

What new challenges is MET facing today?

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Abstract

The paper focuses on the crucial issues, which have far-reaching, and unforeseeable consequences, addressed in the Section 2.5 of the EU Green Paper on the future maritime policy of the European Union, entitled "Developing Europe's Maritime Skills and expanding Sustainable Maritime Employment." In this section the Green Paper deplores the quite rapidly declining number of Europeans engaged in and attracted to a maritime career, particularly in seafaring. The occurring shortages of qualified European maritime professionals, especially in seafaring as well as in onshore maritime activities are an increasingly serious impediment to maritime development in Europe. I have tried to answer and analyse WHY is there an insufficient and declining number of young European men and women who are attracted to a maritime career, particularly in seafaring. Further consideredaton is given to the question of what, if anything, can be done to reverse the evident downward trend and make the choice of a maritime career more attractive and exciting for young European men and women. Discussion is provoked, and also some suggestions for change are made, such as the rising of the general standards of maritime education and training (MET) and providing seafarers with knowledge and skills, that would enhance their chance to be employed outside seafaring in shore-based maritime industry or other industrial sectors. A question is raised whether today's existing system of MET -- indeed our existing approach to MET -- is capable of reversing this negative trend, and whether in MET alone can be found sufficient energy to make seafaring again an exciting, adventurous career choice for young Europeans. Basic primary factors, which influence a person's choice or attraction to a specific employment and career in the field are given. Analysing what is to be done to reverse the downward trend in the number of Europeans entering and staying in certain maritime professions, especially seafaring recognised are certain basic facts. A decreasing number of young Europeans consider today seafaring as a guarantee to achieve a long-term professional career, providing only limited choices and opportunities for mid career transition to professional onshore employment in maritime industry outside. To challenge this conviction and attract young Europeans again to seafaring in general, efforts are proposed to secure life--long professional careers in maritime transportation. An attached graph in the paper outlines the

main features of a possible system of integrated professional education and career progression combining at sea and onshore maritime employment. The proposition put forward here is simply to try an approach, which both raises the educational standards of maritime employment and integrates seafaring and onshore employment.

1 Introduction

About 95% of goods are transported worldwide by ships. The most important people to make the ships move and operate are the seafarers. But the seafarer shortage is a crisis of our times. These alarming news are reported by a number of professionals in the maritime field and maritime press.

Professor (Lane 2003) Director of Seafarers' International Research Centre (SIRC) in Cardiff, sees a manpower crisis in European shipping, a crisis that will decimate global standards unless radical action is taken. European seafarers may be a thing of the past as soon as 2010 according to a new study by SIRC. Fears are that if the industry loses European professionals, shipping will lose its European training infrastructure; an infrastructure which was setting the benchmark in standards for the rest of the world. Although today in 2008 our benchmark should differ from the pattern of standards in the past years. Today we have a crunch issue: a shortage of crews with proper standards.

This view is also supported by Grey (2008) who writes that shortage of seafarers is a perfect case of the market beginning to react, and a realization that supply has been overtaken by demand. Good, experienced, responsible and prudent seafarers are today becoming a scarce species.

Some shipowners are complacent and not doing enough training because they can buy labour from other countries where they do not have to pay any labour costs. But this may be a bitter disappointment. This was some years ago. Today all those fine Indian and Filipino officers who supposedly would fill the breach after the old chaps faded fast away to leave a serious gap behind them, are not hanging around for a full sea career, as did their predecessors, but leave the sea the instant they have accumulated enough savings sufficient to make the break. Which as pay has risen on the international fleet, is much faster than up to now. Quite a number of them do not wish to be promoted to senior officers' ranks, as they are aware of the price of these responsibilities, thinking it is not worth paying, for health reasons among other factors.

A building spree threatens crew shortages writes Grinter (2006). Crew shortages and the consequent shortfall in the quality of many who decide to sail seems to be a chronic problem with little in the way of solutions. Paradoxically, as the shipping industry enjoys its most recent building boom period it at the same time leads to its own misfortune.

There are around 5,000 tankers, bulk carriers and containerships filling the order books of the world's shipyards. All will be delivered between 2007 and the end of 2009. Half will replace ships due for scrapping. The rest will add 50%

more tonnage to the world fleet. To man the expanded global fleet effectively 10,000 qualified officers will have to be found and employed. In turn they will need to be supported by a further 60,000 ratings. So we can conclude that more vessels mean new problems.

The Baltic and International Maritime Council (BIMCO) has been warning about the global manpower situation for many years, urging members to maintain and step up their training commitments.

The ISF/BIMCO 2000 report estimated that in 2000 there were 404,000 officers and 823,000 ratings readily available in the market and the demand was estimated as 420,000 officers and 599,000 ratings, thus indicating a small deficit in the number of officers. This small deficit of officers may already be posing a threat to the safety of life at sea since it has been seen over the past few years that there was an increase on board ships of the number of people with false certificates of competence who are probably filling that gap. Some 12,535 cases of forgery in certificates were revealed by a study in 2000 (IMO 2001).

The realistic "benchmark" scenario see Fig. 1 considers the observed historical growth rate of the number of ships in the world fleet in the past decade at 1%; today it may have reached even 2 to 3% and assumes that recruitment and wastage levels are the same experienced over the last five years. Although the forecast is quite sensitive to a number of factors, the clear message is that the present shortfall of officers will worsen unless action is taken.

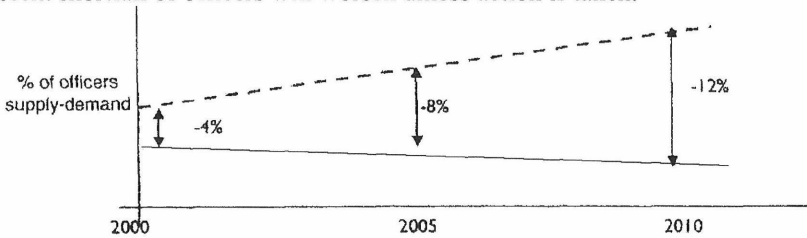


Fig. 1. Predicted supply-demand gap for officers (ISF/BIMCO)

To overcome the predicted manpower shortages Bucknall and Freire (2003) propose unmanned cargo ships as a vision in 2020. In their paper the results of a technical and economic appraisal of a fully automated unmanned cargo ship are presented within the context of expected world developments in the next decades.

With all respect to the elaborate technical level of this paper, the realization of the proposed unmanned ship concept described in it is not for a professional and experienced marine engineer a viable one, no matter what level of technology we reach in year 2020. Thus we have to find still another solution, remembering that the most important people in any shipping company are the seafarers; they are taking care of the assets, they are there to solve the problems, they are where the problems are, they meet the customers, they must be on the ship.

2 EU Green Paper on the future maritime policy of the European Union

In section 2.5 of the Green Paper entitled "Developing Europe's Maritime Skills and Expanding Sustainable Maritime Employment," the Green Paper bemoans the declining number of Europeans engaged and attracted to a maritime career, particularly in seafaring. The paper indicates that the resulting shortages, both in seafaring and in onshore maritime activities, are an increasingly serious impediment to maritime development in Europe as well as worldwide.

Why do we have an insufficient and declining number of young Europeans who are attracted to a maritime career, particularly in seafaring? What, if anything, can be done to reverse the evident downward trend and make the choice of maritime career more attractive for qualified young Europeans and others worldwide?

The EU Green Paper, whose basic purpose is to raise issues and provoke discussion, also makes some suggestions for change -- such as the raising of the general standards of maritime education and training (MET) and of providing present and future seafarers with additional knowledge and skills that would enhance their employability outside seafaring; that is, in shore-based maritime employment or other industrial sectors.

This raises the question of whether the existing system of MET – indeed, our existing approach to MET – is capable of achieving this, and whether changes in MET alone are sufficient to make seafaring again an attractive "career choice" for young Europeans as well as for others.

There is a need to revamp some universities and colleges existing methods of lectures and exercises. The students should be activated and lecturers should put a lot of effort in order to pass a maximum of useful knowledge and skills without repeating of what can be read in the textbooks. The study courses in the maritime universities and colleges should therefore be conducted by using an active teaching method, corresponding with the most effective known in the world solutions in the domain of education. The largest advantage of this method is a simultaneous passing on the students of knowledge and practical skills, thanks to this they hold an advantage compared with students from other universities. One of the most important elements of the education process are case studies concerning operational problems of ships like various casualties, breakdowns of machinery, careless navigation etc. All mentioned case studies are now enumerated in reports by various organisations like UK Marine Accident Investigation Branch (MAIB), Classification Societies banks of serious damages Lloyd's Register, BIMCO, Alert Bulletin and others. These case studies collected by various organisations mentioned are an invaluable source of ships' operational experience and problems are second to none with any textbooks. Completed by proper usage of available today's latest generation of simulators, we shall have a mature and well prepared ship's duty officer.

Therefore conducting traditional lectures should be given up except may be during first years where some theoretical aspects of various subjects should be highlighted. The lectures in the next study years should have a seminar and workshop character. In this way, it is possible to utilize the experience of all participants. The students can work in small groups of few students. The condition of effective participation in the classes is a good earlier preparation for the classes.

The prestige of idea and not the idea of achieving prestige is possible if in the university a partnership between the lecturer and the student exists. The lecturers perform roles of advisors and not of the arbiters. They are the guides encouraging us to independent thinking by creating a creative atmosphere. Thanks to it, the students are not afraid to ask, seek out, demand; they can also consult each other lecturer specializing in a specific problem and not only the person conducting the classes.

3 Basic considerations about the recruitment problem

This is the crunch issue. As already mentioned in the introduction, some seafarers, especially engineers, do not want to commit themselves to a long term career in the main stream maritime industry because they see better opportunities ashore and in the offshore sector. For the development of crew shortages we can partly blame the shipowners themselves. The shipowners used to regard their crews with the same feelings as they did lubeoil, fuel or paint – as a necessary evil which they sadly could not do without – suddenly recognising that seafarers were actually human being. Ship managers, companies should have a vested interest in proper training, because for them the crew is the basis from which they start to do the business. Training is an investment that the owners have to participate in, and should be aware of it. Thus the universities and colleges should seek close relations with shipowners, especially in large shipping companies, for which they will do the recruitment, will do the selection, will do the training and competence building, but as already said the owners need to participate and invest in this by for example offering already the first year students a scholarship.

The universities in turn should start an even aggressive and powerful students recruitment promotion for particular shipping companies so a candidate for a study course in the university should know in advance his future environment and work place. Thus closer cooperation between the universities and big well-known shipping companies should be established. Errors which are done during the recruitment process are mainly the delayed actions in enlisting. If we visit the schools and try to recruit the last class high school students a few months before they complete high school, it usually will be too late because they have already made up their mind what they would like to study, so we should rather address the younger classes giving them some food for thought about their future.

The primary factor which influence one's choice of or attraction to a particular job and career in any field are a mixture of the following:

- wages and salaries,
- quality of working conditions and experience,
- professional status and career prospects,
- availability or lack of alternative employment opportunities,
- intangible factors unique to a certain type of work or profession (for example such as "the call of the sea") which traditionally attracted twenty or thirty years back young men in Europe and elsewhere to seafaring.

These days these factors do not favour a seafaring career by young people. These consequences are clear and well documented, Fig. 2:

- an ageing corps of EU officers (about a third are over 50 years of age),
- wastage of officer trainees (over 10% drop out before completion of training and accelerated attrition of EU officer corps because of early exit from the industry or retirement. This obviously represents a significant waste of investment in maritime education and training.

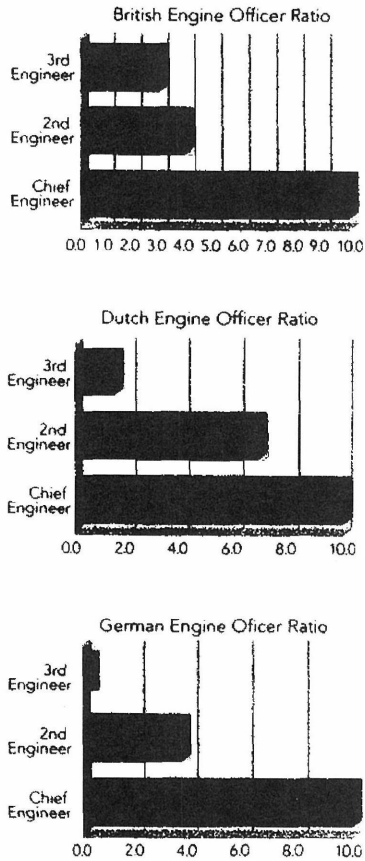


Fig. 2. Engine officer ratios in Britain, Germany and Holland point to a worrying lack of junior ranks coming through (Lane, 2003)

As a result of this there is not only a growing shortage of officers – nautical and engineering officers to man the ships -- but also a greatly reduced flow of professional seafarers required for onshore employment in maritime administration, industry and service sectors.

Considering what is to be done to reverse the downward trend in the number of Europeans entering and staying in certain maritime professions, especially seafaring it is useful to recognize certain basic facts: There is no systematic process for employment mobility between seafaring and onshore employment; only an ad hoc process of officers moving to onshore positions in the maritime sector exists.

4 Professional career progression in maritime transportation

A professional career in any field of human activity has two basic features: first, competency based on advanced education and special training; and second, the expectation and possibility of life-long work and progressive advancement in one's chosen field of activity.

Today a decreasing number of young people consider and pursue seafaring as a long-term professional career. And the experience from seafaring, no matter how good and extensive, provides only limited choices and opportunities for mid career transition to professional onshore employment in the maritime industry or outside it.

If you leave the sea and go ashore you generally have to start all over again building a new career for yourself and your family. Being at sea for rather a short time, say 5-10 years, may change your situation for a better case.

In order to attract young people, especially Europeans, again to seafaring and to a life-long career in the maritime sector in general, I think our efforts should be directed towards what shipping delivers and how shipping works. And this is rather sad, in that people in the shipping industry know that they are part of an amazing, essential and international industry.

Just over five years ago BIMCO decided to use the facility of the World Web to try and address the widespread ignorance of our industry. BIMCO Seascapes was devised, quite simply, to become a useful general source of information on contemporary shipping, maritime topics and current maritime industry issues. It would be hopefully useful for perhaps schools and colleges, for teachers or others seeking rather sparse teaching materials about the shipping industry. It would be pitched at the level of an intelligent 15 years-old and upward, with the emphasis in interest and accessibility (Grey 2007). This could be the beginning of a recruitment process of a young man making him familiar what seafaring is all about.

Thus our efforts should be directed towards following matters:

- creating a pattern of professional education integrating a university first degree, professional training, work experience, professional registration and the option of higher degrees, along the same lines as other professions such as medicine, civil engineering, architecture, law and so on;
- create a pattern of professional career progression integrating seafaring and onshore employment into a life-long progressive path that offers age appropriate career choices, post experience higher university degrees and senior management positions.

The attached graph, Fig. 3 (Laubstein pers. comm. 2007) outlines the main features of a possible system of integrated professional education and career progression combining at – sea and onshore maritime employment. The essential requirements of such a system would be:

- upgrading of MET instruction and qualifications to full university status at the (B.A or B.Sc.) level: raising of academic standards; broadening of

curriculum to include non MET subjects (e.g. law, economics, finance, human resource management, logistics of marine transport etc.); recognition and acceptance of such a degree for admission to postgraduate studies (i.e., portability of the degree in the higher education milieu, consistent with the Bologna process in European higher education);

- accessibility to, and financial assistance for mid – career postgraduate studies in different specializations of maritime affairs or other maritime – related subject at the Master level (M.Sc. or MBA);
- employer sponsorship of transition from seafaring to onshore employment in professional positions in maritime administration, industry, MET institutions and various maritime services (classification societies, P&I clubs, Seamen Unions, etc.).

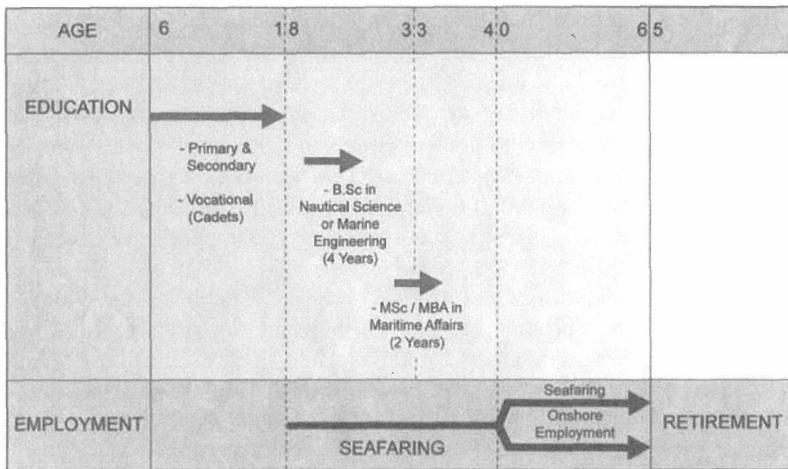


Fig. 3. The maritime professional: education and career progression (Laubstein pers. comm. 2007)

This all amounts to a move towards increased professionalization of the maritime transportation sector based on university-level education standards and qualifications in line with standards and developments in other major industrial sectors. This would raise the status and career prospects of maritime professionals working both at sea and ashore, enhancing the employability and mobility both within and outside the maritime sector.

The transition from seafaring to onshore employment requires obviously forward planning by employers to integrate officers with postgraduate qualifications into appropriate senior management or technical position in their organizations. Ideally, there should be some kind of contractual arrangement between officers and their employers which covers both the postgraduate studies and the move into onshore professional positions. Most probably this would include certain binding commitments by both the employer and the employee.

5 Conclusion

Fewer and fewer young Europeans seem to be attracted to a career in the maritime sector and in seafaring.

Quite obviously, nowadays seafaring is not an attractive choice of a professional career compared to the opportunities open to ambitious young people in other fields. One of the reasons could be the long time period before the young man can reach the senior posts i.e. a master or chief engineer. The solution in this case could be a fastrack scheme in Europe (Lane 2003) to promote appropriate candidates to senior positions in their mid twenties. Experts in European countries should advise what is necessary in their view as far as an additional training between 20-25 years is concerned. The training should take the form of short courses and distance learning, such as a demonstration project having a European Community subsidy already under way. Some may think that a lack of experience may well be the major stumbling block for any plans to fastrack individuals, no matter how talented, into senior roles. Of a different opinion is Professor Lane who points out that in the Second World War 40% of German submarine commanders appointed between 1937-45 were aged between 20-25, and 70% were appointed under the age of 30. And this was not purely a wartime phenomenon. There were plenty of very young people as senior officers among American merchant ships as well.

I served myself with a twenty-five year-old captain on the Singaporean Neptune Orient Line Shipping Company's "Neptune Sapphire". In this company, promoting young Singaporeans to top ranks was a general rule. There is a belief between people that to be in a senior position such as a chief engineer or captain one has to be old and wise, but you can also be old and foolish. I believe that in creating a young man's perspective that at 25 and a holder of a M.Sc. degree he can command a ship worth of billion dollars should be very exciting and stimulating as it would be very difficult for him to reach such a highly responsible position onshore. He may further speculate that after 5 years of sea service he will be still 30 and would not have any problems getting an onshore job in other branch of the maritime industry, starting as well a decent family life.

Thus we have to explore ways and means to make the "maritime career" a more attractive choice for young Europeans and other nations. A 25 year-old captain or chief engineer are a good and tempting example.

The proposition put forward here is simply to try an approach, which both raises the MET educational standards of maritime employment and integrates seafaring and onshore employment.

Acknowledgements

The assistance and suggestions of Dr Karl Laubstein the President of World Maritime University (WMU) during personal contacts in preparing this paper is greatly appreciated.

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