

THE MET INSTITUTIONS IN THE FOREFRONT TO REALIZE THE IMO MOTTO „GO TO SEA CAMPAIGN”

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Abstract. The paper concerns issues, which are crucial with far going unforeseeable consequences namely the quite rapidly declining number of officers engaged in and attracted to a maritime career, particularly in seafaring. The occurring shortages of qualified maritime professionals, especially in seafaring as well as in onshore maritime activities are according to the IMO secretary an increasingly serious impediment to maritime development in the world connected at the same time with fast growing world fleet. Further the EU Green Paper entitled “Developing Europe’s Maritime Skills and Expanding Sustainable Maritime Employment” is considered. The basic task of the paper is focused on the issue how the Universities and other to conduct the recruitment of young people to be successful in attracting the youth for a shipping career. Finally a professional career progression in maritime transportation is proposed.

1. INTRODUCTION

Today we have a perfect case of the market beginning to act and a realisation that supply has been overtaken by demand this statement concerns the availability of crews for the continuously rising number of ships. Good experienced, responsible and prudent seafarers are becoming like hen’s teeth.

The global shortage of seafarers, especially officers has already reached significant proportions and is now a source of genuine concern to all involved in the maritime industry.

The demand for raw materials, finished products, energy and luxuries is growing year-on-year, in line with the requirements of global trade and it is not expected that the current financial crisis to have a very serious impact on the volume of at least, the basic commodities transported by sea.

The demand has been, from time immemorial, satisfied by the international shipping industry, which today transports 95 per cent or so of the world’s commerce safely, efficiently and at a fraction effecting the environmental impact and cost of any other form of bulk transportation.

Without ships or better stated without the seafarers to man them – one half of world would freeze for lack of the fuel to heat it and the other half would starve for lack of the grain that gives it its daily bread. A complete indication of just how serious the manpower shortage is becoming is given by BIMCO (The Baltic and International Maritime Council), by Drewry Shipping Consultants or the Seafarers’ International Research Centre (SIRC) in Cardiff as well as other institutions SIRC assesses 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. Drewry Shipping Consultants assessed the current shortfall of officers in the global fleet to be some 34,000, against a requirement of 498,000. Moreover, assuming officer supply continues to increase at current levels, the report predicts that by 2012 the officer shortfall will have risen to 83,900.

BIMCO/ISF Manpower Update in 2005 had assessed the officer shortage to be 10,000 with the shortfall rising to 27,000 by the year 2015. Anyway the general message is clear: we are fast approaching a crisis situation.

Over the last few years, shipping has enjoyed a period of considerable expansion – so much so that at the beginning of 2007, the world fleet reached 1.04 billion deadweight tons.

Thus there are still serious concerns over the supply of manpower for the huge number of newbuildings scheduled to come on stream – in this and the subsequent years. One estimate has assessed that about

400,000 seafarers and 45,000 new officers would be needed to crew the 10,000 vessel forecast to join the global merchant fleet in the next three years.

Such growth has exacerbated the scarcity of human resources, both in terms of seafarers and among those who provide the shore based technical support on which the shipping industry relies (marine superintendents, harbour masters, maritime pilots VTS and SAR personnel and other. And as these people are almost entirely drawn from the seagoing, the campaign “Go to Sea” should be focusing on the need to attract seafarers into the professions – and retain them as long as possible thereafter. The issue has both quantitative and qualitative aspects. Purely in terms of numbers, while the point has not yet been reached when ships are unable to sail and cargoes remain on the quayside, it will become an increasingly real prospect as the shortage increases – unless we act with due haste, methodically systematically and consistently. (Efthimios E. Mitropoulos [2]).

Some of the shipowners are complacent 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 leaving 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. 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.

Currently, the shortfall of officers seems to be absorbed by the existing workforce – but not without recourse to some excessive measures. According to reports, officers are working longer hours and occasionally, not taking their holiday entitlements.

Some are awarded exemptions to enable them to serve in positions for which they may not be fully qualified. Training periods are being shortened, hastening the early promotion of younger seafarers, who may lack the necessary experience to shoulder the responsibilities of higher ranks. Ships may receive short term permits to sail with fewer than required minimum crew complement.

Meanwhile, the demand/supply imbalance is forcing salaries up, which has the effect of enticing older officers out of retirement, thus raising the age profile of the workforce and giving rise to some undesirable developments.

The small or larger 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 the officers gap. Some over 12,500 cases of forgery in certificates were revealed by a study in 2000 (IMO [5]).

The realistic “bench mark” scenario (see Fig. 1) considers the observed historical growth rate of the number of ships in the world fleet in 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 wise and prudent action is taken.

To overcome the predicted manpower shortages (Bucknall and Freire [1]) 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 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 to solve the problems, they are where the problems are, they meet the customers, they must be on the ship.

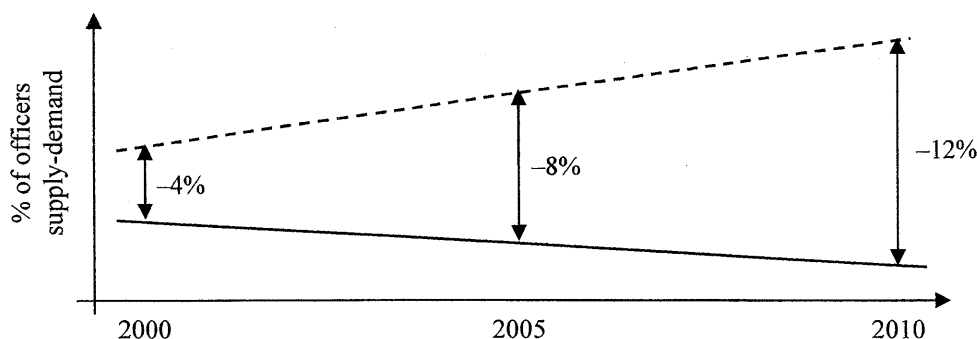


Fig. 1. Predicated supply-demand gap for officers (ISF/BIMCO [6])

2. FUTURE MARITIME POLICY OF THE EUROPEAN UNION

In the issued by EU 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 we have an insufficient and declining number of young European and not only, men and women 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 European and other worldwide?

The EU Green Paper whose basic purpose is to raise the 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 other nations.

There is an urgent need of revamping the existing still in some universities and colleges methods of lectures and exercises. The students should be activated more 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 to the students of knowledge and practical skills, thanks to this they hold an advantage compared with students from other universities. It seems that some of the MET maritime academies live in a kind of isolation from world shipping developments and trends.

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, German Lloyds, BIMCO, Alert Bulletin and other. This case studies collected by various organisations mentioned are an invaluable source of ships operational experience and problems, second to none with any textbooks, completed by proper usage of available today's latest generation simulators potential, we shall have a mature and well prepared ship's duty officer. Therefore conducting of traditional lectures should be given up except may be during first year where some theoretical aspects of various subjects should be highlighted. The lectures in next study years should have a seminar and workshop character, thanks to it; 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 exists a partnership between the lecturer and student. The lecturers perform roles of advisors and not of the arbiters. They are the guides encouraging to independent thinking by creating a creative atmosphere. Thanks to its students are not afraid to ask, seek out demand; they can also consult each lecturer specializing in a specific problem and not only the person conducting classes.

3. HOW TO SOLVE THE RECRUITMENT PROBLEM – BASIC CONSIDERATIONS

The image of shipping industry is not good in the eyes of the general public, who rarely hear of any good news stories. Instead, they are informed of ships in difficulties in stormy weather, of freak waves, of groundings and of the subsequent pollution and its effect on the environment.

They may be told about acts of piracy that are taking place in various parts of the world, and occasionally, they may hear of a shipmaster being thrown into jail for some alleged misdemeanor on the high seas.

Those who are conversant with the various maritime 'blogs' on the internet will have read messages berating the state of shipping, and specifically life at sea today. There will be comments about overregulation, too much paperwork and the increasing number of inspections about reduced manning and the problems of fatigue; and some shipowners who do not care for the seafarers, and who do not reinvest their profits in the human element. None of these are positive images of the shipping industry, although some of the less complimentary comments are perhaps based on perceptions rather than fact. Yes there are unscrupulous employers, there are ships that should not be at sea and there are seafarers who are badly treated. As stakeholders in this industry, we should all work towards promoting the positive side of shipping – it is not all 'doom and gloom'. We need to fulfill the expectations and aspirations of the new generation of seafarers, such that they will have the motivation to do the job well and a commitment to a full career in the shipping both afloat and ashore.

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 should not do without – suddenly recognising that seafarers were actually human beings. 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, colleges should seek close relation with ships especially in large companies, for which they 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 few month before they complete the high school, it usually will be to 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 thinking about their future.

On a general note a professional mariner wonder how can an industry that carries more than 90 % of world trade be, to all intents and purposes, invisible? How can people take completely for granted the vast and intricate maritime distribution system that feeds, fuels and services our modern world? Perhaps very easily, in that we are only interested in what shipping delivers, rather than how shipping works. And that is rather sad, in that people in that people in the shipping industry know that they are part of an amazing, essential and international industry. We at the universities and colleges wish that it was not so far from the consciousness of the man and woman in the street, who only ever think about ships, when the media tell them that one has sunk, spilt oil or was attacked and taken by the pirates.

A tool for the general public has been fortunately created by BIMCO (Grey [3]). BIMCO decided to use the facility of the World Wide Web to try and address this 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 was designed for ordinary members of the general public who might have a specific question to answer, or a wish to inform themselves better.

It would be hopefully useful for perhaps schools and colleges, for teachers and others seeking rather sparse teaching materials about the shipping industry. It would be pitched at the level of “an intelligent 15 year-old and upwards, with the emphasis in interest and accessibility (Grey [3]). It would assume no prior Knowledge, avoid the jargon and “shipping speak” of industry insiders and professionals.

To help to understand what a sea and sea life is programmers already in the public schools should cover it in quite range. This would essentially assist later the recruitment and as a matter of fact be already the beginning an early one of the real recruitment by the university.

Seascapes would confront issues, honestly and objectively. It would answer questions that general public might ask, even though the answers might be uncomfortable for some. But above all it would convey some of the excitement and fascination of ships and the sea, trade and marine technology. Seascapes would answer the question – **why?** which is the universal question we all ask when we are confronted by something we do not know! It’s quite obvious that in the recruitment campaign the universities, colleges and other training institutions should follow the devised by BIMCO Seascapes.

Another important argument in the recruitment campaign, which the educational institutions should bring forward, is the coming introduction of the International Labour Organisation Maritime Labour Convention 2006 (MLC 2006) which marks a significant development in international shipping. Described as a ‘bill of right’ for maritime labour and as the ‘fourth pillar of maritime legislation’ both terms reflecting that the MLC, 2006 is extensive both in its application and scope in addressing maritime labour related issues with the objective of improving the standard, safety and status of shipping.

The convention has been drafted to help ensure that all seafarers, regardless of their nationality and the flag of the ship, receive acceptable working and living conditions.

Lloyd’s Register believes that the MLC 2006 will have a direct and positive impact on both crew recruitment and retention, and most importantly maritime safety – a key issue for all those involved in shipping. The new convention sets minimum standards on issues such as conditions of employment, accommodation provisions, recreational facilities, food and catering, health and safety protection, medical

care, welfare and social security protection. Detailed requirements of the convention aim to tackle issues associated with the causes of fatigue, occupational accidents, recruitment, employment opportunities and working and living conditions for an estimated 1.2 million seafarers.

The new International Labour Organisation Maritime Labour Convention 2006 – the “seafarers’ bill of right” it has been called is now looming over the horizon, something that is very bit as important as was the ISM Code. It could just about be ratified by 2010 and come into effect a year later, or perhaps 2012, if we are unlucky. Which in the scheme of things, is not that long for about 70,000 ships and a million and a half people who work in them to put their ducks all in a line. One in the shipping business may think it’s only another one more paper. But he could however be very wrong in this estimation, as documents supporting the MLC, which must be carried aboard every ship, once it is in force, amount to a “trading certificate”, without which the ship is highly likely to be detained by port state control. It is also by no means “just” a paper exercise, and ships are likely to be physically inspected, and those aboard interviewed, to ensure that the reality of that ship matches up with Declaration of Maritime Labour Compliance and the Maritime Labour Certificate.

The MLC 2006 can be now a very powerful tool in the recruitment process. Through the involvement of educational institutions, the youth can be made aware of the importance of the industry and the vast career opportunities available in shipping. It is encouraging to note that the MLC 2006 content can sustain the seafaring profession, seafarers must be valued and treated with respect, and this should be distinctly passed during the recruitment process by the universities to the young people – maybe candidates for a shipping career. There is a need for a much longer term strategy to reach into the hearts and minds of the youngest generation – Generation M who are currently entering school. Greater interest should be shown for visiting schools to help educate and provide practical applications about international trade and business which, by extension, includes seafaring – thus exposing these young minds to a profession that prepares them for multiple jobs and careers in an interesting and dynamic industry.

More attention should also be focused on how to engage Generation Y [www.he-alert.org/documents/published/he00760.pdf] – those born between 1978 and 1994 – about opportunities seafaring can provide. It is well worth looking at www.shiptalk-jobs.com/survey_results, if manpower is a current concern. Shiptalk Recruitment simply invited people on their books, or who look at their website or take the Shiptalk newsletter to complete a questionnaire, so the group which answered might be considered self-selecting. There were 229 respondents, mostly mature and largely senior officers with long sea service and with UK, Russian, Indian, Swedish and Americans forming the largest percentage. More than one in four were over 51, half were over 40, a very large number married with children.

The most important part of this research might be considered the most negative in a table which listed in order of importance the worst aspects of a career at sea.

It is worth to reproduce this list: (Grey [4])

- 1) long time spent apart from family and friends – 67,6 %;
- 2) oo much paperwork – 34,1 %;
- 3) time spent away from children – 29,7 %;
- 4) fatigue – 22,3 %;
- 5) fear of being treated like a criminal – 19,7 %;
- 6) onboard living conditions – 18,3 %;
- 7) difficult to keep in contact with home – 17,5 %;
- 8) lack of shore leave – 15,5 %;
- 9) crews too small to share workload – 14,8 %;
- 10) few carrier opportunities – 10 %;
- 11) loneliness – 9,6 %;
- 12) concern about accidents at sea – 7,9 %;

- 13) lack of onboard recreational facilities – 7,9 %;
- 14) no privacy – 4,8 %;
- 15) piracy – 4,4 %;
- 16) bullying – 0,9 %;
- 17) lack of respect for me religion.

There was a huge amount of additional information. However I think we should focus upon this table above, because fundamentally it is these issues concerning sea life that will need to be addressed if we are to crack the manpower conundrum and attract and retain the people we need. One might quibble about the relatively small number of respondents (although it is a perfectly respectable number) and wonder perhaps, if more young people would have given very different answers, or offered different priorities, if they were half the age, unmarried and without responsibilities of their senior officers.

But the point about the items on this list is that it provides a target of things that can be done to address these negatives. We might look at the length of tours and leave ratios. Certainly priority might be given to ensuring that there is cheap and readily available communications, for we have younger generation obsessed with connectivity who just won't tolerate that of the past, when agent's boat was the sole equipment available. There is plenty that can be done about the living conditions and recreational facilities – just going back 30 years to the best ship of that era would teach us plenty. But it is clear that if we are to properly address the manpower shortage, which is now being faced by the whole industry, the charms – and more importantly the horrors – of a life at sea need as much attention as we give to the employment of our busy ships.

There is a great role to be played by the teachers and instructors in the universities and colleges as far as recruitment as well retention is concerned in this case The International Labour Organisation Maritime Labour Convention 2006 (MLC 2006) marking a significant development in international shipping can contribute immensely to the recruitment problem if the educational institutes during visiting secondary schools and during lectures in the universities can provide the basis for a fulfilling and satisfying life long career or that seafaring would provide them with the necessary experience and qualifications for a related job ashore. *Life At Sea surveys – www.shiptalkshop.com* have undertaken to discover exactly what serving seafarers think about their lives and jobs afloat while obtaining up-to-date perspectives on the issues of most concern. The surveys are still going on and the findings give an important route map for anyone especially for the universities looking to attract, retain or manage people at sea. It is also worthwhile to mention that the preliminary revised text of chapter of the International STCW Convention is introducing Electrical Officers what means a ship personnel qualified to perform all tasks related to the maintenance and efficient operation of ship's electrical machinery and power equipment such as the ship's distribution system, alarm and monitoring system, main propulsion generators, propulsion motors, ship's service generators and emergency generators.

Thus universities curricula should be well prepared and enhance the knowledge of electrical technology to be able to educate the soon in the future coming electrical officers' ranks.

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 like 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.

In this case the MLO 2006 convention is a very valuable input into the seaman’s life style at sea wiping the majority of the job dark aspects.

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. 2 (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.).

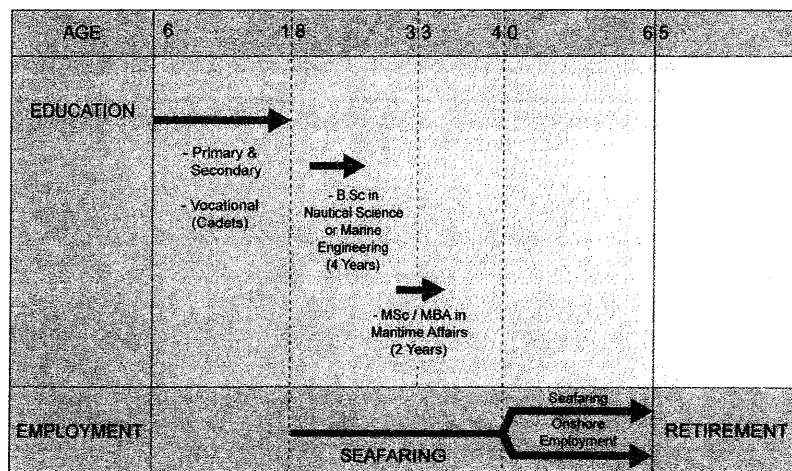


Fig. 2. The maritime professional: education and career progression (Laubstein pers. comm. 2007)

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 officer with postgraduate qualifications into appropriate senior management or technical position in their organizations. Ideally, there should be some kind of contractual arrangement between officer 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. CONCLUSIONS

Fewer and fewer young Europeans and not only, seem to be attracted to a career in the maritime sector and particularly not 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 field. 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 [7]) 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, a demonstration project having a European Community subsidy is 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 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 25 years 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 believe 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 creating a young men a perspective that already at 25 being at the same time 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 years or so 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.

There are many choices for young people. The answers to the problems of recruitment and retention of seafarers are clearer than we assume – the real challenge is how we package the job prospects and career opportunities to address the needs of Generations Y and M.

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