) attracted some support as a potential barrier to career mobility.

4.7.6 The lack of adequate information about suitable shore jobs and training availability also attracted some support from ETF/ECSA members. Several respondents also commented on the shortage of available shore jobs for seafarers, although these respondents came from countries generally without significant shore-based maritime clusters. Other respondents, usually from Northern Europe commented that there were many shore jobs available for qualified ex-seafarers.

4.7.7 Three substantial maritime recruitment companies (names listed in Appendix 3) kindly agreed to structured interviews, one in person and two by phone. Two of the three companies specialised in ship to shore recruitment and one, a significant player in recruiting, training and employing seafarers for the offshore sector.

4.7.8 In general, it was clear that in the experience of these companies there were more jobs available in shore positions and in offshore than there were suitable candidates (note the term “suitable) to fill the jobs. In the North Sea offshore sector alone, it was reported that over 10,000 new employees would be required for each of the next ten years, of which several hundred each year would need to be ex-seafarers. The principal issues raised by the recruitment companies relevant to career mobility ashore for seafarers are reported in the following paragraphs.

4.7.9 Seafarers seeking work ashore were of all ages but averaged around 28 years old for those seeking a first job ashore and over 35 years of age for those seeking their second or third shore job, with some over 60 years of age who still wished to remain involved. The large majority were ex-officers rather than ratings and Masters or Chief Engineer certificates were their most usual qualification. Between 2 and 5% were female.

4.7.10 If required to visit ships in a superintendent capacity or as a claims handler, clients of the recruitment companies considered that the person involved needed credibility when meeting Masters or Chief Engineers on board, which is why ex-Masters or Chief Engineers were preferred. But the shortage of supply of suitable candidates meant that Chief Officers and Second Engineers were now acceptable.

4.7.11 In addition, the shortage of suitable candidates is encouraging some companies to consider alternative scenarios. For example, instead of requiring all
technical and marine superintendents to be senior ex-seafarers, one senior ex-seafarer might manage a team of technical, but not necessarily fully maritime qualified, ship management support staff e.g. perhaps those who had held junior officer positions, who were responsible for several ships.

4.7.12 The term “suitable” in respect of job applicants was stressed. Although adequate numbers of ex-seafarers were applying for jobs through the recruiting companies, several examples were quoted where seafarers applying for jobs specified completely unrealistic pay levels and geographical locations as necessary conditions for their acceptance of any job offers.

4.7.13 A lack of knowledge about the various job positions available in the maritime sector, about their responsibilities in these jobs and the reporting structure within the companies where such jobs were available, in particular about the degree of independence – or lack of it – that they would experience in various positions, were frequently mentioned as problems for seafarers seeking jobs ashore.

4.7.14 A decline in net income and very different, and in many ways less attractive, employment conditions (in the sense of less leave time plus increased commuting time and cost) is almost inevitable for seafarers when they decide to work ashore. The issue of lower “relative” pay levels ashore, which is raised in paragraph 4.7.5 above, refers to this point. The jobs ex-seafarers are recruited for ashore generally pay above the average for shore salaries, but there are often many other factors to be taken into account.

“If you move ashore you can expect to take a major pay cut up to about 50%. On the other hand there are opportunities to further yourself ashore, as once you become Chief Engineer on a ship chances of promotion are almost nil. Whilst if you move ashore promotion is almost limitless.”

4.7.15 Even when ex-seafarers can earn very close to their sea-going wage when working ashore, which is possible although usually unlikely, there can be personal tax implications and other expenses that can result in take-home pay being reduced significantly. One interviewee suggested that Marine or Technical Superintendents could command salaries in the UK not too much lower than a Master or Chief Engineer at sea, but an income tax deduction of 40% meant that net pay was significantly lower than net sea wages.

4.7.16 In addition, many seafarers will need to relocate, usually to more expensive locations near shipping centres, sometimes abroad and sometimes involving wives and children with the domestic problems this can bring. And commuting time and cost from home to office can be a further unwelcome surprise.

“Shore opportunities are strongly concentrated in only one city/country. Most likely it is not your home town and then need to move with family.”

4.7.17 Work in the offshore sector, often a halfway house for seafarers between deep sea and shore work, can provide an exception as wages can be comparable to, if not in excess, of wages at sea, employment conditions (in the sense of the work/leave pattern) are not dissimilar and it might not be necessary to move home. The potential financial and other practical difficulties seafarers face when transferring ashore is the subject of one of the Project Recommendations set out in Section 5 of this report.

4.7.18 In the survey conducted by a commercial recruitment company quoted above, 92% of shoreside workers in certain sectors of the maritime cluster considered that having ex-seafarers in the office was quite useful, while 35% considered it essential. Interviewees in the CM2 Project praised seafarers technical competence, “can-do” approach to fixing problems, “thinking on their feet” abilities and independent “tough mindedness” with decision-making. However, as reported above, many ex-seafarers perceive that their maritime qualifications and experience are not sufficiently valued when they transfer ashore.

4.7.19 Those interviewed for the CM2 research (ex-seafarers and non-seafarers) suggest that there could be three main reasons for this perception:
> the office hierarchy
> office skills and knowledge requirements
> leadership and management styles

### 4.7.20 Firstly, in their seagoing capacities, the seafarers were in senior, if not the most senior, positions in the shipboard hierarchy – they were “big fish in a small pool”. Coming ashore into a non-seagoing capacity such as an office environment i.e. excluding work as pilots, offshore etc where seagoing norms may still apply, they move down in the hierarchy, often in larger companies they move quite a long way down the hierarchy – they become “smaller fish in a much larger pool”.

### 4.7.21 But it is not just that seafarers transfer into positions lower down the hierarchy than they have been used to, the office environment can be much more complicated than the one they were familiar with at sea. There are more departments involved in the enterprise ashore than there are at sea, such as the IT department, accounts, external communications and HR. And office politics are more complicated, with different departments and different individuals within departments sometimes having different, and sometimes competing, priorities.

### 4.7.22 Secondly, several interviewees also highlighted that some skills and knowledge required routinely in an office environment can be lacking in many ex-seafarers. An analytical approach to problem solving, report writing, budget preparation and control and general office administration were mentioned as areas of weakness – albeit for very understandable reasons.

### 4.7.23 Thirdly, most interviewees, and many delegates to a maritime HR Forum that was attended (see Appendix 3) commented that ex-seafarers leadership and management styles often needed to be modified to suit an office environment. Leadership and management styles are subjects that have filled many an academic treatise and this is not the time or place to discuss these subjects in any depth.

### 4.7.24 However, commentators suggested that ex-seafarers can demonstrate autocratic, transactional or directional leadership and management styles (“go there”, “do that” forms of instruction) which, while no doubt appropriate in a shipboard environment, can create disharmony and disruption in an office environment where participative, consultative or transformational styles are more familiar. A lack of “emotional intelligence” and “social skills awareness” were similar issues mentioned, although such problems are clearly not the exclusive preserve of ex-seafarers.

“I tried three months ashore in the last 2 years and hated it. I found it to be a completely different work-orientated mind set.”

“Office politics will come hard to the seafarer brought up in a school of thought where a person means what he says.”

“You’re not bossin’ your bloody sailors around now!”
“Have tried twice to work ashore. I just cannot fit in an organisation where I have limited influence.”

4.7.25 All of the three potential problem areas raised by CM2 interviewees in paragraph 4.7.19 above can be overcome, where they exist, with structured, organised mentoring, induction training and on-going training programmes. All of the companies present at the Maritime HR Forum (see Appendix 3) claimed to operate such programmes for ex-seafarers.

4.7.26 However, evidence from the recruitment companies interviewed as part of the CM2 research and evidence from ex-seafarers serving with several companies represented at the Maritime HR Forum, suggests that induction programmes for ex-seafarers transferring into work ashore are often inadequate and frequently non-existent. A lack of appreciation by companies of other potential problems faced by seafarers transferring into shore positions was also reported by interviewees, in particular where family relocation was involved.

4.7.27 Anyone in a shore position contemplating a substantial career move after many years in a familiar routine will face a degree of anxiety and uncertainty. But for seafarers contemplating transferring ashore the future must appear fraught with potential problems, at least initially, not just with the changed work role and responsibilities, the new skill sets needed and the wholly new daily work schedule, but usually also the physical re-location of their home and family and the prospect of a possible decline in living standards.

4.7.28 The assistance employers could, and should provide to ex-seafarers transferring ashore is subject to a Project Recommendation set out in Section 5 of this Report.

4.7.29 Several other possible forms of assistance to help seafarers transfer into shore positions within the maritime clusters were suggested by active and ex-seafarers, and by ETF and ECSA members/affiliates. These included:

> more financial help to cover costs for training for shore qualifications
> more distance learning facilities for training for shore qualifications
> more short courses provided to assist with shore office skills
> the provision of more information concerning jobs, qualifications needed, the costs of training, and the availability of the training courses and possible training funds.

These issues are explored in the following sections.

4.8 Financial Help For Training/Retraining

4.8.1 Not surprisingly, more financial help for training/re-training was one of the most requested forms of help requested by active and ex-seafarers. But there were no significant complaints about the fact that more training and obtaining qualifications for shore jobs would probably be required.

4.8.2 Where additional qualifications are required the costs can indeed be formidable. One CM2 interviewee reported that the qualifications needed for his desired shore job position took four years in total and cost over EUR 25,000. But other necessary or desirable qualifications do not always take so long or cost so much and reputable courses available through distance learning leading to qualifications with international recognition can cost between EUR 1,500 and EUR 4,000. The Institute of Chartered Shipbrokers (ICS) qualification and a range of other qualifications provided through commercial organisations, such as the International Diploma in Port and Harbour Management, accredited by a UK university can prove sound investments.

4.8.3 There are also ways in which training time and costs can be minimised. In the example quoted above, the ex-seafarer concerned deliberately accumulated the equivalent of 1 year of paid leave from his shipping company employers and also received grant funding from his local state authority towards part of the cost.
4.8.4 There are also several organisations which have funds available to provide grants or loans to seafarers to upgrade their skills and qualifications – the Slater Fund in the UK, which provides grants to ratings wishing to upgrade to officer positions is one example. And there are others which provide loans for seafarers to upgrade their qualifications, including general secondary level educational qualifications (e.g. maths), a range of university-level qualifications and other specifically maritime-related qualifications. Indeed in response to a question on possible ways to help seafarers wishing to work ashore, several seafarers suggested the establishment of a loan system in which loans could be repaid once a qualification had been obtained.

“The option should be given to seafarers to do training on a “deferred cost” basis, in that once they get back into work, if unemployed, they can pay for the training given.”

4.8.5 Studying while at sea – as is possible with the ICS and several other institutions – or while on paid leave, taking advantage of the distance learning that is available (see below), can reduce the need for unpaid training time once a seafarer has transferred ashore.

4.8.6 That said, finding out about what, if any, funding might be available to support training or re-training for seafarers is difficult, particularly for individuals in European Member States with little maritime infrastructure. Funding for training/retraining might be available at European Union level e.g. perhaps through the Lifelong Learning Programme, at Member State level through support for, for example, apprenticeship programmes as is being requested in the UK to support rating training, at a lower level within EU Member States as local training initiatives, or indeed from some employers or from maritime institutions e.g. the Marine Society.

“Unless your company are willing to pay for your training and give you the time off, there is absolutely no outside help available other than taking out a loan. I don’t know of any sponsorship available for seafarers wanting to move shore-side.”

4.8.7 An investigation of the different possible funding sources, and publication of the results, is one of the Project Recommendations made in Section 5 of this Report.

4.9 Distance Learning

4.9.1 The provision of more distance learning facilities featured quite prominently in the list of help with career progression from sea to shore requested by seafarers and mentioned by ECSA/ETF members.

4.9.2 Distance learning, as distinct from dedicated classroom learning, is a very fast growing trend internationally in both maritime and non-maritime training. It makes use of relatively new technology such as personal laptops and internet connectivity for home or workplace study purposes and for obtaining qualifications rather than requiring fulltime attendance at a dedicated training institution. It is increasingly used by training institutions to overcome problems of assembling students from different locations within one country, or from different countries, into one location for teaching with the attendant time constraints and costs involved.

4.9.3 At a basic level, distance learning can be simply watching a training video (DVD) – and many companies use this as part of a seafarers career development matrix i.e. the need to view certain videos in order to progress up to the next grade. Moving up the scale, computer-based training (CBT) will often be less visual and more interactive and will require students to read, analyse, learn and demonstrate, often through computer-marked questions or assignments, understanding of the subject covered.

4.9.4 More sophisticated distance learning will involve guidance and mentoring from a tutor and/or webinars where all students can form part of a web “virtual classroom” to see and communicate with a tutor and with each other. They may also attend in person at a training institution on occasions for a review of their progress and for assessment. Such courses are often referred to as “guided” or “blended” learning in the sense of students being guided...
by a tutor or study blended by involving a mix of self study, tutor assistance and attendance at an examination centre for evaluation.

4.9.5 Where an examination or assessment is required as part of a course this might be through computer-marked tests or, in more advanced training, such as national educational standards or degree-level courses, an invigilator may be involved, such as the ships Master, a consular representative or through physical attendance at a training centre to sit the examination.

4.9.6 The maritime world has a wide range of companies offering a variety of distance learning courses for seafarers (albeit mostly in the English language). These range from relatively simple DVDs to aid shipboard career progressions, and increasingly they also include sophisticated CBTs, occasionally with tutor assistance. These courses cover certain basic national educational qualifications up to degree-level qualifications and cover many courses that would assist seafarers with preparing themselves for jobs ashore (see Appendix 3 for a list of those interviewed as part of the CM2 Project).

4.9.7 But if a wide variety of distance learning training is available, what seafarers need is to have equipment that can make use of it, such as a personal laptop and, where appropriate, internet connectivity with adequate broadband capability, assistance with the costs of the training together with information about what is available and where.

4.9.8 Issues concerning the provision of information about, inter alia, training course availability are covered in section 4.11 below. However, the ability to access the training material is more complicated and problematic.

4.9.9 The main problems affecting access to training material are principally that:

> several of the larger companies that produce training material do not target individual seafarers as potential clients – the material they produce is of very high quality, requires a substantial financial investment to produce and must make a reasonable financial return to make the investment worthwhile. Targeting shipping companies, preferably with full fleet agreements, makes much more commercial sense than targeting individual seafarers

> several of the larger companies, in line with the interest of their main client base, focus mainly (but not entirely) on training aides to assist seafarers technical knowledge and upward progression at sea, not their progression from sea to shore or their general academic qualifications

> internet access at sea for seafarers is still very restricted, expensive and limited by the broadband width available. This situation is improving slowly, with new products arriving on the market in ever increasing number which will apparently drive down the costs and increase bandwidth

> but some of the producers of training material are rapidly developing new, much more sophisticated, training systems using games technology and animation that appear to be requiring more bandwidth at a rate faster than the internet providers can make it available on board at a price that most seafarers will be able to access in the near future on most ships.

4.9.10 In a recent crew communications survey covering 960 seafarers (see Appendix 3) it was found that 68% of crew members on a range of deep sea ships had access to communications equipment most of the time, 30% only some of the time and 2% not at all. But this is a quite misleading statistic.

4.9.11 In the survey, 46% of crew members had to pay for use of all communication systems on their ships. When communication systems were provided free of charge, text emails were most frequently provided, at just 20% of seafarers being provided with this service. Web access, which is essential for more sophisticated distance learning, was provided free of charge in just 13% of cases.

4.9.12 The costs charged to seafarers for use of communication equipment averaged $150 per month, with officers (who represented 12% of those surveyed,
compared to 88% of ratings) paying twice as much as ratings i.e. around $270 per month. Of that amount, the major expenditure was on voice calling (as this was the most easily accessed) while web surfing was well down the list (as this was the least accessible, the most time-consuming and therefore the most expensive).

4.9.13 Despite the points made above, there are a number of companies and other maritime organisations offering a range of training courses, including those leading to accredited and internationally recognised qualifications which are designed for individual seafarers, are not outrageously expensive and can be downloaded from discs on to personal computers for personal study. In some cases these involve tutor-assistance and mentoring as well as the use of shipmasters or consular services for assessment purposes.

4.9.14 However, no training comes cheaply, particularly when the courses are not statutory STCW career-orientated courses, which many employers pay for, but are intended for professional, and personal, career development. This is even more the case when distance learning is involved, internet access with adequate broadband capacity is not available at sea and the costs involved are formidable.

“I shall shortly be returning to college and will be financing myself through this. Of major benefit to me has been the fact that I have been able to complete some of the coursework by distance learning meaning I will need to spend less time in college which will enable me to get back to work again sooner than had I not completed these studies.”

4.9.15 In the short-term, encouragement should certainly be given to those maritime training organisations currently offering lower tech distance learning facilities to seafarers. But in the longer term consideration should be given to whether some form of regional approach should be made to the maritime communications providers through the European Union/EEA, on behalf of European flagged ships or European seafarers in respect of bulk discounts for internet access charges for training purposes.

4.9.16 It is understood that the leading maritime communication companies are prepared to consider offering special payment arrangements for bulk users of their services, such as large fleet users (the President of one such company is actually an ex-Master). A regional approach to leading maritime communication providers could be designed to explore whether a more cost-effective solution to improve broadband capacity and access at sea for training purposes could be achieved, such as the special bulk discounts offered to the larger shipping companies. It is notable, for example, that airlines offer discounted tickets and other benefits in respect of seafarers air travel while on duty.

4.9.17 The issue of distance learning is covered by a Project Recommendation in Section 5 of this Report.

4.10 Training In Shore Office Skills

4.10.1 The need for more short courses in shore office skills was an issue raised by ex-seafarers when asked what more help would they have benefited from in making the transition from sea to shore. It was also raised by commercial recruitment companies who place ex-seafarers in shore jobs.

4.10.2 There are three separate elements involved here:
> basic office skills needed for an ex-seafarer to navigate around the office he or she will be working in – who does what, who is responsible to whom, who to approach for advice or guidance etc.
> management skills needed in the office, such as preparation and adherence to a budget, report writing, employment and HR policy, team building (including leadership and management within the office environment)
> knowledge of the roles of other players in the wider shipping world that a seafarer will probably not need to have been aware of while serving at sea.

4.10.3 The first element raised above, basic office skills, could, and should, be delivered in-house as part of a normal induction process provided to all new staff, but is too often apparently overlooked for ex-
seafarers who may be assumed to be aware of such things from having had experience at sea in a senior position.

4.10.4 Some of the issues raised in the second bullet point above, management skills, might be delivered in-house, such as report writing or preparation of budgets, although there are many such courses available online. But management and leadership skills in an office environment, will probably benefit from external specialist advice so that it is delivered expertly and with sensitivity. There are many leadership and management specialists available who can provide such training, which can be tailored to a particular company’s culture.

4.10.5 Knowledge and understanding of other players in the maritime world that the ex-seafarer will need to relate to - classification societies, charter parties, maritime law, regulation and how it is developed – is covered by many courses. The Institute of Chartered Shipbrokers course has an extensive “introduction to shipping” section, and there are many commercial training providers that have produced similar courses by distance learning.

4.10.6 More provision for short courses in shore management skills is one of the Project Recommendations in Section 5 of this Report.

4.11 Provision Of Information

4.11.1 The lack of available information about suitable maritime jobs and about training courses that are available was mentioned by active and ex-seafarers as well as by ETF and ECSA members. Commercial recruitment companies also mentioned that seafarers were often very poorly informed about the functions of different shore-based occupations for which they were qualified because they had not come into contact with them during their sea service.

“At least when you keep in touch with friends and colleagues you feel more sure to find a job because the good jobs travelling only by word of mouth and not by newspapers.”

4.11.2 However, all of this information is readily available, albeit scattered around in numerous different web sites and mostly in the English language. Much of the 1980 publication “Changing Course” (now out of print) is taken up with valuable descriptions of the jobs available for ex-seafarers and the role and functions of these jobs, and certain, more up-to-date, advice is provided on the web site of one of the commercial recruitment companies. The UK Merchant Navy Training Board web site has a section specifically directed at careers advice for seafarers considering working ashore and the “Sail Ahead” Project web site also provides careers advice.

4.11.3 All of the commercial training providers as well as the maritime institutions publicise their training courses using their web sites. And all of the commercial recruitment companies publicise their job vacancies through their web sites. Although most of the organisations mentioned also use other forms of promotion, such as the maritime press and attendance at conferences or exhibitions, by far the most important medium for them is through use of the internet, either a web site or dedicated social media sites or both.

4.11.4 However, although the information is available, it is not necessarily easily accessible unless those needing the information have the time, internet access, know that the information is available somewhere on the internet and the know-how to use search engines to find it. Indeed, the difficulty in finding information about jobs was one of the most frequently raised issues in the comments section of the seafarers questionnaires.

“Gaining qualifications can greatly help prospects ashore. There is limited information on this although it is there if you know where to look.”

4.11.5 It should be possible to bring all of this information together in one site so that the types of jobs that operate in maritime clusters and their functions, the variety of training courses that are provided by various sources and the actual job vacancies that exist can be found in one properly advertised site.
4.11.6 Much of the information could be provided by links to other dedicated sites and it should also be possible to provide the home page in several different languages so that browsers in their native language rather than English could easily find the information. Using maritime social media sites seafarers and other members of the maritime community could be encouraged to visit the information site and advertising could generate income to contribute towards the site running costs.

4.11.7 The establishment of such an on-line information source is subject to a Project Recommendation in Section 5 of this Report.
Conclusion and Summary of Project Recommendations

5.1 Conclusion

5.1.1 This CM2 Project has been focussed on seafarers career mobility and progression. Although certain recommendations have been made about mobility and progression at sea, there is no magic wand that will overturn the international regulatory regime and traditional shipboard manning structures overnight even if consensus already existed that changes needed to be made - and no such consensus currently exists.

5.1.2 So the recommendations that are made concerning the international regulatory regime and shipboard manning structures, even if accepted by the European social partners, suggest only that a debate should be commenced on possible new manning configurations. In addition they suggest that consideration should be given to new ways to upgrade ratings training and to incorporate them into existing national vocational training schemes. Such discussions will not provide a quick fix to mobility issues at sea, but should nevertheless be pursued in order to move these issues forward.

5.1.3 But many of the other recommendations that are made are practical and achievable measures that could be taken to improve career mobility and progression within a reasonable timescale and should not involve substantial costs or lengthy lead-in times. These recommendations include careers literature, co-ordination and co-operation with the various constituent parts of the maritime cluster, sources of funding for training including better broadband access, improvement in distance learning and other training courses and promotion of more assistance and support with seafarers career ambitions.

5.1.4 But in reading this Final Report, what must not be overlooked is that many seafarers, both officers and ratings and albeit a minority, actually thoroughly enjoy the job of "being at sea". A very random selection of quotes from those received as part of the research makes the point:
>
"I don't want to go ashore – I am a sailor!"
>
"a shore job would mean moving to an urban setting whereas working at sea allows me to live in a remote area"
>
"sea gives me immense satisfaction"
>
"I like the sea and all the maritime world. It is interesting and different to an office job."

5.1.5 So in trying to help seafarers who wish to make the transition from sea to shore, it will be important not to devalue or undermine in any way, the career choice of those who, for whatever reasons, prefer things just the way they are. Their experience is vital to safe ship operations, to an assurance of reliable and consistent performance by the crew as a whole and to the transfer of years of accumulated knowledge to the younger people learning their trade on board.

5.2 Summary of Recommendations

5.2.1 National and company careers literature intended for young people should incorporate and maximise the career strengths revealed by the research e.g. trainees consider it is an interesting and challenging job, it offers opportunities to travel, work outdoors and meet people, they like ships, they have a perception that the career offers good pay and good training etc. Careers literature should also place increased emphasis on future job opportunities ashore within the maritime cluster. See Section 4.2.

5.2.2 There should be more co-ordination and integration of maritime promotion, career progression, training and qualifications in European Member States involving maritime, ports and harbours, the offshore
sector, yachts and river transport (i.e. the maritime cluster) in order to share resources, promote the strengths of the whole maritime sector to the general public, maximise political impact and encourage career mobility for qualified seafarers within the sector as a whole. Paragraphs 4.2.9 and 4.4.19 apply.

5.2.3 The integration of ratings training and certification arrangements into national shore vocational training structures should be increased and expanded to improve recognition and accreditation of their qualifications and assist career mobility. Paragraphs 4.4.16 to 4.4.19 apply.

5.2.4 A debate should be commenced on possible new maritime manning structures involving the integration of crew members within a management and operational structure that would maximise career path mobility and job opportunities vertically between officers and ratings and horizontally between deck, engine and other departments using the provisions of STCW Chapter VII on alternative certification plus Regulation I/13 concerning trials. Paragraphs 4.4.1 to 4.4.10 apply.

5.2.5 More schemes to recruit and train ratings with potential career paths to officer level should be developed, including where appropriate upgrading training in certain watchkeeping skills to the operational level rather than support, with the appropriate certification, to add value to ratings contribution to safe ship operations and to increase career mobility at sea. Paragraphs 4.4.16 to 4.4.21 apply.

5.2.6 Sources of EU, Member States and other sources of funding for aiding retention in the maritime sector, retraining seafarers for shore work, and obtaining the necessary qualifications should be explored by means of a research project and the results published on line. In particular, the research should include a review of the extent to which broadband access at sea for training purposes (as well as to aid crew retention through use of social media) might be made more accessible and cost-effective through a possible regional approach to internet providers or through direct EU and/or Member State financial support. Section 4.8 and paragraphs 4.9.15 and 4.9.19 apply.

5.2.7 Distance (blended or guided) learning and qualification courses should be upgraded and expanded ideally using broadband where possible and available:

- using tutor assistance where possible
- including use of lower-tech training vehicles e.g. discs, as an alternative to internet course material so that seafarers can learn using personal laptops if broadband access, or alternative sources of access to the material, are not available on board
- involving assessment procedures that are compatible with learning at sea so that examinations or other means of assessment can be completed away from a maritime college or university e.g. by using the Master or other senior officer as invigilator, or a consular representative or other appropriate agency
- including normal national educational qualifications (not least to assist ratings upgrade their educational qualifications), degree-level qualifications, STCW qualifications and other qualifications appropriate to employment in maritime cluster occupations e.g. maritime law, Institute of Chartered Shipbrokers, DP operators etc.

Section 4.9 and paragraphs 4.11.4 to 4.11.6 apply.

5.2.8 More short training courses should be made available, both shore-based and through distance learning, for shore leadership, management, financial management and other so-called “soft skills” needed for shore positions. Section 4.10 applies.

5.2.9 An on-line maritime career assistance database should be established to provide European seafarers with a single, easily accessed and free of charge information source covering:

- information on different types of shore job positions in the European maritime clusters e.g. ship broker, maritime law, pilot etc., an explanation of the job requirements and listing of national contact points for further information
- information on actual shore job vacancies offered by commercial recruitment companies and other...
European maritime organisations e.g. MET institutions, and the qualification requirements, geographical location and contact details

> information on training courses offered by commercial and other European maritime organisations, course methodology e.g. distance learning or classroom, and costs (plus information on donor funding where available).

Section 4.11 applies.

5.2.10 Employers should be encouraged to provide more support to seafarers career ambitions both at sea and in shore positions, including support during the transition from sea to shore positions. Such encouragement could be through:

> publication of advice to employers on the benefits of initiating career development programmes for their sea staff and guidelines on measures that could be adopted to assist sea staff with career development

> production of specific guidelines on how employers should manage the ship to shore transition, such as mentoring, induction training and support with financial and other domestic issues arising from the possible relocation that might be involved

> arrangement of a seminar/conference for EU maritime employers, trade unions and other members of the maritime community to promote the need to encourage career progression for seafarers within the maritime sector, and/or

> encouragement of an existing commercial maritime conference organiser (e.g. Informa or ACI) to dedicate one or more sessions of one of their existing programmes of conferences specifically to career mobility

Section 4.7 applies.
Appendices
Country Report 2013 Update

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Denmark

National Maritime Characteristics

> Denmark is a traditional maritime nation with a well-established maritime cluster ranging from shipbuilding and equipment manufacture to education, shipping, offshore and management. The cluster is labelled “Det Blå Danmark”, “Blue Denmark”

> Blue Denmark has a national collective public awareness and recruitment campaign through its “World Careers” initiative. This has significantly increased public awareness of the job opportunities and diverse careers available in the maritime sector and has increased the number of recruits even during recent times of economic recession.

> In 2012 the Danish Government presented its maritime growth plan bringing together all sectors in the Blue Denmark within an ambitious and high-level growth plan aimed at making Denmark a major maritime hub. A key challenge of the plan is to build on the provision of sufficient manpower with the right competences and a strengthening of the high standards of Danish education programmes.

> The majority of Deck Officers will stay within the maritime cluster when they go ashore. Engineers are more likely to enter non-maritime positions on leaving the sea, such as industrial plant operation and maintenance, public utilities and large buildings with substantial technical infrastructure like hospitals or conference centres.

Maritime Overview

The strong Danish maritime sector has managed to overcome the worst effects of the global economic recession since 2008 and has emerged stronger than before despite the ongoing challenges.

Danish Fleet statistics show:

<table>
<thead>
<tr>
<th>2004</th>
<th>2012</th>
</tr>
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<tbody>
<tr>
<td>Total operated fleet (owned and chartered)</td>
<td>50 million dwt</td>
</tr>
<tr>
<td>Danish flag ships</td>
<td>500</td>
</tr>
</tbody>
</table>

While the number of Danish-flagged ships is higher than at any time in the past 20 years the fleet also contributed foreign exchange earnings of some Eur 26 billion making it the largest single contributor to overall Danish foreign exchange earnings.

Statistics on the number of seafarers on Danish-flagged ships estimated by the Danish Maritime Authority in 2011 suggested that there were some 8,286 mustered seafarers, of which 3,363 were officers and 4,923 other crew. However, these figures do not include employed seafarers who were on leave at the time. The Danish Shipowners Association has estimated the number of Danish seafarers at some 9,000 which is a modest reduction in numbers since 2005.

The Danish maritime cluster comprises maritime transport, maritime services, shipbuilding, maritime equipment manufacturing, and offshore oil and gas extraction. More than 100,000 people are employed in the sectors within the maritime cluster, its total output value is more than 190 billion DKK. It is therefore one of the most important sectors in Denmark.

Maritime Training and Education

Ratings start their maritime education after a minimum of 9 years primary and secondary school, by doing a 6-month basic course followed by 18 months sea time and 10 weeks at finishing school. Qualification to become a “Ships Assistant” is reached after 12 more months at sea. Compared to the “Ships Assistant”, the education for a “Ships Mechanic” is designed to offer better technical skills, and is equivalent to similar formal educations of skilled workers in
Denmark combined with training at sea. The training for Ships Mechanic, takes altogether 3 years and 3 months.

For Officers entry level is 12 years of schooling, or from various vocational backgrounds combined with additional requirements in math, science and language. Officers’ education is divided into a junior and a senior section. The junior section is reached after 4 years. The senior section adds 18 months. Like the ratings education, it is a “sandwich” based system, mixing college and sea time. The officers’ education system has been classified at BA level. A Master’s level education in transport and maritime management, includes innovation, business development, supply chain management, international economy and human resources management.

Shore-based Maritime Employment Opportunities

The “Blue Denmark” campaign ensures that all sectors which are part of, or use the services of, the maritime infrastructure draw some benefit from the public and political profile it generates and the recruitment activities it organises. Salaries within the maritime cluster are generally higher than in other parts of Danish industry and this helps ensure that most ex-seafarers, particularly those from the deck department, remain within the cluster when they come ashore.

Unlike some other countries, Denmark has a highly developed and extensive shore-based maritime cluster, which is closely integrated and offers an attractive career path for ex-seagoing personnel. The “Blue Denmark” forms a model which should be of considerable interest to others anxious to promote the maritime cluster concept in recruitment and career mobility for seafarers.

The extent of the integration within the Danish maritime cluster is demonstrated by the attached career path model.
Germany

National Maritime Characteristics

> Germany is a major industrial and trading nation and a traditional maritime nation with a substantial merchant fleet under both German and foreign flags, a strong and vigorous maritime cluster covering ports and waterways, marine equipment, ship management and ship building.

> The global economic recession has affected the German maritime sector as German owners had ordered significant numbers of new ships, particularly container ships, just before the trade downturn, and this downturn also affected ports and other parts of the German maritime cluster, although German trade, including the maritime sector, remains strong.

> Seafarers do not appear to have long careers at sea and the shore-based maritime cluster provides employment for a substantial number of ex-seafarers both in Germany and in shipping centres abroad.

> Through the “Maritimes Buendnis fuer Ausbildung und Beschaeftigung in der Seeschifffahrt”, established in 2000, a national maritime forum exists to bring together industry, unions, government and coastal states in a common effort to strengthen the sector.

Maritime Overview

The German operated merchant fleet has increased steadily from 2,575 ships of 40.9 million GT in 2005 to 3,784 ships of 88.7 million GT in 2012. However, the German flag fleet declined in recent years from its peak of 645 ships of 15.8 million GT in 2009 to 530 ships of 15.5 million GT in 2012.

It is difficult to estimate the number of German seafarers serving on German owned and flagged ships, German owned and foreign flagged ships and on foreign owned and flagged ships as data showing the number of seafarers covered by the German social security system includes foreign seafarers and other data shows German and other EU nationals grouped together. However, it appears that the number of German seafarers covered by the German social security system, including trainees, is in excess of 7,287 which represents a modest decline since 2005.

With regard to new entrants into marine education, there are a number of different training routes into shipboard employment and several different training establishments in the Northern coastal area of Germany, which makes it difficult to calculate the numbers in different disciplines with precision. However, in overall terms, the number of German apprentices, students and pupils appears to have peaked at 894 in 2005 and to have reduced to 580 by 2012.

Significant numbers of German ex-seafarers are employed within the maritime cluster ashore particularly in ports, the shipowner and ship manager operations, shipyards and marine equipment manufacturers and suppliers. The total of ex-seafarers probably exceeds 8,500 within a total of over 200,000 people employed in the maritime cluster as a whole.

Maritime Training and Education

The education of officers is provided in a somewhat complicated yet flexible system, designed to allow open access to officers licenses to students of all education levels regardless of the type of school degree at entry. Unlimited deck and engineering licenses can be obtained either at the Fachschule (which is essentially a vocational qualification) or at Hochschule, which is a university of applied science.

The Fachschule education last two years, awarding the students with a Watch Officer’s License on successful completion. Students may enter after completion of vocational college education as either a “Ships Me-
chanic”, or a “Ship Operation Assistant” (Schiffsbe-
triebstechnischer Assistant).

The Fachhochschule allows entry only to students with higher level qualifications. It takes three years of college study in addition to sea time of respectively 12 or 18 months for Deck and Engineer Officers. This curriculum leads to the same certification as the Fachhochschule, but also to the academic degree of Diploma, which is highly valued in Germany, and plays an important role in future career prospects.

Academic degrees from the Fachhochschule have been changed from “Diploma” to “Bachelor”, and a Master’s level education has been created at the Fachhochschule for Deck Officers. Engineer Officers can already obtain a higher degree, which is open to them for example in mechanical engineering.

The “Ship Mechanic” apprenticeship system is open to young people with no prior academic qualification, although the emphasis is on progression from Mechanic to officer and most candidates intend not to remain as ratings. The “Ship Operation Assistant” education is open for graduates with a middle degree, and again, after training, the emphasis is on the students obtaining a Watch Officer’s certificate.

**Shore-based Maritime Employment Opportunities**

With such an extensive shore-based maritime cluster which actively recruits the personnel it needs with seagoing experience, German seafarers have attractive and rewarding career options open to them once they decide to leave the sea. Some 19,000 people are employed in the ship ownership and management sector alone, of which a significant number are ex-seafarers.

As many seafarers are recruited from the Northern coastal states, and most of the shore-based maritime cluster activities are based there, the transition from sea to shore can avoid some of the relocation problems which can create problems in other European countries.

Estimates suggest that, of shore-based ex-seafarers, 24% work in ports and harbours, 18% in operational, administrative and managerial functions in ship owners and management companies, and 12% in surveying, auditing with various bodies and comparable numbers in shipyards, and in marine equipment suppliers, and smaller numbers in pilotage, waterway administration, water police and VTS operators. The most significant career pathways are illustrated on the attached career path map.
Greece

National Maritime Characteristics

- Until the 1980’s the traditional source of seafarers within Greece has been from the islands. Seafaring opportunities were available for individuals, even for those with a limited education, to obtain a good income in an economy that was largely agricultural with little industry.

- In the early 1960s, the industrial economy and associated service industries expanded. This led to young people preferring to enter shore-based sectors in preference to going to sea. In addition, the older generation of seafarers have increasingly encouraged their children to enter higher education in order to qualify for professional posts such as medical doctors and lawyers.

- A further influence has been the development of tourism in the islands, which provides a useful employment opportunity for young people and also those retiring from seafaring.

- In the last two decades the seafaring profession has attracted young people from all over the country and the applicants are graduates from High School of a very high standard. Also in some years the number of applicants is higher than the Merchant Marine Academies can accommodate.

Maritime Overview

The Greek flag merchant fleet over 1,000 GT is the second largest in the European Union comprising of approximately 21% per cent of the total European tonnage. The Greek owned merchant fleet, flying EU flags, is the largest in the EU, representing 43% of the tonnage by deadweight. It is believed that 10 per cent of the Greek population (of 11 million) are involved with shipping interests in its widest sense e.g. owning, serving at sea and with the associated maritime infrastructure.

Table 1. Greek Owned Merchant Fleet.

<table>
<thead>
<tr>
<th>Number of Ships</th>
<th>GT (in million tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek flag</td>
<td>829</td>
</tr>
<tr>
<td>Greek owned foreign flag</td>
<td>2848</td>
</tr>
<tr>
<td>Greek owned total</td>
<td>3677</td>
</tr>
</tbody>
</table>

In 2011 the total number of Greek seafarers was 19,831. Good estimates suggest that of these approximately 11,359 were officers and 8,472 were ratings. Additionally, it is believed that there are approximately 2,000 officers working on domestic trade vessels, as well as 1,000 cooks and 4,000 stewards.

The Greek shipping community wants to employ Greek officers, particularly in senior positions, to this end many Greek shipowners prioritise the recruitment of young people who will progress into senior positions at sea and the concept of a “maritime cluster” where some ex-seafarers will be employed in shore-based work activities is not familiar.

Maritime Training and Education

There are nine Merchant Marine Academies (MMAs) in Greece for Deck Officers, in addition to four Merchant Marine Academies for Engineer Officers.

There are 2,490 cadet places within the Deck Officer MMAs and 1,773 cadet places in the Engineer Officer MMAs. During the academic year 2012/2013 (as first entrants) there were 680 deck cadets and 480 engineer cadets studying within the Greek MMAs.

Cadets must be High School graduates and pass an entrance examination in order to gain entry into the Merchant Marine Academies. The cadets start their studies with one semester at the MMA, followed by their first semester of onboard training. They then have two more semesters at the MMA followed by their second semester of onboard training. Their studies conclude with three more semesters at the MMA.
The full course lasts almost four years, after which successful cadets are awarded their third class Deck or Engineer Officer certificate of competency. After 24 months of seagoing service, and successfully completing the mandatory STCW courses, third class officers are awarded their second-class certificates of competency. Following a further 36 months of seagoing service and successful completion of the mandatory STCW management level short courses they are awarded their first class certificate of competency, Master or Chief Engineer.

There are two government funded Centres of Post-Training, which run STCW professional short courses for continuing professional development of Greek seafaring officers. In addition, there are five private maritime training institutions that run a variety of maritime training courses that are approved by various maritime administrations, but not by Greece. It is understood that the Greek Maritime Authority is going to approve courses at the private maritime academies at some point in the future. There are no schools in Greece offering education for ratings.

**Shore-based Maritime Employment Opportunities**

Shore-based job opportunities for ex-seafarers are limited. Approximately 100 work as lecturers in the training institutions, with Masters of Chief Engineer licenses as the entry level, and somewhat less in shipping company offices. A number of ex-deep sea seafarers are employed as ships agents, shipbrokers, maritime lawyers, in classification societies, pilots on yachts, insurance consultants and in general in the whole maritime cluster.
Italy

National Maritime Characteristics

> The onset of economic recession in 2008 has impacted in Italy where more young people are willing to apply for maritime training, more are prepared to apply for work abroad and there is a preference for young people to look to the passenger ship market where retention rates are higher compared to other trades.

> There are few Italian ratings, the few that are employed are on home trade ships and the average age is between 45 and 50.

> Retention rates for Italian seafarers and trainees are low, however, one estimate suggested that of the perhaps 50% of trainees who dropped out after one or two years, many would enter various sectors of the maritime cluster such as terminal operations or freight forwarding.

> There is a significant maritime cluster in Italy and the number of ex-seafarers employed in these industries is substantial.

Maritime Overview

The introduction of the Italian International Registry in 1998 has given a boost to the Italian shipping industry, with additional vessels coming onto the new registry, not just those that are transferring across from the original Italian Registry. In 2004 there were 1031 ships over 100 grt registered on the Italian Register and 544 on the International Register. Today the numbers are 882 and 692 respectively, and there has been a substantial growth in the size of the overall tonnage.

During 2004 there were 352 Italian cadet officers at sea, of whom 184 were navigating cadets and 168 engineer cadets. It is estimated that today there are 640 cadets under training on board Italian vessels. Only around 50 per cent progress to junior officer level. Approximately 130 junior officers per year are awarded their 2nd class certificate of competency.

There were approximately 27,000 Italian seafarers holding valid competency certificates in 2004, with a further 7000 believed to be employed in the coastal and fishing trades, including tugs. However, it was not known how many were actually serving at sea. In late 2012, jobs on board the Italian fleet amounted to 38,530 (with a 2% increase over 2011), 23,060 of whom were Italian or EU nationals and 15,470 were non-EU national seafarers. About 54,000 seafarers rotate on these jobs.

Maritime Training and Education

In November 2005, after around a year of preparation, the Italian Merchant Marine Academy opened in Genoa. This is the first such national academy, whose main goal is to offer a post-secondary school course of study, carried out in part on land, through periods of study, and in part on-board, with on-board training of deck and engine cadets from all over Italy. The aim is to prepare students, within a maximum 24-month period, to take examination for the first certificate of competence. The project has received approval and financing as an IFTS course (Advanced Technical Instruction and Training), from the MIUR (Ministry of University Instruction and Research), in addition to gaining recognition from the Ministry of Infrastructures and Transport, the Ministry of Welfare and the EU Commission.

From age 14, young people have a choice concerning their high school preference which includes the possibility of attending one of 36 Institute of Transport and Logistics (ITL) schools, which offer a general education, but specialize in maritime disciplines of navigation, marine engineering, naval construction and logistics. State funding is provided up to age 19. Approximately 1100 students graduate from these schools per year.
Only 20 per cent of graduates from ITL take up seafaring officer cadet positions. Of the remainder, around 50 per cent go on to university to start maritime related or other degree programs. However, the retention rate at universities in Italy is not good, with about half of entrants failing to complete their course of study. The remaining 30 per cent of those graduating from Nautical School go directly into employment, many entering the maritime sectors of port and terminal operations, ship-building, repair and the pleasure-craft industry.

There are currently approximately 73 private training centres offering STCW mandatory training courses, however, government funding for STCW mandatory training courses ceased in 2001, after which it was felt that there has been less interest in seafaring as a career more generally.

**Shore-based Maritime Employment Opportunities**

There is a wide range of industries in the Italian maritime cluster, including maritime education and training, shipbuilding, ports, pilotage, yachts, ships agency, classification and maritime law.

Quite significant numbers of ex-seafarers are employed in the Italian maritime cluster. The ratio between shore staff and on-board personnel is estimated at 1:5. Therefore in late 2012 jobs ashore were estimated at about 7,700.
Latvia

National Maritime Characteristics

- Latvia regained its independence in 1992, joined the European Union in 2004, and the large number of national seafarers compared to the small size of its registered tonnage of ships is part of this legacy.

- There is a considerable surplus of ratings and efforts have been made for several years to retrain many of them as officers.

- Wage rates for ships officers are very much higher than those available ashore and this encourages high retention rates.

- The maritime cluster is limited in terms of the number of jobs available and seafarers wishing to work ashore may be deterred by the lower wage rates.

Maritime Overview

On gaining independence in 1992, after the break-up of the Soviet Union Latvia effectively inherited all of the Soviet era ships operated from Latvian territory. Initially this comprised 107 ships which were mainly reefers, gas, chemical and oil tankers. A large number of fishing boats and fish factory ships were also taken over.

In the absence then of a legal and financial system appropriate for commercial ship operations and, perhaps because of the age and associated structural condition of the ships, a large number were re-registered abroad in the following years, much reducing the Latvian registered fleet. In 2012, 20 ships were registered in Latvia and 138 Latvian-owned ships were registered abroad. These figures have changed little in the past 8 years.

The number of national flag ships contrasts sharply, however, with the number of Latvian seafarers – 17,500 held valid certificates in 2004 of which 10,000 were ratings and 7,500 were officers. In addition, there were approximately 2,000 seafarers in the fishing fleet and 2,000 seafarers employed in port service vessels and inland and coastal waters vessels.

As the ships operated from Latvia during the Soviet era were predominantly specialist types, such as chemical and gas, Latvian seafarers have been highly regarded for their skills and have been in high demand by overseas companies operating in these trades. So most Latvian seafarers, particularly officers, are employed on foreign flagged ships. However, on foreign flag vessels Latvian ratings have faced competition from ratings from other countries with lower wage rates and this has resulted in a decline in job opportunities.

Maritime Education And Training

Maritime education and training is offered at three levels: a secondary level vocational school, a college education offering the lower operational levels of certificates and an academy at university level, offering the higher level certificates.

Latvian ratings are educated in a system offered by four private vocational schools.

Traditionally deck and engine ratings have been educated separately, but following inspiration from Germany and Denmark, a new dual purpose “Ship Mechanic” education is about to be introduced. Entry into the system requires nine years of basic primary schooling, and will bring students up to secondary level. The full education will be of three to four years duration of which the maritime component is one to two years.

Officers are recruited with A-levels after 12 years of basic education. The officer’s education is at university level and both Deck and Engineer officers follow a similar program. After an admissions test, the education commences with three years at university, fol-
allowed by 12 months sea time at junior officers level, and two years back at university. The last two years may be attended part time.

In addition to the full time students, the Latvian system allows students with a maritime background to undertake part time education or distance learning. This pathway is particularly attractive to ratings and maritime college graduates. In 2004, 312 Deck and 250 Engineer officers graduated.

The Latvian education system is quite flexible and allows seafarers to supplement their qualifications, and an estimated 10% of the officers will at some stage undertake additional education. The impression is that additional education to Masters degree level is undertaken by individuals who want to leave the maritime industry entirely. Law is mentioned as a popular subject for supplementary education, but also economics and business administration. The MBA degree seems to be particularly popular.

The entry requirements for maritime education programmes can be set to a very high standard, because seafaring is a very attractive career in terms of employment, salary and social status.

**Shore-based Maritime Employment Opportunities**

There is a quite small but vibrant maritime cluster in Latvia based around the crewing sector, ship agents and freight forwarders, maritime education and training, ship owners and managers and ports and ship repair. Given the expertise of Latvian seafarers in gas and oil, the offshore sector in the North Sea also an attractive alternative to deep sea employment.

But the wage difference between sea and shore acts as a deterrent to ex-seafarers seeking such jobs and there are not sufficient jobs in Latvia needing qualified ex-seafarers to fill these positions given the number available.
SHIPPING MANAGEMENT

OTHERS
CONSTRUCTION
SERVICE

EDUCATION
AND
TRAINING

SHIP AGENTS
FORWARDERS

CREWING
AGENCIES

PORTS AND
CARGO
HANDLING

SURVEYING
CLASSIFICATION
SOCIETIES

SEAFARING
DEEP SEA
(FOREIGN FLAG)
AND
DOMESTIC
OFFICERS

NAVAL DEFENCE

FISHING

GRADUATES FROM VOCATIONAL SCHOOLS, COLLEGES AND MARITIME ACADEMIES

SHIPPING: RATINGS
Netherlands

National Maritime Characteristics

> The Netherlands is one of the world's major international trading countries, with a strong maritime tradition, a significant fleet, a reputation of good seamanship from its seafarers, major ports and a developed cluster of associated maritime industries.

> The Dutch maritime training system has been strongly associated with vocational training and with bivalent (polyvalent) certification of deck and engine officers.

> Despite the economic recession in the industry since 2008, the number of ships in the Dutch-flagged fleet increased from 2006 to 2011 by 28%. While the number of Dutch seafarers declined by 12% during the same period, the number of Dutch officer trainees increased by 32%.

> There is an advanced maritime network based around 11 components including shipping, ports, maritime services, ship-building, marine equipment suppliers, yachting, fishing, dredging, offshore, the Dutch Navy and inland waterways. There is a significant movement of employees between the various maritime cluster components.

Maritime Overview

The world economic recession which commenced in 2008 resulted in a sharp contrast between the pre and post-2008 situations in the Netherlands as elsewhere. With the volume of world trade declining overall in 2009 it was inevitable that a trading nation, such as the Netherlands, would face severe pressures on revenue from its fleet, maritime services and ports.

However, the Dutch fleet increased in size and in carrying capacity between 2006 and 2011 even though much of the fleet growth was due to the delivery of new ships ordered before the economic recession, as shown below:

<table>
<thead>
<tr>
<th>Ships under Dutch flag</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>748</td>
<td>778</td>
<td>862</td>
<td>1031</td>
<td>974</td>
<td>1033</td>
</tr>
<tr>
<td>Deadweight</td>
<td>6.6</td>
<td></td>
<td>7.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mill dwt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dutch officers tend to be young and to transfer to shore jobs in the maritime cluster sectors after relatively short careers at sea, estimated in 2005 at between 5-8 years. However, for those officers who remain at sea, and for ratings, the age profile is increasing and retirements will increase the trend towards a general decline in numbers despite the encouraging increase in the carriage of cadets undergoing training indicated by the following figures:

<table>
<thead>
<tr>
<th>Dutch seafarers</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td>910</td>
<td>890</td>
<td>880</td>
<td>850</td>
<td>840</td>
<td>830</td>
</tr>
<tr>
<td>Officers</td>
<td>2300</td>
<td>2220</td>
<td>2190</td>
<td>2140</td>
<td>2110</td>
<td>2090</td>
</tr>
<tr>
<td>Ratings</td>
<td>700</td>
<td>590</td>
<td>580</td>
<td>530</td>
<td>520</td>
<td>520</td>
</tr>
<tr>
<td>Cadets</td>
<td>410</td>
<td>470</td>
<td>530</td>
<td>540</td>
<td>540</td>
<td>540</td>
</tr>
</tbody>
</table>

Maritime Training and Education

Apart from short sea qualifications, STCW certificate courses for officers in the Netherlands follow either a 4-year vocational route – the MBO - or a 3-year higher vocational route – the HBO - leading to a BSc degree. It is possible for a student to transfer from a MBO to an HBO with one additional year of study.

There are no ratings training courses except those for inland waterways.

With more foreign officers now working on Dutch flag ships trained as either dedicated deck or engine officers, it has become increasingly difficult for...
owners to operate polyvalent systems for their Dutch officers. As a result, MBO courses, in particular, have been revised to allow more mono-disciplinary courses. For comparative purposes, the numbers of students entering into the officer training institutions are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Entering 2004</th>
<th>Entering 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students</td>
<td>Graduates</td>
</tr>
<tr>
<td>HBO</td>
<td>235</td>
<td>114</td>
</tr>
<tr>
<td>MBO</td>
<td>308</td>
<td>308</td>
</tr>
</tbody>
</table>

**Shore-based Maritime Employment Opportunities**

The Dutch Maritime Network comprises 11 related sectors which employ nearly 140,000 employees representing some 1.8% of the total Dutch labour force. The largest number are employed in ports, followed by merchant shipping, the offshore sector and marine equipment suppliers.

The purpose of the Network is to provide a forum for discussion, for development of action plans and for promotion of the maritime cluster. Most of the shore-based maritime job opportunities for ex-seafarers lie within one or other of the sectors within the maritime cluster as indicated in the attached career path map.
Poland

National Maritime Characteristics

- Poland is similar to certain other Eastern and Central European countries in that its maritime characteristics are still affected by its Soviet era legacy.

- Most seafarers work for foreign shipping companies and in other foreign maritime sectors, although the number of officers trained and qualifying has remained constant.

- The maritime cluster sector of Poland remains significant and growing, including ports, manning agencies, ships agency, ship building and marine equipment manufacturing.

- EU policy is very influential in the future direction of the Polish maritime industry, which is currently confronted with the uncertainties that accompany the need to reorganize and restructure some of the State-owned or controlled maritime entities.

Maritime Overview

When Poland finally achieved full independence and adopted a market economy it inherited some 300 ships but had neither the legal nor financial systems in place to provide the necessary ship mortgages and loan facilities to support ship ownership. Currently, Polish shipowners control a fleet of 111 ships of which only 15 fly the Polish flag.

With a historically substantial fleet, Poland also trained the necessary number of seafarers to man the ships – estimated at over 45,000, of which over 19,000 were officers and over 25,000 were ratings. While the numbers have declined somewhat, particularly the number of ratings, they are still estimated today at some 35,000, of whom 22,000 are officers and 19,000 ratings, making Poland one of the largest maritime labour sources in Europe.

Even before independence, a few Polish seafarers had been allowed to work on foreign flagged ships and the work was popular as it allowed foreign travel and foreign exchange earnings. So it was not surprising that many foreign companies established manning offices in Poland and recruited seafarers to work aboard their ships. This has ensured that the overall number of seafarers and the level of recruitment and training has been maintained much above the numbers needed to support the national flagged fleet.

The strategic location of Poland on the Baltic, together with its inherited maritime infrastructure of significant ports, shipbuilding yards and maritime equipment manufacturers also ensures that the maritime cluster is significant. At the end of 2012, the Polish maritime cluster employed more than 85,000 people, including in the region of 50,000 in marine equipment, 18,700 in shipbuilding and repair and 16,500 in R&D and maritime education.

Maritime Training and Education

Maritime education follows three pathways:

- Secondary vocational schools and apprenticeship, aimed predominantly at the ship-building and repair industry;

- Private maritime schools offering a fast-track diploma to students entering upon completion of 12 years basic education. This is a 36-month programme at management level (based on IMO model courses) and includes 12 to 14 months at sea, after which graduates obtain a licence as officer of the watch, with higher level licenses available thereafter based on sea-time served; and

- A five to six year college/university level education for students entering upon completion of 12 years basic education, which includes sea-time on training vessels and in the Navy.
Ratings also complete 12 years basic education before attending a maritime college and are therefore potentially eligible to undertake officer training. Current estimates suggest that between 20 and 30 per cent of the ratings progressing through maritime education will eventually become officers. Officers’ progression is normally quite fast, especially in the lower ranks, where individual appraisal systems gain prevalence as the higher ranks are approached. Senior officer level may be acquired after six to eight years.

Initiatives are underway to develop maritime awareness and attract young people (via a system of stipendia) to maritime education and to increase the number of cadets/students in two Polish universities.

**Shore-based Maritime Employment Opportunities**

In relation to seafarers’ career paths ashore, Polish ex-seafarers are not normally employed in maritime administration, as these posts are occupied by Civil Service employees.

Seafarers are attracted not only to more traditional jobs as pilots, educators and administrators and the emerging private economy, but to new opportunities in ship agency, ship brokerage, freight forwarding, manning agencies and shipping operations. They are also attracted to ports, general logistics, insurance and finance, ship management, shipping companies, marine equipment manufacture and the inspection and surveying industry.

Many officers are prepared to accept work away from Poland, and to relocate with their families, to take up employment with operators and shipping companies in Europe and elsewhere. Recent growth recorded in ship management agencies is evidence of this trend.

In the shore-based maritime sectors, engineer officers are in demand as inspectors and surveyors with classification or insurance companies, or in technical functions with ship management companies, ship-yards and equipment manufacturers, with maritime service and repair and in various functions as superintendents. Outside the maritime cluster, opportunities can be found as operations and maintenance functions at large industry plants, hotels, hospitals and public utilities.
Spain

National Maritime Characteristics

> Maritime trade is very important to Spain and the maritime cluster of associated maritime industries is a significant employer.

> Retention rates at sea for seafarers are high and a significant number remain at sea until retirement.

> The economic recession since 2008 has reversed the previous trend of a declining number of young people applying for maritime training.

> The two main routes into maritime qualifications – vocational and academic – provides an early route into shore-based maritime jobs qualified at degree level but with very short sea service.

Maritime Overview

Virtually all Spanish-owned ships were registered in the traditional Spanish register until the late 1980s when owners began to make use of foreign ship registers. However in 1992 when the Special Canary Islands Register was established the situation changed as more Spanish owners transferred ships to the new Register at the expense of the Traditional Register. Today in 2013 Spanish owners control 215 ships of 4.1 million GT of which 37%, 1.5 million GT is registered with foreign flags and 63%, 2.6 million GT is registered with the Special Register. This fleet has suffered only a modest decline since the start of the recession in 2008.

The number of seafarers was estimated in 2005 to be 25,000 of which 10,000 were ratings and 15,000 were officers. No recent data is available. Reliable recent data on the number of trainees is also lacking although it appears that the number of new entrant students entering the universities for degree-level maritime training is, at 377 in 2010, higher than at any time since 1995. A similar number enter training through the diploma (vocational) route.

The academic or degree-level training is attractive to many young people because they can enter maritime-related shore jobs, such as the maritime administration, with very short sea experience. However, as those who follow the vocational route and become fully qualified seafarers often tend to stay at sea until retirement and this can lead to a shortage of ex-seafarers in shore positions where their experience is necessary, such as in pilotage.

Maritime Education And Training

In Spain there are two ways to train Merchant fleet officers, both of which are controlled by the regional and autonomous communities education authorities rather than the authorities responsible for STCW compliance.

The first way is the University system which comprises a four year degree programme at one of the seven maritime universities. This programme includes three years shore-based study, followed by six months sea time experience as a cadet, followed by a further two years academic study including a final project. To take this route, a student must have completed the “Bachillerato” (2 years after Secondary Education) and an access test (equivalent to UK “A” levels). The minimum age for entry is 18. The student graduates with a university degree (“Grado”). To proceed to a Second Mate’s certificate, a candidate now needs to complete one year’s sea time (and an oral examination). To obtain a First Mate’s certificate requires a further year’s sea time. Finally, to proceed to a Master’s certificate, another year’s sea time is required with the successful completion of a project.

The second system comprises the professional schools or technical colleges (Formación profesional). It provides a pre-university education. The completion of these studies is accredited by a title that is more restrictive than the university system already mentioned. There are also two routes through the technical college system.
1. “Formación profesional grado superior” (High Professional Grade). A student is required to finish secondary education, and then a further two years. Entry age is 18 years old.

2. “Formación profesional de grado medio” (Medium Professional Grade). A student is required to finish secondary education. The entry age is 16 years old.

The first route of the university system is popular with many students who graduate from the degree programme but do not then go to sea. They may enter a number of professions but some do go directly into shore-based maritime employment, for example, in the maritime administration.

The system is broadly similar for both deck and engineer officers. The degrees are awarded by the Ministry of Education and Science, but the Certificates of Competence are issued by the Maritime Administration (Dirección General de la Marina Mercante of Ministerio de Fomento). Ratings have their own college(s) in order to obtain their AB and other relevant certificates. Promotion to officer level is rare and most ratings generally remain at sea until they retire.

Training is funded by the Government so recruitment by shipping companies usually occurs on completion of the academic period.

**Shore-based Maritime Employment Opportunities**

A significant number of ex-seafarers are employed by a Government agency, SASEMAR, which operates search and rescue services, salvage and anti-pollution services and VTS services. Probably 90% of the 1,500 staff are ex-seafarers.

Other significant employers are the maritime administration, with perhaps 200 ex-seafarers, maritime education and training institutions, shipping company management, piloting, with approximately 250 ex-seafarers, ships agents and classification societies.

However, as retention rates at sea are high, and shore-based companies and organisations find difficult in recruiting sufficient numbers with sea experience despite attractive employment packages.
GRADUATES FROM UNIVERSITY SYSTEM OR TECHNICAL COLLEGE AND OTHER ENTRANTS

MARITIME ADMINISTRATION
SASEMAR SALVAGE VTS POLLUTION
EDUCATION AND TRAINING R&D
PILOTAGE
SURVEYING CLASSIFICATION SOCIETIES ETC
SHIP REPAIR
SHIPS AGENTS

SHIPPING MANAGEMENT

SEAFARING (DEEP SEA AND DOMESTIC)
OFFICERS RATINGS

ENGINEER

FISHING
Sweden

National Maritime Characteristics

- Sweden is a traditional maritime nation which retains distinct regional shipping interests and a strong maritime cluster.

- The Swedish registered fleet has declined in the past thirty years, as have those in many other European countries. Efforts to reverse the flagging out to foreign registers have not been successful, although the rate of flagging out has slowed down.

- 50% of deck and engineer officers are expected to transfer to shore employment within 7-8 years and the 50% of ratings who progress to officers positions is a significant feature of the Swedish maritime education and training system, and they tend to remain at sea for longer.

- The geography of the country has an important impact on the maritime sector, with Europe’s longest coastline and thousands of small islands. Small passenger ships, ferries and the associated infrastructure provide employment to a large number of seafarers.

Maritime Overview

The Swedish merchant fleet has declined significantly from its peak years in the 1960s, when Swedish controlled ships comprised nearly 3% of the world fleet, to under 1% today. Between 2008 and 2012 more than 30 percent of the Swedish flagged ships above 300 GT disappeared, reducing in number from 230 in 2008 to 141 in 2012. The decline has continued in 2013 and present figures are approximately 106 Swedish flagged ships. These ships, which are predominantly smaller and involved in the domestic, North European and Baltic trades, are around 50 percent passenger ships and ferries, with the remainder divided between tankers and dry cargo ships. The Swedish-controlled fleet under foreign flag comprises 520 ships and are predominantly larger deep sea ships carrying international cargo.

A number of efforts have been made to revive the Swedish merchant fleet. A campaign to introduce an international register on Norwegian or Danish lines was rejected in both the 1980s and in 2010. The Temporary Employed Personnel agreements (TAP) were introduced in 1998 aimed at allowing owners to adopt certain wage advantages available to employers of low-wage foreign crew members, and a Net Wage Model Agreement system was adopted in 2001 to allow employers to alleviate tax and social insurance costs in accordance with the European SAG scheme. Neither has been as successful as hoped.

In 2012 it was estimated that some 12,200 seafarers were employed on Swedish controlled ships, a small number of whom were non-Swedes on TAP agreements, of which 3500 were officers some 2,700 were ratings and 6,000 were hotel personnel of ferries and passenger vessels. Of these 12,200 seafarers 28 percent were women predominantly in the ferry trade.

Maritime Education And Training

The engine and deck ratings education programmes are offered at 7 High Schools throughout Sweden. The two education programmes follow the same pattern. Entering from a minimum of nine years primary and secondary school, the education programme consists of three years at a Maritime High School, including eight months sea time, half of which is on a training vessel. This is equivalent to the 18 months of sea time required for the ratings to graduate at AB/motorman level. The enrolment at present is 289 students, a decline from 388 the year before.

The officers’ education programmes are offered at two colleges, in Gothenburg and Kalmar, which have 1,033 students enrolled in 2013. The education programmes lead to the award of either a B.Sc. in Nau-
tical Science or a B.Sc. in Marine Engineering. Both programmes basically follow the same pattern.

There are two alternative admission criteria for officer education programmes. The first is as a qualified AB or motorman. The second is with a minimum of nine years primary and secondary school, but with significantly more subjects required than the entry requirement for the ratings Maritime High School. The curriculum is the same, whichever admission route is taken. The education programme lasts three years if entering as a qualified AB or motorman, or four years for the other admission route, due to the inclusion of 12 months sea time.

Young people who initially choose the ratings, rather than the officers’ education programme, are often school weary and prefer the ratings education as it offers more seetime, less schooling and a more immediate opportunity to earn an income. However, it is expected that upon reaching the age of 25 – 30 years they will apply to enter the officers’ education programme, where they benefit from some accreditation for prior learning, and are favoured for admission before others.

Two Masters Degree programmes have been introduced at the maritime college in Gothenburg. These programmes are mainly directed towards Deck and Engineer Officers and the programmes are of 1½ years duration in either, logistics and maritime business, or in ships engineering.

**Shore-based Maritime Employment Opportunities**

For deck officers, the large number of small coastal passenger ships and domestic and semi-domestic passenger and cargo services offer a wide variety of shore-based job opportunities.

The Maritime Administration, including pilotage, and private inspection and surveying industries offer a significant number of employment opportunities for ex-seafarers both deck and engine. New regulations and concerns about pollution and other possible damage caused to the environment by shipping operations has increased the number of job opportunities and led to attractive wage packages for ex-seafarers.

Many ex-seafarers will also remain in employment with their shipping companies in shore positions in technical and management functions.
United Kingdom

National Maritime Characteristics

> Although no longer having the dominant fleet it once had, the UK retains a substantial maritime presence as a maritime financial, legal, regulatory and insurance centre as well as still having a significant owned and controlled fleet.

> Efforts have been made to stimulate recruitment and training of young people, both as officer trainees and ratings. Officer recruits have doubled and rating trainees have started to show signs of an increase, albeit from a very low ebb.

> The introduction of a tonnage tax regime in 2000 stimulated growth of the ship register up until the economic recession in 2008, after which growth fell away. Less than half of UK-controlled ships are UK registered.

> Apart from the maritime commercial and regulatory industries based in London, the UK also benefits from an underpinning of long established maritime training institutions, various industry bodies such as the “Maritime London” and “Sea Vision” campaigns, charities and other sources of recruitment and training funding and support, such as the Merchant Navy Training Board and the Marine Society.

Maritime Overview

A strong maritime tradition remains in the UK, with a focus globally on the service sector located in the City of London which relies upon a foundation of seafaring experience. This includes a wide range of maritime services including classification societies, chartering, education and training, equipment manufacturing, insurance, law, P&I, loss adjusting, offshore energy sectors, regulatory and investigatory bodies, ship management, and yacht manufacture. Merchant shipbuilding has virtually disappeared although ship repair and offshore construction remain.

The UK fleet size is complicated by questions over such issues as the definition of “ownership” and whether overseas territory fleets should be included. However, one measure of the UK owned trading fleet suggests that in 2012 there were a total of 675 UK owned trading ships totalling 21,627 million dwt, of which 331 ships of 6,775 million dwt were UK mainland registered, and 344 ships 14,864 million dwt were foreign registered or registered in the Isle of Man.

Accurate statistics for UK seafarers are also difficult to determine, but this is estimated at 11,000 officers and 11,880 ratings in 2011. The latest figures indicate a small decline, with 10,930 officers and 9,330 ratings for 2012.

The number of new trainee officer entrants is estimated as:

<table>
<thead>
<tr>
<th>Year</th>
<th>Officers</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>662</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>555</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>571</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>685</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>854</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>925</td>
<td></td>
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<tr>
<td>2010</td>
<td>754</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>854</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>903</td>
<td></td>
</tr>
</tbody>
</table>

It is estimated that there is about a 20% drop-out rate, mainly occurring in the first sea phase. The number of officer trainees has improved substantially, although doubts remain whether the numbers are sufficient for sustainability of both sea and shore requirements. The number of rating trainees is showing early signs of some improvement, albeit still at very low levels.

Maritime Education And Training

The variety of UK maritime education and training schemes are extensive and are still evolving through development by the tripartite Merchant Navy Training Board (MNTB) to meet industry needs, education and training provision and provide suitable programmes to meet the aspirations of young people and their parents.
For ratings, there are two entry routes: the marine apprenticeship scheme (deck and engine), which is a structured sandwich training course, or the traditional vocational system with little academic underpinning. The apprenticeship programme, which has a higher education entrance requirement, leads to STCW rating forming part of a watch qualification, and the AB certificate, and has been approved for reductions in normal seetime requirements. It can also facilitate the progress to officer level for those who wish. The traditional rating entry is also available and involves only pre-sea basic safety training and then onboard training and sea service to reach ratings STCW qualification.

In the case of the apprenticeship programme, the course qualifies for Government funding support as part of its objective of increasing the skill base of young people in all industries. The course also fits within a nationwide, maritime sector-specific, recognition system which includes tugs, offshore and other sea-going parts of the maritime cluster.

For officer trainees, various options are offered. There are sponsored degree courses, graduate entry programmes for those already holding degrees, two-year Foundation Degrees (blending work-based skills with academic learning) plus more conventional vocational training. Foundation Degrees are now a popular entry route, offering sponsored training costs, degree-level qualifications and vocational training. But the more conventional training with a lower level educational entry level remains popular.

**Shore-based Maritime Employment Opportunities**

While London is regarded as the main maritime hub for insurance, maritime law, finance, broking etc. many ports around the UK coasts have their own maritime clusters – Aberdeen for the offshore sector, Southampton for classification and the UK Maritime and Coastguard Agency, Glasgow and the Isle of Man for ship management and maritime training institutions based in many major ports, such as Liverpool, Glasgow, South Shields and Southampton – and so on.

Ferries, the coastal sector, the growing number, size and sophistication of North Sea and other offshore craft, as well as harbour craft, offer seafarers a halfway house between deep sea and working ashore. And, once onshore, there are some of the major commercial recruitment companies specialising in matching qualified seafarers to jobs in the global maritime cluster, as well as jobs in the UK, a substantial number of maritime education and training institutions, an extensive pilotage service and several major ports and harbours where ex-seafarers are welcomed.
Appendix 2

New National Career Path Reports And Maps

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Belgium

National Maritime Characteristics

> Between 1991 and 2003, the Belgian registered merchant fleet had all but disappeared as ownersflagged out to foreign flags, particularly Luxembourg. However, the Belgian government approved a series of measures to restore attractiveness to the Belgian shipping register and from 2003 onwards these proved effective in radically increasing tonnage.

> Applications for maritime training have increased as the national fleet has increased, although most applicants are from the Flanders Region and the areas near the coast and major ports.

> Maritime training is of a high standard, with an emphasis on degree-level in preference to vocational training, although the later is available.

> Jobs for ex-seafarers are available in the growing maritime sector ashore particularly in ports, piloting and offshore sectors.

Maritime Overview

The most remarkable feature of the Belgian maritime scene is the dramatic turnaround in the fortunes of the national fleet. From nearly 2 million GT in 1990 it declined rapidly to less than 200,000 GT in 2003 then, making use of European State Aid Guidelines, new measures were introduced in 2003 based on a tonnage tax regime and support for crew wage and social security costs.

Almost immediately ships were re-flagged to Belgium with the registered fleet increasing to 1 million GT in 2004 and growing, and then, after a dip in 2009 following the general economic recession, to over 4 million GT in 2012. However, even now less than 30% of the Belgian-owned fleet flies the national flag.

With Antwerp, Zeebrugge and Oostende as significant Belgian ports on a major trade route through the Channel, a thriving ferry trade, close trade and transport links with other significant coastal states in the vicinity and a resurgent national merchant fleet, the Belgian maritime cluster offers good career prospects to young people.

The number of seafarers employed on Belgian flag ships was some 2,000 in 2004, it increased to 4,000 in 2010 and then dropped back somewhat to some 3,600 in 2012. During this time, the number of EU nationals on board (mostly Belgians) increased from 500 to 1,000 and the decline in total numbers between 2010 and 2012 affected mainly non-Europeans.

The number of students enrolling at the Maritime Academy for degree-level maritime training has virtually trebled from 250 in 1999/2000 to 700 in 2010/11 although the number of graduates has remained virtually unchanged during this time because of the rigour of the course can lead to high failure rates.

A survey among alumni of the Maritime Academy revealed that ex-students consider that they undertake two distinct careers; one at sea and another on shore. On average they had spent 8.9 years at sea, for males and 3.1 years for females and 80% were working in the discipline for which they had first trained. Over 95% considered their time at sea to have been vital in their shore careers, although while 90% thought they had acquired sufficient knowledge in their training only 54% considered they had acquired adequate competency in the skills they needed.

In the decade up to 2010, employment in the seagoing parts of the maritime cluster, i.e. dredging, tugs and the merchant fleet, increased by some 18% to 8,230, of which the number of Belgian nationals increased by 20% to 4,910.
Maritime Education and Training

Maritime training in Belgium comprises both degree-level courses and vocational training and is fully paid by the Government at university and secondary levels.

The Antwerp Maritime Academy is Belgium’s only maritime university-level training institution, providing Bachelor and/or Masters degrees after three or four years academic study respectively as well as the appropriate STCW operational or management certificates after completion of the necessary seafarers' training.

In principle maritime training is available from the age of 12 at secondary schools following which, and after a 6-year study period, a candidate may qualify to serve on vessels up to 3000 GT or to enter the Maritime Academy.

The adult education centres in Antwerp and Ostend provide a number of modules covering STCW-related vocational training which are provided through evening classes. The three year duration courses include a number of shared modules plus some for deck specialisation and some for engine.

The maritime competence centre at VDAB Zeebrugge also provides vocational STCW training through a modular system.

Shore-based Maritime Employment Opportunities

A steady range of job opportunities ashore are available in the pilotage, port and ancillary public services although senior management postings often require a university degree, which puts the degree holders of the Antwerp Maritime Academy at an advantage. Deck and engine officers with a good track record on board of gas tankers have as a rule no great difficulties to reposition themselves in the expanding energy sector (onshore and offshore) both in Belgium and overseas. However, all Belgian trained officers are highly regarded because of the quality of their training and can find employment in the maritime clusters of Netherlands and Scandinavian countries as well as in Belgium.

Long service ratings have the opportunity to retrain as officers in the coastal, towing, offshore and dredging trades although in the deep sea trades the opportunities for ratings to re-train do not realistically exist.

The maritime cluster in Belgium is concentrated on the coastal areas and seaports, and that is where the majority of seafarers originate from. Information about shore job availability may therefore be somewhat more problematic for seafarers from the South of Belgium because of linguistic and other issues.
France

National Maritime Characteristics

Notwithstanding the crisis that began in 2008, the French maritime community forecasts substantial growth in the merchant marine sector. Global groups have, however, begun to decline. The closure of Singapore BW’s French subsidiary and instability within the Danish group, Maersk, illustrate this instability. Factors such as these have culminated in the number of vessels being effectively cut by half.

December 2009 figures recorded the availability of 1154 seafarers, which shows an increase of 229 unemployed (+25 per cent) against 81 (10 per cent) in 2008 at the start of the recession. Long-term unemployment (> 1 year) has also increased. The unemployment rate more generally remains low, although it has seen a slight increase from 3.0 to 3.8 per cent. Unemployment also remains seasonally cyclical.

Unemployment has increased in France since 2009 as a result of sustained global economic decline. Jobs in the commercial sector have not increased since 2006 and labour market downturn therefore continues to pose a significant challenge for the French maritime industry.

Maritime Overview

French companies transport 15 million passengers and 102 tonnes of freight annually, generating a turnover of 6.5 billion Euros. The French flag merchant fleet has been declining slowly and there are currently some 160 French registered merchant ships and a further 150 French-owned ships registered abroad.

In 2009, the French maritime sector accounted for 300,000 jobs (source: CMF), excluding coastal tourism (250,000), and seafarers represented in the region of 30,000 (i.e. 10 per cent) of the total. In 2010 the French maritime sector employed 14,975 seafarer employees and recorded 3079 (2182 male and 897 female) trainees.

Data 2009-2011

<table>
<thead>
<tr>
<th>Number</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>Officer</td>
<td>7354</td>
</tr>
<tr>
<td>Ratings</td>
<td>8817</td>
</tr>
<tr>
<td>Total</td>
<td>16171</td>
</tr>
</tbody>
</table>

The following chart (source: DAM data) shows a steady trend of decline for the period in the number of French seafarers 1997–2010:

General maritime employment at December 2008 (source: OPMQ) shows that French maritime companies employed 13,696 seafarers, comprising 9876 French, 2123 EU and 1697 non-EU; representing 72, 16 and 12 per cent of the total workforce respectively. In terms of distribution of employees by industry, the transportation of passengers generates 4839 jobs (49 per cent) and one in five French seafarers works in the ports sector. The off-shore sector (10 per cent), oil transport (7 per cent), container transport (6 per cent), research and technology services (4 cent), dry bulk transport (3 per cent) and rolling stock transport (1 per cent) account for the remainder. Passenger and port transport are the main employers of operational staff and these two sectors employ 5143 crew members out of 6234 (constituting 82 per cent of the aggregate workforce).
Maritime Training and Education

By age 15 students have a first national exam, after which they elect to either remain in general education or progress towards a technological or professional qualification. Graduates may then progress towards a ratings or fishing career. To become a merchant naval officer, students train at the École Nationale Supérieure Maritime (ENSM)\(^1\), where there are two entry routes: “filière A” (academic stream) and “filière B” (apprenticeship). Officers graduating from “filière A” can serve either on deck or in the engine-room. Students graduating from “filière B” choose during their training whether they want to be deck or engine officers.

Shore-based Maritime Employment Opportunities

Opportunities exist for former seafarers in insurance or maritime law firms, or as independent consultants. The emerging field of marine renewable energies is also attractive in this respect. Other sectors such as classification societies, surveyors, port services, terminal operators, towage, salvaging and dredging, marine equipment suppliers, information technology, marine engineering and ships’ crew management also attract former seafarers.
Norway

National Maritime Characteristics

- Norway has a rich maritime history and is one of the world’s largest maritime nations. It has one of the longest coastlines in the world, and maritime activities have always constituted an important part of everyday life.

- The maritime industry has an international focus and Norwegian shipping companies earn their revenues from around the world. It is forecast that the largest and most significant future growth markets will be the Norwegian Continental Shelf (NCS) and the High North/Arctic region. The offshore markets in Brazil, West Africa and Australia will be similarly important for Norwegian shipping companies.

Maritime Overview

Based on market value, the Norwegian fleet is the world’s fifth largest. The Norwegian off-shore fleet is the world’s second largest. The maritime industry in Norway creates NOK 150 billion in revenue every year, and makes up about ten percent of private industry in Norway, excluding oil and gas.

The total number of Norwegian seafarers is around 24,000 and this figure has remained relatively constant for the past ten years, although there has been a modest increase in the last 3 years. Most are employed on ships on the domestic register (NOR), however around 2,500 are employed on ships on the international register (NIS) paying into the seafarers pension fund, and a number are also employed on Norwegian-owned foreign flag ships.

Maritime Training and Education

Maritime education in Norway is totally integrated with the general education system and all maritime education is based on STCW demands.

For ratings, the skills based high school education is called a 2+2-model. Students attend school for two years, and then undertake two years of practical training before taking a final diploma examination. The two years of practical training are divided equally between academic learning and practical (on-the-job) working. Twenty-two schools providing 54 classes provide 2+2 model training.

Those who choose maritime skills education take part in general skills education for the first year, before taking up a more specialised maritime education during the second year. During the second year, students also choose between becoming an “able seaman” or “engine technician”. After completing the two years’ studying, students must then obtain a training contract onboard a ship that is specifically certified to deliver practical training. One of the main challenges currently posed to Norwegian maritime education is identifying sufficient training positions for those exiting the education system. After finishing the 2+2 education, students take a diploma, after which they will qualify as ratings.

There are three ways to attain an officers education in the maritime industry. One is through the Royal Norwegian Navy, with a further two pathways via Maritim Fagskole (tertiary education but not higher education) or a maritime bachelor degree (higher education).

The Fagskole-education builds upon a maritime skills education (secondary education). After having finished their skills education, they are able to work as rating crew or apply for tertiary maritime education. Maritim Fagskole is a tertiary education available only for those who have finished relevant skills education. Maritim Fagskole is a two year officers education based on STCW, with two fields of study, technical and nautical. Fifteen schools provide this form of training.
There are five university colleges that give a bachelor in maritime education. This is officers training with higher education. It can consist of regular officers training plus economics, engineering or other specializations and at two locations in Norway the two years of Fagskole is the same as the two first years of the bachelor’s degree so that graduates from Fagskole can take the final year at the university college and get a bachelor’s degree.

A third stream for obtaining a maritime bachelor’s degree is the Y-veien system which is a specialized bachelor’s degree that builds on a relevant skills based secondary education. If you have a maritime secondary education, you can get into a Y-veien maritime bachelor’s degree. The Y-veien path builds on the experience the candidates have from the secondary education and their work experience, and have extra focus on math.

**Shore-based Maritime Employment Opportunities**

Having a large “land based” maritime industry makes the competence of former seafarers very attractive. Norway has a large shore-based maritime industry. The total maritime industry in Norway employs in the region of 100,000 people. Around 80 per cent of these work on shore. On-shore industries include ship building, ship equipment industry, ship brokering, shipping administrations, maritime insurance, shipping finance, classification societies, maritime law, ship agents, port services and public authorities. All these fields of work require seafaring knowledge and competence to some degree. All ship workers are attractive to the Norwegian labour market and the number of seafarers going ashore is not currently sufficient to satisfy demand.

Any seafaring experience is relevant, especially for ship building companies and ship equipment developers. Officers with a combined maritime and engineering bachelor’s degree are especially sought after. Many therefore take an engineering degree after going ashore.

Attracting seafarers to shore based industry is in fact a challenge for the shipping industry. A lot of sailors go ashore after only ten years’ service—a tendency that arguably depletes the fleet of experienced personnel.

The majority of seafarers on any level are recruited directly into shore based industries. Those who enhance their education with a degree in economics, engineering, or law are, however, especially attractive to the current job market.
SHIP BUILDING AND EQUIPMENT
CLASSIFICATION SOCIETIES, MARITIME AND SHIPPING FINANCE
SHIP BROKERING
SHIP OWNERSHIP AND MANAGEMENT
PORT AND HARBOUR MANAGEMENT AND SERVICES
MET
MARITIME ADMINISTRATION

FISHING
DEEP SEA AND COASTAL SHIPPING
OFFSHORE ENERGY GENERATION

MARITIME SCHOOLS AND COLLEGES
Romania

National Maritime Characteristics

> Romania’s current constitutional position emerged in 1996, it joined NATO in 2004 and the European Union in 2007, and is therefore still in something of a transition.

> The maritime community is relatively small and mainly confined to the coastal region around Constanta, and the situation of the merchant fleet and the national seafarer population is still based on the inheritance which emerged after the fall of the previous regime.

> Standards of maritime education and training are high and this is perceived to be a strategic national asset if the current number of jobs available to Romanian seafarers are to be preserved.

> Jobs for ex-seafarers in the shore-based national maritime cluster are not plentiful so retention rates at sea are high and a significant number of ratings go on to qualify as officers.

Maritime Overview

Romania must be one of the very few countries, if not the only one, with a President, Traian Basescu, who has served as a VLCC Master after graduating from the Naval Academy “Mircea cel Batran” in Constanta in 1976. This does not, however, signify that Romania has an active maritime policy, indeed several contributors suggested that the reverse was the case.

As with several other Eastern and Central EU Member States, with the break-up of the old regime Romania inherited a large nationally-owned fleet and a large number of national seafarers that were required to operate the ships. Many of these ships were old and sub-standard and neither the legal nor financial systems were in place to enable fleet renewal to take place. The bulk of these ships were fairly rapidly disposed of but the Romanian flagged fleet has continued to decline, from 34 ships in 2004 to just 5 today, and with 31 Romanian-owned ships registered under foreign flag.

It has been suggested that the absence of a significant national fleet results in the industry having a low political profile, which prevents necessary developments in maritime law, regulation and financing to aid the industry. Proposals have been made for the establishment of a second or international register that would attract more ships to register in Romania but there are as yet no signs whether the proposals will be accepted.

Romania is at the end of the extensive Danube river system and the Rhine, Danube, Black Sea Canal and has provided an important export transit point for landlocked Eastern and Central European countries through the port of Constanta, which ranks fifth of the top twenty EU ports based on tonnage handled. Shipbuilding and onshore and offshore oil production are also important sectors of the economy, which is otherwise focussed more on agriculture than on industry.

The number of Romanian seafarers is difficult to establish precisely, although it is clear that Romania is one of the larger labour supply countries in the European Union. One estimate is that there are around 34,000 seafarers, of which some 15,000 are hotel staff on passenger ships and around 5,000 are ratings i.e. there are around 14,000 officers. Another, not dissimilar, estimate was that there are:

<table>
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</thead>
<tbody>
<tr>
<td>Deck officers</td>
<td>6320</td>
</tr>
<tr>
<td>Deck trainees</td>
<td>2548</td>
</tr>
<tr>
<td>Engine officers</td>
<td>6580</td>
</tr>
<tr>
<td>Engine trainees</td>
<td>1740</td>
</tr>
<tr>
<td>Total officers</td>
<td>11,000</td>
</tr>
<tr>
<td>Ratings</td>
<td>5,000</td>
</tr>
<tr>
<td>Total seafarers</td>
<td>16,000</td>
</tr>
</tbody>
</table>
However, maritime training remains an attractive option for young people as alternative career options are limited, wage rates for officers are high compared to shore wages (national GDP per capita is estimated at $13,000 compared to Bulgaria at $14,500 and Netherlands at $42,900) and there is the opportunity to travel. Around 1,000 graduate each year with a BSc in marine engineering or navigation.

**Maritime Education and Training**

In Constanta there are two maritime education and training institutions providing maritime degree-level training and qualifications for officers: the Constanta Maritime Academy and the Naval Academy “Mircea cel Batran”. In addition there is the Romanian Maritime Training Centre, CERONAV, which provides rating training, STCW short courses for officers and ratings, as well as a range of other maritime-related courses for offshore, river and port personnel. In Bucharest there is also the relatively more recent arrival, the Romanian Nautical College, which provides vocational training to STCW operational level for officer trainees, and offshore training and potentially ratings training in association with CERONAV.

Demand for Romanian ratings has decreased on deep sea ships faced with competition from low-wage cost countries outside Europe and the wage rates offered are no longer so attractive to young people. Consequently many ratings, perhaps up to 50%, are retraining to become officers.

The maritime institutions are very well equipped, the new safety, survival and offshore training facility at CERONAV being particularly impressive, and the staff at all institutions are well-qualified.

One estimate is that around 1,000 young people graduate each year with a degree-level qualification in navigation or engineering, however it is not known how many actually secure a training berth at sea and achieve the necessary sea time to obtain a certificate of competency (COC). Several estimates were that only between 10-15% of graduates actually obtain a COC and it is certainly the case that in several crew manager offices some staff, particularly female staff, had obtained maritime degrees but had not obtained COCs. By contrast, it appears that virtually all students who complete the vocational training for STCW operational level certificates (with a 20% drop-out rate) go on to obtain COCs, at operational level.

The quality of the training programmes and strict compliance with international and EU standards are priorities in Romania as change might impact on job opportunities for national seafarers in the international market place. Initiation of change in shipboard work practices, manning structures or sea time requirements – except maybe to increase sea time beyond strict STCW requirements – is most unlikely.

**Shore-based Maritime Employment Opportunities**

Romania is at the end of an extensive inland waterway system that connects the North Sea and North Atlantic to the Black Sea, from Rotterdam to Constanta.

There are also extensive shipbuilding and repair facilities at Mangalia and Galati on the coast and Brailia and Tulcea in the Danube. In 2009 Romania was 10th in the World rankings for shipbuilding although output has declined since then.

The port complex at Constanta, and in the vicinity, is an important transhipment centre for cargos from the Middle East and Asia to East and Central Europe. In addition, a new offshore oil and gas find within Romanian territorial waters, which complements or replaces the now declining onshore capacity, is generating new employment opportunities.

In addition, there are perhaps 100 crewing agents supplying Romanian crews to merchant ships and river craft, of which some 24, which provide 65/70% of the Romanian crewing market, are members of the National Association of Crewing Agencies in Romania (ANACR). ANACR represents the crewing industry in discussions with Government, the local union and internationally.
Finally, the local maritime trade union representative and ITF inspector is particularly active in publicising and promoting the industry, bringing the various parties together and making representations to Government sources when necessary. This is particularly important as, with the lack of a significant national merchant fleet, there is an absence of industry structures to co-ordinate and represent the various interests and to lobby on their behalf and there is no specific department within the Government responsible for shipping.

These industries and other bodies appear to provide the potential for a variety of onshore career pathways for ex-seafarers and to form the basis for a strong maritime cluster. However, the strong linkages and close networking within the maritime cluster that are seen in many other EU Member States are weak in Romania and each sector appears to operate almost in isolation from others.

Some efforts have been made to establish a maritime cluster organisation in conjunction with the Norwegian Maritime Cluster and the Norwegian Centre of Maritime Expertise. Major stakeholders, including Government departments, have expressed support for the initiative and 42 members have joined the cluster organisation, RONOMAR, which is part of the Constanta Maritime University. The organisation is still embryonic, however, and is exploring ways to attract funding from regional or other grants.

Ex-seafarers are employed in the offshore oil and gas sector, in the shipyards, although work there is declining, and in the Maritime and Port Administration and the Naval Authority. Ex-seafarers are also employed in the training institutions and in the offices of the crewing agencies. There does not appear to be any cross-over between deep sea and river transport in terms of employment. The total number of ex-seafarers working ashore is quite small, however, probably not more than some 400.

As a consequence of the limited opportunities for work ashore, retention rates at sea are high with the low wastage rates mainly due to medical problems, indiscipline or retirement. Several seafarers who were interviewed stressed the advantages of high wage rates at sea by comparison with shore wage rates, long leave periods and the advantage of being able to live in the Constanta area where most seafarers originate from and where their crew agencies were based. Most considered that their only prospect of working ashore would be if they were offered a shore job with their current employer.

**List of Representatives Interviewed**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Adrian Mihalciou</td>
<td>ITF Inspector</td>
</tr>
<tr>
<td>Laurentiu A Lazar</td>
<td>Barklay Manning Services</td>
</tr>
<tr>
<td>Valeriu Raicu</td>
<td>Dohle Manning Agency SRL</td>
</tr>
<tr>
<td>Stelian Cojocaru</td>
<td>Romanian Nautical College</td>
</tr>
<tr>
<td>Romeo Stavar-Vergea</td>
<td>CMA Ships</td>
</tr>
<tr>
<td>Ovidiu Sorin Cupsa</td>
<td>Romanian Maritime Training Centre</td>
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<td>Emil Luca</td>
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<td>Cornel Panait</td>
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<td>Ionelia Popescu</td>
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<td>Florin Urziceanu</td>
<td>AB Crewing</td>
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<td>Igrigore</td>
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<td>Catalina Coval</td>
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<tr>
<td>Cristian Dumitrescu</td>
<td>Seatrans Crewing</td>
</tr>
</tbody>
</table>

1 http://www.supmaritime.fr/
Grateful Thanks Are Due

to the Following Organisations and Individuals who
Contributed to CM2 Through Face-to-Face or Phone Interviews
or Other Means

**Maritime Recruitment Services**
Phil Parry, Chairman, Spinnaker Recruitment  
Glyn Barker, Viking Recruitment  
Cara Carter, Director, Halcyon Recruitment Ltd.  
Faststream Recruitment Group (Perception vs Reality Report February 2013)

**Maritime Employers**
Bill Lunn, Group Director for Development and Talent Management, BS Shipmanagement  
Peter Aylott, Chief Operating Officer, C-MAR Group

**Distance Learning Providers**
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Nigel Cleave, Chief Executive Officer, Milind Karkhanis, Vice President Training Services, Vidoetel.

**Maritime Institutions**
Phil Belcher, Marine Director, INTERTANKO  
Julie Lithgow, Director, and David Barrett, Education Manager, Institute of Chartered Shipbrokers  
Tim Springett, Head Employment and Legal, UK Chamber of Shipping  
Glenys Jackson, Head, Merchant Navy Training Board  
Ashok Mahapatra, Senior Deputy Director, International Maritime Organisation  
John Mace, International Group of P&I Clubs  
Mark Williams, Director Loss Prevention, West of England P&I Club  
Mark Windsor, Director of Lifelong Learning, Paul Russell, Marine Society  
Stephen Gosling, Training and Quality Manager, Nautical Institute

**MET Institutions**
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Ian MacLean, Partner and Master Mariner, Hill Dickinson LLP  
Michael Grey, author and maritime journalist  
Phil Parry, The Maritime HR Forum (Annual Conference June 2013)
List Of Selected Publications/ Research Relevant To Maritime Career Mobility And Progression

1. “Changing Course: A second career for the seafarer within the maritime industry”, written by the well-known maritime journalist Michael Grey and published by Fairplay Publications in 1980 (ISBN 0-905045-22-X). Although written from the perspective of the UK maritime labour market the book has useful sections on pre-planning for a future ashore, how to find out about and apply for a shore job, social adjustment to life ashore and descriptions of many of the most common posts for ex-seafarers, much of which is still relevant today.

2. Subsequent to this, two projects co-ordinated by the World Maritime University, with European Commission funding, also investigated maritime recruitment and career progression albeit with an emphasis on maritime education and training. The Harmonisation of European MET Schemes, METHAR, in 1999 identified a serious decline of interest of young people in seafaring and an insufficient supply of ships officers from EU countries (“those who could go to sea won’t and those who would go to sea can’t” is a quote from the report). Another similar report in 2003, the Thematic Network on Maritime Education, Training and Mobility of Seafarers, MET-NET, made a number of recommendations relevant to CM2, including:

- Efforts should be made to improve the image of the industry
- Seafaring should be promoted as part of an attractive career in the maritime sector
- Shipboard life should be made more attractive by providing more opportunities for distance learning and social interaction

3. Another relevant research project was the Report on the Project on Enhancing Recruitment and Training in the Maritime Sector in Europe, published in September 2010. This produced a number of recommendations for ways to improve the recruitment situation, not the least of which was that the concept of employment ashore within the maritime cluster was one of the most important aids to recruitment in most EU/EEA countries.

4. Two more recent projects, both supported financially by the European Commission under the Lifelong Learning Programme of the Leonardo da Vinci Programme, are also very relevant to CM2. The Rank-Up Project, which produced its report in September 2013, aims to provide a comprehensive syllabus for deck ratings to upgrade to watchkeeping officer under the terms of the IMO STCW Convention, while the Sail Ahead Project has provided comprehensive careers guidance information and an online careers guidance tool directed at deck officers, and principally Masters.

5. In the small commercial vessel (SCV) sector there have also been EU-funded projects to help career mobility by promoting mutual recognition of SCV certificates within EU Member States (the Trecvet Project) and establishing a database of Member States various SCV qualifications (the Getafix Project). Both projects are on-going.
Social Media Report – Career Mapping Project (CM2)

It was decided to use Social Media to:
> expand the reach of the possible questionnaire responses
> publicise the research project to the maritime media, industry institutions and other interested parties, and
> generate discussion and comments that could be helpful in putting flesh on the data

Several networks were used in an attempt to capture different sections of the seafaring community and several core elements were used to ensure that we could share, track and report the results.

Core Elements

SurveyMonkey
Central to the success of the study was an online questionnaire generator. SurveyMonkey is one of the most well known online survey generators and its ease in allowing people to share their questionnaires once they have been generated was central to the decision to use it. In addition, the ability of SurveyMonkey to store, arrange, analyse and present in diagrammatic format large volumes of data was another key factor in the decision to make use of it.

bit.ly
Put simply, bit.ly is a URL (uniform resource locator) shortener that was used a lot throughout this study, in particular as a shortcut for those wishing to ac-
cess the various questionnaires. It is used primarily on Twitter as an automatic function of most of the 3rd party social media management platforms allowing people to monitor multiple accounts from one place. With Twitter only allowing tweets of 140 characters it is often difficult to include long URLs in tweets without using up your allocation of characters. Therefore bit.ly is used to make URLs shorter and more manageable.

However, one often underused function of bit.ly is the analytics side of the platform. It is possible to track what is being tweeted by monitoring the number of clicks on the link and this function was used extensively in the CM2 Project.

The diagram above indicates data that can be provided through use of bit.ly, including the spikes when Linkedin group messages were sent out, where the messages were shared and the countries concerned.

**Strategy for each social network**

**Linkedin**

Linkedin is the primary business social network and for this reason was identified as the predominant network on which to focus and, on an initial inspection, there was plenty of maritime activity surrounding its group facility. Linkedin allows you to set up and host a group to which people can join and take part in a variety of discussions. It was decided, given the amount of activity, that the questionnaires would be publicised within these networks as a starting point.

Of the dedicated maritime Linkedin groups, 39 groups were targeted despite there being more seafaring and shipping groups on LinkedIn (over 1,900 groups are found using common maritime terminology as a search term). Several criteria were factored-in which included an active level of discussion (not all 1,900 groups were indeed active), held over 1,000 members and most importantly had a keen group owner or moderator. The 39 targeted groups had between them in excess of 300,000 members, although there would no doubt be a degree of overlap between membership of certain groups.

Linkedin allows questions to be posted in the member’s area of the groups of which you are a member. Therefore, the CM2 Project Team Leader joined each of the targeted groups and posted a short message to other members advising them of the project and providing details of the SurveyMonkey web address where the questionnaires could be found.

However, it was considered that this would not achieve the level of exposure the project needed so it was decided in addition to target the owners or moderators of the groups. Each group owner has the ability to send a group message to all followers of the group so it was decided to try to convince the group owners that CM2 was a worthwhile project and ask them to send the questionnaire to their members via a direct message. It was considered more likely that all group members would see the questionnaires in this way rather than just the few that happened to be on the group page at the time of posting an update to it. This proved successful and significant numbers of questionnaires were filled in when group owners were kind enough to send out the suggested text.

Another part of the strategy was to create a dedicated CM2 Linkedin Group to be a central point of the project. This was not a particularly active part of the strategy but if CM2 had been a more long term project this would have assumed much more importance to allow stakeholders and participants to communicate ideas and discussion.

**Twitter**

Although Linkedin was central to the campaign, Twitter was also used, although it was used differently and to target a different audience. Linkedin group members often predominantly use it as a business social media platform where they can “meet”, communicate and exchange information and concerns with other professionals with similar interests through the medium of the groups of which they become members. By contrast, Twitter users are often from more diverse social, work experience and age profiles – in crude terms, more ex-seafarers are likely to be found as members of Linkedin groups and more trainee seafarers are likely to be found through Twit-
Twitter was used in two different ways; firstly by using Twitter Lists and then secondly, by using these Twitter lists, to contact journalists and other organisations.

**Twitter lists**

Essentially Twitter lists are a way to segment followers down to particular groups of people. Twitter followers can be separated out and viewed one list at a time e.g. a friend list, a shipping list, a football list or a celebrity list, in order to make Twitter more manageable.

In the case of the CM2 Project, 15 relevant maritime Twitter lists were found from which 400 individual Twitter accounts were included in the CM2 Twitter list (which is the largest of any of the other existing maritime Twitter lists). This list included maritime journalists, port and harbour authorities, maritime bloggers and others with decided maritime interests.

**Facebook**

As with LinkedIn and Twitter, Facebook again had a different audience. Whilst LinkedIn had the largest audience of those in the target populations, Facebook, with its membership base of over 1 billion accounts was a network that needed to be targeted, although it was appreciated that there were only a few relevant organisations active on the network and that shipping profiles consisted mainly of training academies.

Similar to LinkedIn there is a way to contact Page/Profile owners, which is what was done, but unlike LinkedIn, there is no way of reaching out to all page fans (i.e. people that decide they want to follow updates from that particular page).

**Conclusion**

Perhaps the principal lessons learned from this exercise are that:

a) social media is a most useful way to make direct contact with target populations

b) there are a variety of social media platforms which serve different purposes, appeal to different audiences and different age groups, and

c) even when particular social media platforms are selected to assist research, the manner in which each platform is utilised will have a material influence on the success of the venture.
Under the provisions of the STCW 1978, officers were certificated as Masters/Chief Mates, Chief/Second Engineer officers or officers in charge of a watch. They were required to demonstrate knowledge (sometimes specified as a general knowledge, a detailed knowledge or a thorough knowledge) of various tasks associated with their respective positions in order to be issued with a qualification. This knowledge was to be established “to the satisfaction of the Administration” before certificates were issued.

Criticism that such an approach resulted in a failure to establish common international standards of competence led to agreement being reached that STCW 1978 should be thoroughly revised in 1995. It was also agreed that the principles governing the revision should be based on what became known as “the functional approach” to certification.

The functional approach comprised analysing each position for which certification was required in terms of the job functions actually undertaken, identifying the knowledge, understanding and proficiency required for each function, listing the various methods which could be used to demonstrate that the candidate was properly competent in performing each function and setting out the criteria to be used to evaluate competence. Actually demonstrating the ability to undertake a task competently and safely, rather than demonstrating knowledge of how to undertake it, was a key principle of the functional approach. Another key principle was that by breaking jobs down into various tasks or functions, the training and certification programme could be constructed in a series of modules.

Consideration of the modular approach to training and certification gave rise to questions about possibilities of alternative arrangements for the manning of ships, most notably concerning watchkeeping arrangements. It was suggested that the ability to maintain a safe watch either on deck or in the engine room was a distinct task which required specific skills and competencies that could be taught and certificated separate from other tasks and skills required of qualified officers. In simple terms, the ability to keep a safe bridge watch (subject, of course, to the operational conditions at the time) did not depend on the individual’s knowledge of celestial navigation or cargo work and stowage, and the ability to keep a safe engine watch did not depend on the individual’s knowledge of engine maintenance and repair.

If the suggestion that watchkeeping skills could be taught and certificated separate and distinct from other technical skills had been accepted, it would have been a short step to consider that, subject to necessary safeguards, deck officers could obtain limited certificates covering engine watchkeeping and vice versa. There was also the possibility that suitably trained ratings could obtain bridge and engine watchkeeping certificates. Such safe watchkeeping certificates would have been circumscribed to apply only in certain specific circumstances, such as areas with low traffic density and good visibility.
The attractions of such a system were considered by its proponents to be chiefly that:

- there would be an increase in the overall skill levels on board ship
- with more crew members certified as able to stand watches safely in appropriate circumstances it would be easier to avoid fatigue accumulating among watchkeepers
- a ships crew would be more integrated and work patterns could be organised much more flexibly and more efficiently.

The proposals did not, however, gain sufficient support and were not pursued. Nevertheless, the 1995 amendments to STCW did include provisions enabling Parties to the Convention to issue alternative certificates to the standard STCW certificates and to conduct trials to “evaluate alternative methods of performing specific duties” (Chapter VII and Regulation I/13 respectively).

It is understood that full development of modular training and certification of watchkeeping skills has not been pursued since 1995, although Chapter VII and Regulation I/13 of STCW provide for Member States to approve trials to be carried out to establish the viability or otherwise of such systems should they wish.
Dr Jane Copley

Background/career
Jane has a background in both criminal and employment law and has recently completed a doctoral research studentship remitted by the Economic and Social Research Council (ESRC), in conjunction with the Working Lives Research Institute at London Metropolitan University, to research the nature of collective organisation among managerial and professional workers. This research focused on workplace, industrial, labour-market and cultural change, unionisation, career trajectories, employee engagement, management and analysis of employment relations, equality and diversity, change management and implementation and the impact of reorganisation and restructure. Jane has a particular interest in white-collar unionisation in the post-privatisation UK rail industry.

A qualified teacher, Jane teaches employment law and related disciplines and delivers bespoke training packages in this area, as well as undertaking advisory work in the field of employment rights.

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Digital Marketing Bureau

The Digital Marketing Bureau is a company which specialises in social media and digital marketing, consultancy and monitoring, search engine optimisation and augmented reality. In particular, the company assists clients with devising and implementing a social media strategy which will target the most appropriate sites for the client and ensure they maximise the results.

The company provides bespoke services to a range of clients wishing to improve on-line sales performance and optimise their use of, and investment in, social media. As use of social media becomes more prevalent and more important to a company’s reputation and profile, as well as to sales, it becomes ever more important to monitor how many people are commenting on a company, what they are saying – is it positive, negative or neutral - which sites they are using and in which countries the contributors are based.

While the Digital Marketing Bureau primarily targets clients in the commercial world, the concept of designing a dedicated social media strategy, selecting the most appropriate sites to suit the intended purpose and monitoring the results applied equally strongly to the Career Mapping Update Project.

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