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**Study on the Supply & Demand of EU Officers/ Ratings and Manning
Levels (Phase One)**

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1 INTRODUCTION

1.1 Background

1.1.1 Supply and Demand

The European Commission addressed the issue of declining number of EU seafarers and, in particular the shortage of well-qualified officers, in its Communication to the Council of Ministers and the European Parliament, adopted in April 2001 (COM (2001) 188 final).

This text provided an update on the shortage of seafarers on the basis, in particular, of the 1998 FST and ECSA Joint Study¹. The general interest in the dramatic decline in EU seafarer numbers is also reflected in a number of other studies and research projects, such as the 1996 “Study on the maritime professions in the European Union”, the BIMCO/ISF 2000 Manpower Update², the OECD Study on the “Availability and Training of Seafarers” (2003) and the METHAR research project³.

Moreover, in its conclusions on improving the image of Community shipping and attracting young people to the seafaring profession, adopted on 5 June 2003, the Council invited the Commission to continue monitoring the evolution of the training and recruitment of seafarers on the basis of data provided by the Member States.⁴

Against this background, the Commission intends to have an accurate overview of the current seafaring population in the Community and bring the supply and demand figures for seafarers up to date.

1.1.2 Manning Levels

Manning levels are dictated by the size and operation of the ship, its machinery and trading area. The principle document for defining the number of seafarers required on board a ship is the Safe Manning Certificate which is issued by the flag state upon registration. While many ships use this certificate as the definitive number of crew required, others use it as a minimum guideline and allocate additional crewmembers as necessary.

¹ Joint Study of the Federation of Transport Workers’ Unions in the European Union (FST) and the European Community Shipowners’ Association (ECSA): “Improving the Employment Opportunities for EU Seafarers: An investigation to Identify Seafarers Training and Education Priorities (1998).

² BIMCO (Baltic and International Maritime Council) / ISF (International Shipping Federation) 2000 Manpower Update – The World-Wide Demand for and Supply of Seafarers –April 2000.

³ Research project funded by the European Commission under the Transport RTD Programme of the 4th framework programme).

⁴ IMO Resolution A.890 (21).

Safe manning is internationally governed by the SOLAS Convention and the IMO guidelines on the “Principles of safe manning”⁵. At Community level, Directive 1999/63/EC defines the applicable manning levels for ships registered in the territory of a Member State⁶. However, these texts do not impose specific manning levels for the different types of ships, while they simply lay down the obligation of the Parties to ensure that ships are sufficiently, safely and efficiently manned.

Besides, in defining manning levels, the competent administrations have to address certain specific concerns, such as respect of regulations on hours of work/rest and regulations on maritime security, the introduction of new technologies and the new tasks assigned to officers (administrative, managerial).

In this context, the Commission intends to identify the current practices in the Member States as regards manning levels.

1.2 Work to be Performed and Objectives

1.2.1 Supply and Demand Data Collection

1. Yearly intake and progression (hence drop-out) numbers in the approved national maritime training institutes and number of certificates of competency awarded in compliance with the STCW Convention to officers;
 - a. Intake and progression (drop out rates) from Colleges;
 - b. Certificates of Competency (CoC’s) issued, including endorsements, from Maritime Administration.
2. Yearly new intakes of officers to the ships flying the national flag (national ships; main register),
 - a. Selected major shipping companies in member states will be approached;
3. Number of nationals employed as officers on board national ships (in particular on the basis of the revalidation of certificates of officers) and number of non-nationals employed on these ships (per nationality);
 - a. Data from Maritime Administrations on revalidation;
 - b. Number of non-nationals, based on the endorsements issued by the flag.
4. Number of officers required to man the national ships;
 - a. An estimate to be provided based on the number of ships registered and manning certificates, allowing for leave etc.

⁵ IMO Resolution A.890 (21).

⁶ And which is ordinarily engaged in commercial maritime operations.

5. Number of former merchant navy officers employed by the shipping industry and other shore based maritime related activities⁷;
 - a. Define major sectors of the industry,
 - b. MIF, IFSMA, NI, IMarEST, NUMAST, EMPA, P&I clubs, etc to provide qualitative indicators.
6. Number of former merchant navy officers required for employment in the shipping industry and other shore based maritime related activities;
 - a. MIF, IFSMA, IMarEST, NUMAST, NI, EMPA, P&I clubs, etc to provide qualitative indicators.

(Items 5 and 6 above in close co-operation with the EC funded Career Map project – input from Prof M Barnett and Mr A Graveson)

1.2.2 Supply and Demand Data Analysis

1. The impact of declining seafarer numbers on the operation of fleets and skilled shore based maritime functions;
2. Balance (surplus/ deficit) of seafarers in member states;
3. Forecasts on the growth of the seafaring population;

1.2.3 Manning Level Data Collection and Analysis

1. The minimum manning levels according to national regulations and operating manning levels by ship type;
 - a. Consider a few ship types and sizes; Feeder Container ship, Product carrier, Ro-Ro Ferry,
 - b. Get sample ship data for these types,
 - c. Get manning levels from Maritime Administrations.
2. The forecast as regards alterations in manning levels;
 - a. Maritime Administrations to advise.
3. Identify the major factors that affect manning levels.

⁷ Maritime training and developments organisation, Ship owners/technical and ship management companies, ship owners'/seafarers' organisations, shipbuilders and equipment manufacturers, as well as other supporting shore based activities, such as: flag states, pilotage authorities, insurance, port companies, classification societies.

- a. Report based on previous publications, national and international instruments, and Class guidelines.

1.3 Methodology

The above data collection and analysis involves interviews with competent administrations, shipping companies and other shore based organisations, professional organisations etc.

The study will be carried out in two phases:

- Phase one, as a pilot study, data collection will be carried out for the listed country by the identified partner organization. Data will be compiled and analyzed by the World Maritime University (WMU).

a. Denmark	WMU
b. Sweden	WMU
c. France	French Maritime Administration
d. Greece	Southampton Institute, National Technical University of Athens
e. Cyprus	Seafarers International Research Centre (SIRC)
f. Latvia	Gdynia Maritime University (GMU)
g. Poland	GMU

- Based on the pilot study, the methodology will be revised as necessary, and An EU wide study will be carried out. Note that this report details only the findings of phase one.

2 EXECUTIVE SUMMARY

2.1 Main Findings

1. This report documents the findings of phase one of the EU Seafarer Supply and Demand Study. Phase one was conducted as a pilot study on a limited number of Member States to evaluate available data and methodologies and then make revisions as necessary in support of phase two which is planned as an EU wide study.
2. Accurate analysis of EU seafarer supply and demand is dependent upon the amount and accuracy of data provided by the Member States. In the conduct of phase one, one of the greatest challenges encountered was obtaining accurate and complete data. Some of the administrations appeared not to give the study a very high priority resulting in little or no provision of data. For administrations that did provide solid data, a large variance in the type of data extractable was clearly seen. As an example, data on certificates of competency issued during the past five years was requested. Some of the Member States could provide the data, others could provide only partial data, not provide data more recent than 2002 or not provide the data at all. It is noteworthy that this same problem was highlighted by three other major studies on seafarer supply and demand conducted during the past five years. BIMCO/ISF in 2000, OECD in 2003, and the UK in 2004 conducted these studies.
3. Relevant findings from studies conducted by BIMCO/ISF in 2000, OECD in 2003, and the UK in 2004 are detailed in [section 3](#). Highlights of these findings include:
 - OECD Officers are an ageing workforce with 40% over 50 years old. This has the present effect of offering a stable and mature workforce for the maritime industry. However, as these seafarers retire, there are not as many OECD officers to take their place. Many shipping companies argue that they will be replaced by other Officers from Eastern Europe, India and Asia, however current analysis indicates relatively few of these officers remain at sea after the age of 50.
 - The primary marine manpower suppliers have shifted, and continue to shift, from traditional countries in North America and Europe, and Japan, to Eastern Europe, India, and the Far East. One reason for this is that officers from these countries are typically paid 50% less wages. This trend may have significant impact in the EU because many of these Eastern European suppliers of less “expensive” seafarers are now (or may be in the future) part of the EU. This in turn may set a precedent for severe wage differences within the EU, or necessitate serious wage reform if An EU norm is desired.
 - Experienced seafarers are vital to the maritime community ashore and even required to fill certain jobs such as in fleet management.
 - Global Officer supply was estimated at a 4% deficit in 2000 and is expected to continue to fall to a 12% deficit by 2010. Rating supply exceeded demand by 27% in 2000 and is expected to continue to grow to 30% excess by 2010.

- Reduced manning levels due to more automation in newer ships and other factors have helped to keep demand for officers and rating fairly static in the past. Growing legislation affecting working hours and training may increase the demand slightly in the coming years.
 - Wastage in officer training could be improved to help provide more officers. In 2000 it was estimated that 30% of officer trainees fail to complete their training.
 - Improvement in recruiting would also aid in maintaining a stable officer supply. The UK estimated the number of UK officers would stabilize if they could intake an average of 1000 cadets per year vice the 604 noted at the time the study was done.
4. Data from maritime colleges was not collected for phase one, the primary focus being on data collection from Maritime Administrations.
 5. Data was collected from selected shipping companies in Denmark, Sweden and the UK via a questionnaire. Section [4.1.3](#) provides the data obtained from this questionnaire that was conducted as test of response quality and distribution methods.
 6. From the collective data we find that there are a total of 47,130 seafarers (EU and Non EU Seafarers) working on National Flag Ships from a total of 86,261 available EU Seafarers. From this figure it can be inferred that at least half of the available EU Seafarers are not employed on EU Flag Ships.
 7. Issuance of Certificates of Competency for Masters, Chief Officers, Chief Engineers and 2nd Engineers have remained fairly stable during the past five years except for a noticeable increase in CoC issues from 2000 to 2001. The most probable explanation for this spike was the implementation of new CoC requirements under STCW 95. This resulted in the need to issue new CoCs and endorsements that met these requirements not later than February 1, 2002.
 8. 2nd Officers and 3rd Engineers appear to have a distinct (although slight) negative slope since 2000. In general, these are the entry-level ranks in most European countries and new certificates for these ranks are issued almost exclusively to those graduating from Maritime Training Institutes. The slight downward trend then, may correspond closely to dropping graduation levels from EU Maritime Training Institutes. This will be explored further in phase two.
 9. Senior Officer certificates far exceed those of junior officers. Taking 2004 as an example, 2224 new Masters CoCs were issued while only 1469 entry level Navigation CoCs (2/O + 3/O) were issued. This suggests an inverted rank pyramid that also indicates the overall supply of EU Officers (at least from the phase one Member States) will decrease as older officers retire.
 10. Only Denmark and Sweden were able to report on the yearly intake of officers on national ships. Their total came to 1499.
 11. Data from various shipowners/operators indicated that for approximately 2060 EU Officers employed, and average of 81 or 4% retire or take up employment ashore each year and 119 or 6% new officers are hired.

12. Comparing the number of An EU Member State's national officers working on their national ships, to the number of non-nationals (including EU and non-EU officers) was done by comparing the number of revalidation CoCs issued (to nationals) to the number of endorsements issued (to non-nationals). Of the combined totals, Denmark issued 82% revalidations and Sweden 68%.
13. Examining manning level data, it is interesting to note that for Product Tankers and Feeder Container Ships, the three countries providing data (Sweden, Denmark and Cyprus) were similar (but not exactly the same). The biggest difference was observed in the Ro-Ro Passenger Vessel in which Cyprus required 22 personnel to Denmark's 14 and Sweden's 13.
14. None of the Member States that replied indicated any intention to alter their current manning levels although they said reviews may be required in light of developing legislation in the areas of security and work hours.
15. Common factors identified among Maritime Administrations in the issuance of minimum manning certificates included: Vessel size (<500 GRT, other ships), Vessel Type (tanker, passenger, cargo), Vessel Power Plant (Steam, Diesel), Level of Automation (Attended/Unattended Engine room), Number of Passengers (if applicable), Voyage Area & Duration (International, Restricted, Middle) and Crew fatigue levels at sea in accordance with STCW 95, Section A-VIII/I.
16. Countries noted that they typically receive an application for a manning certificate from a company that includes the company's recommendation. They then review the request in accordance with their guidelines and appropriate legislation for approval.

2.2 Phase Two Implementation

1. It is strongly recommended that for phase two DG TREN mention the study to each of the Member States and request they provide MTCP with a specific point of contact to assist in the data collection. Outside of this study, it is also recommended that DG TREN continue with initiatives to establish a central EU seafarer database that was also suggested by METNET.
2. A short Maritime Training Institute questionnaire is being developed for use in phase two. The IMO Compendium of Maritime Training Institutions (CMTI) can be used as a resource to insure all applicable Maritime Training Institutions within the EU are contacted.
3. The phase one study showed that accurate and relevant statistical and commentary information could be obtained from Ship Owners and Operators via the developed questionnaire. The primary problem encountered was how to best define the survey population and obtain a representative sample set. Questionnaire distribution methods and follow-up also present significant challenges in obtaining responses that can be interpreted with a sufficient level of confidence. Collection of this data itself should actually be the subject of a separate study. Suggestions for obtaining a representative sample would include an exhaustive search of all EU companies meeting defined criteria and then selection of a random sample group from the whole. Alternatively, a more arbitrary sample set could be developed with input from various EU Shipowners Associations.

4. In phase two, the yearly intake of officers should be expanded to cover the same 5 year period as the CoC data to see if a trend is seen.
5. Insufficient data was collected during phase one regarding number of officers required to man national ships. During phase two, a specific data request should be added to the Maritime Administration questionnaire. This may be supplemented by an independent ship registry search.
6. Further detailed analysis of seafarer numbers and their impact on the industry, current balance of seafarers in member states and forecasts on the growth of the seafaring population will be addressed in phase two when a more complete data picture is presented. However, given the identified challenges in collecting uniform data from the Member States, it is not expected that this analysis will be in anyway conclusive.
7. For the phase two manning level study, the sample ship types will be specifically defined and copies of actual ship's manning certificates will again be requested.

2.3 Expert Group Review and Conclusions

The MTCP Expert Group on Human Resource and Maritime Education and Training met to review this study on 7 March 2005. During that meeting, it was generally agreed that given the study's limited time and available resources, the scope of the complete study (including Phase Two) is too large to provide the desired insight into the key issues. The group suggested that in lieu of a Phase TWO study, the study instead be broken up into studies that might provide more detailed and accurate information. These studies would include 1) a look into how EU Maritime Administrations maintain seafarer data and what data each can provide. 2) A detailed survey of Ship Operator/Owners taken from an actual representative sample set of a determined population to yield answers that could be interpreted with a high level of confidence. 3) Conducting the Manning Level Study separately.

3 SUPPORTING STUDIES

Three major studies pertaining to seafarer supply and demand have been published in the last 5 years. It is important to review the key findings of these studies in concert with a focused EU seafarer study to gain insight and identify common trends.

The first and oldest of these studies is the BIMCO/ISF 2000 Manpower Update⁸. This is an update to the complete study conducted in 1995. A 2005 update study is due for publication in June 2005 and will add additional relevant material for DG TREN consideration on the topic. Applicable findings from the 2005 study will be summarized in our phase two report. The BIMCO/ISF study is generally considered as the premier study on global seafarer supply and demand.

A second study to be considered is the 2003 OECD Study on Availability and Training Of Seafarers.⁹ This study focuses on OECD countries and in particular addresses the effect that a shortage of OECD Officers would have on the operation of national fleets and associated shore based positions.

The final study is an analysis of UK Seafarers published in 2004¹⁰. While this study is concerned only with the UK, its findings support those of the other two studies. Additionally, the study has a unique perspective on shore related maritime jobs given the UK's prominence in this area.

3.1 Seafarer Numbers Impact on Operations

Availability and accuracy of data on the number of seafarers is crucial to enable an accurate impact assessment. The 2000 BIMCO/ISF manpower study stated, "The previous reports in 1990 and 1995 emphasised the need for improved national data on the supply of seafarers, and numerous references in the current *Update* highlight the weakness of manpower data in many countries."¹¹ OECD made a similar comment noting, "The biggest obstacle to international/OECD analysis of seafarer numbers is the paucity of reliable national statistics."¹² Not surprisingly, this lack of data has been encountered as a problem during the conduct of the EU Seafarer study as will be discussed in more detail later in the report.

⁸ BIMCO/ISF (2000). *BIMCO/ISF 2000 Manpower Update: The Worldwide Demand for and Supply of Seafarers Summary Report*. University of Warwick, UK; Author

⁹ OECD Directorate For Science, Technology and Industry (January 2003) *Availability and Training of Seafarers*. Available at www.oecd.org

¹⁰ Dowden, J., Glen, D. and McConville, J. (2004). *United Kingdom Seafarers Analysis 2003*. London: The Centre for International Transport Management, London Metropolitan University.

¹¹ BIMCO/ISF (2000) pg. 4

¹² OECD (2003), pg. 7

The current age distribution of OECD officers is highlighted in all three studies. The OECD study points out that OECD officers are an “ageing workforce”.¹³ In reference to OECD officers, BIMCO/ISF found that “over 40 per cent of these officers are over 50 years old and 18 per cent are aged over 55.”¹⁴ They go on to suggest, “Most of these officers are in senior positions as Masters or Chief Engineers. The impact on the industry of their retirement, without adequate numbers of well trained and experienced replacements, could be severe.”¹⁵ The UK study points out, “The results serve to confirm an ageing workforce that in the immediate term brings stability to the industry.”¹⁶ But conclude, “If current trends are allowed to persist, the long term cost will be a dwindling resource of highly skilled seafarers.”¹⁷ It has been assumed by the shipping industry, that officers from India and the Far East will replace these senior officers. However, the BIMCO/ISF update “suggests that, unlike OECD countries, relatively few officers from the Far East or the Indian sub-continent choose to remain at sea after the age of 50” which would challenge this assumption.¹⁸

As of 2000, OECD countries currently made up 27.5% of the marine global workforce compared to 31.5% noted in 1995. The marine manpower centre of gravity has continued to move away from the traditional maritime countries in Europe, Japan and North America, toward Eastern Europe, India and the Far East.¹⁹ The OECD points out that OECD seafarer wages cost more when compared to other these other seafarer suppliers. As an example, a typical monthly wage for a Master from Croatia or India is \$4200 to \$6300 per month. This can be compared to a wage for a Master from Denmark, France or Germany that can be from \$8500 to \$11000 per month.²⁰ Interestingly, many Eastern European nations are included among the lower wage seafarer supplier nations. As these countries join the EU, it will greatly impact what is considered the average EU seafarer wage. It may also impact wage structures on EU National Flag ships.

Seafarers are vital to the maritime community ashore. Within OECD countries almost half of the fleet management staff are former seafarers.²¹ These companies go on to say that “successful shore based management requires ex seafaring personnel”.²² The UK estimates that 9% of their active officer stock is shore based.²³

¹³ OECD (2003), pg. 7

¹⁴ BIMCO/ISF (2000) pg. 4

¹⁵ Ibid

¹⁶ Dowden, J., Glen, D. and McConville, J. (2004), pg. 8

¹⁷ Ibid

¹⁸ BIMCO/ISF(2000) pg. 4

¹⁹ Ibid pg. 3

²⁰ OECD (2003) pg. 7

²¹ Ibid pg. 7

3.2 Seafarer Surplus and Deficit

The BIMCO/ISF report is the only one that estimates both a seafarer surplus and deficit. According to the 2000 figures the worldwide supply and demand was:

Figures in 000's

	Supply	Demand	Balance
Officers	404	420	-16
Ratings	823	599	+224

Source: BIMCO/ISF 2000 Manpower Update

The report made the following prediction for the global balance through 2010

	2000 000s	%	2010 000s	%
Officers	-16	-4	-46	-12
Ratings	+224	+27	+255	+30

Source: BIMCO/ISF 2000 Manpower Update

In the UK, officer numbers were estimated at 17,126 in 2003 with a projected drop of 12% to 15,031 by 2008²⁴ supporting the BIMCO/ISF officer decline prediction.

²² OECD (2003) pg. 7

²³ Dowden, J., Glen, D. and McConville, J. (2004), pg. 8

²⁴ Ibid pg. 70

3.3 Seafarer Population Forecast

Over the past 15 years, demand for both officers and ratings have remained fairly static. Reasons for this include reduced manning on newer, automated ships balancing out an increase in the overall number of ships. However, at least a modest growth in the need for seafarers is likely in the future given the fact that further reductions in manning are not likely. This combined with a growing world fleet and legislation affecting working hours and training may increase the demand for seafarers.²⁵ The OECD study supports this conclusion citing, “There is no evidence to suggest a declining demand for, primarily, OECD senior Officers, although requirements for junior Officers and ratings are predicted to fall.”²⁶

One key area cited in all three studies in meeting demand is wastage in maritime training. The 2000 update estimates that 30% of officer trainees fail to complete their training.²⁷ The UK data suggests that wastage may be as high as 40% given an annual wastage of 13-15% for the 3-4 year training cycle. However, they suspect that this figure is lower assuming that failure and drop out rates are higher the first year of training.²⁸ In any case, a reduction in the wastage rate would ease the overall growing officer deficit.

Another area mentioned unanimously is that of improving recruiting. Officers polled during the OECD study cited the main drawbacks of a seagoing career as “poor image, little job security, limited social life and lack of recognition from shore management.”²⁹ In the UK, it was estimated that given the combined training and officer wastage rates, the number of officers could stabilise if the cadet intake averages 1,000 per year (rates at the time of the study were 604).³⁰

²⁵ BIMCO/ISF (2000) pg. 3

²⁶ OECD (2003) pg.9

²⁷ BIMCO/ISF (2000) pg. 3

²⁸ Dowden, J., Glen, D. and McConville, J. (2004), pg. 70

²⁹ OECD (2003) pg.7

³⁰ Dowden, J., Glen, D. and McConville, J. (2004), pg. 7,41

4 MEMBER STATE DATA

4.1 Data Collection Scheme and Encountered Challenges

4.1.1 Member State Maritime Administrations

The primary target for collecting data during phase one of this study was Member State Maritime Administrations. [APPENDIX A](#) contains a questionnaire that was forwarded to the selected Member State Maritime Administrations from October to November 2004, with the anticipation of receiving the requested data, if available, prior to 20 December 2004. [APPENDIX A](#) also contains a summary of the data actually collected from the selected administrations. Collecting the data proved a challenge in the following areas:

1. Many of the Administrations appeared to give the provision of the requested data a very low priority resulting in some delayed data (not submitted until the end of January 2005) and some non-submission of data. Sweden was the first to deliver their data, doing so on 17 November. However, it should be noted that the World Maritime University, located in Sweden, who requested the data, has a close relationship with the Swedish Maritime Administration. This undoubtedly played a part in the high level of attention the request was given and short response time.
2. There was a tremendous amount of variance in the type of data that could be obtained. As an example, Sweden and Denmark provided data that was most closely in line with what was asked for. Even so, neither of these data sets was complete. Statistical data was requested on numbers of seafarer certificates issued yearly from 1999-2004. At the time of this draft, only Sweden, Denmark and Poland were able to produce this breakdown. Greece was only able to produce data through 2002.

It is unclear whether missing data is actually not accessible from a particular administration, or whether the retrieval of the data was simply not a priority. As noted earlier, an inability to accurately obtain administration data was a problem noted in both the BIMCO and OECD studies. In light of this, it is strongly recommended that for phase two DG TREN briefly mention the study to each of the Member States and request they provide MTCP with a specific point of contact to assist in the data collection. Outside of this study, it is also recommended that DG TREN continue with initiatives to establish a central EU seafarer database.

4.1.2 Maritime Colleges

Data was not collected from Maritime Colleges during phase one. A short questionnaire is being developed for use in phase two. The IMO Compendium of Maritime Training Institutions (CMTI)³¹ will be used as a resource to insure all applicable Maritime Training Institutions within the EU are contacted.

³¹ CMTI is available on the IMO Website at www.imo.org under the Technical Cooperation TAB

4.1.3 Shipping Companies

[APPENDIX B](#) includes a questionnaire that was sent to various ship operators in Sweden, Denmark and the UK as a test of responsiveness and quality of replies. The questionnaire was designed to be brief and gather relevant statistics but also afford an opportunity to provide comments.

One concern in requesting data via this format is that the questionnaire will be handed down to the lowest level and the information collected, and especially any comments, may not truly reflect the particular company. In this case, it was nice to see that a majority of the 20 completed questionnaires received were done (or at least critically reviewed) by a senior staff member. These included the President of the company for smaller companies and the General Manager for Marine Personnel or similar for the largest companies. The quality and detail of many of the comments supplied indicate those responding took the questionnaire very seriously. Specific details will be discussed later.

The best distribution of the questionnaire was also an issue. It was determined that email would afford the quickest response and also give the various ship operators the most options in routing and completing the questionnaires internally as well as returning them to the study coordinator. Determining a representative distribution list posed a few more challenges. Two basic methods for selecting ship operators were employed. In the case of Sweden, The Swedish Ship Owners Association was contacted and they referred the project to the Swedish TransportGruppen³² that deals more specifically with manning issues. They in turn forwarded the questionnaire to all 108 of their shipping members on behalf of the study. This resulted in 12 replies, or 11%. The primary shortfall of this endeavour was that since the TransportGruppen considered their list confidential, it was not possible to do direct follow-up with non-responders (e.g. send a reminder email or phone or visit the company directly to solicit input). The second method involved generating an email list of companies from the Lloyd's Fairplay World Shipping Encyclopaedia. In the case of the UK, this resulted in 147 valid email addresses (those not reporting a failure to deliver) out of which 7 replies or 5% responses were received. In the case of Denmark, 2 replies were received from 34 sent emails 6% responses. This method was performed to see what kind of responses might be generated and no follow up was done given the time constraint of the end of the phase one study. Combining all the methods together resulted in a total of just over 7% return of the questionnaire.³³

The phase one study showed that accurate and relevant statistical and commentary information could be obtained from Ship Owners and Operators via the developed questionnaire. The primary problem encountered was how to best define the survey population and obtain a representative sample set. Questionnaire distribution methods and follow-up also present significant challenges in obtaining responses that can be interpreted with a sufficient level of confidence. Collection of this data itself should actually be the subject of a separate study. Suggestions for obtaining a representative sample would include an exhaustive search of all EU companies meeting defined criteria and then selection of a random sample group from the whole. Alternatively, a more arbitrary sample set could be developed with input from various EU Shipowners Associations

³² See www.transportgruppen.se

³³ The OECD study on availability of seafarers achieved an 18% industry questionnaire response rate. OECD Directorate For Science, Technology and Industry (2003) *Availability and Training of Seafarers*, pg.10

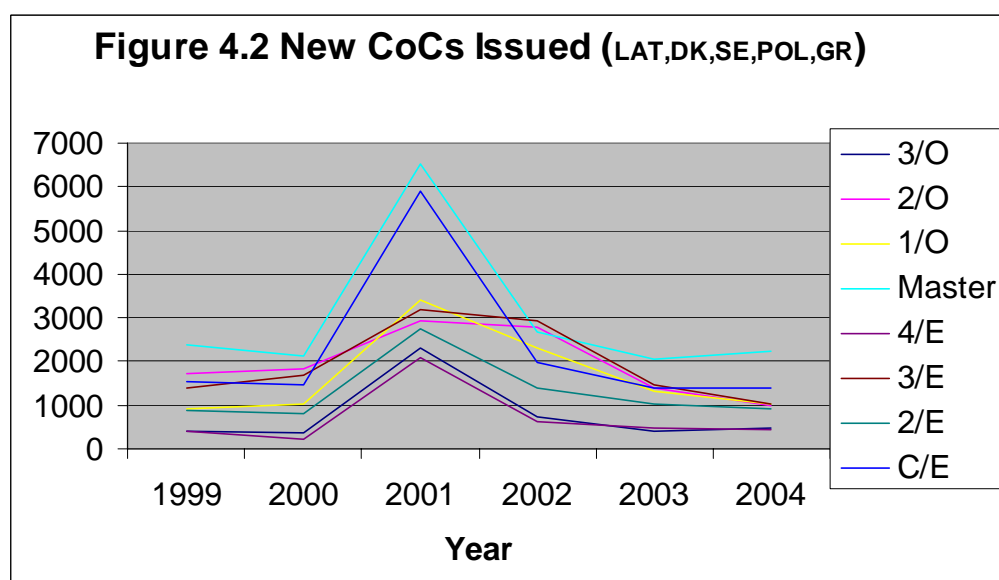
4.2 Supply

4.2.1 Certificates of Competency Issued

[Appendix A, section 2](#) is a summary of data that was collected from the phase one Member States. For Certificates of Competency, the summary shows an average for each Member State covering the 5 years of requested data, showing at a glance what type of data each State was able to provide. Note that only 5 States were able to provide a breakdown of information for the past five years. Of these, only Sweden was actually able to discern between new CoCs and renewals. In addition, Denmark was the only State to be able to break out the number of endorsements³⁴ to CoCs by rank. Sweden was able to provide the total number of endorsements issued for each of the 5 years.

Examining the collective data further we find that there are a total of 47,130 seafarers (EU and Non EU Seafarers) working on National Flag Ships from a total of 86, 261 available EU Seafarers.³⁵ From this figure it can be inferred that at least half of the available EU Seafarers are not employed on EU Flag Ships.

Figure 4.2 shows the combined total of new CoC's issued over the last 5 years. There is a noticeable increase in CoC issues from 2000 to 2001 in all ranks. The most probable explanation for this was the implementation of new CoC requirements under STCW 95³⁶. This resulted in the need to issue new CoCs and endorsements that met these requirements not later than February 1, 2002.



³⁴ An endorsement is the official vehicle whereby a Flag State recognizes a CoC for service on one of its ships, that was issued by another Government-(STCW 1995 Section A-I/2)

³⁵ Sweden did not have a record of available Swedish seafarers, only CoCs issued so this number will actually be a bit higher.

³⁶ STCW 1995, Regulation I/15

Aside from the spikes just noted, all ranks except the 2nd Officer (2/O) and 3rd Engineer (3/E), show a relatively steady issue rate. The 3rd Officer (3/O) and 4th Engineer (4/E) ranks have the lowest issue rate. This is because from the Member States providing data, only Poland still issues these certificates. All other States issue the 2nd Officer and 3rd Engineer as the entry-level officer rank that is now provided for under STCW 1995.

It was very interesting to note that the 2/O and 3/E appear to have a distinct (although slight) negative slope since 2000. There are several factors that may help to explain this. As mentioned previously, the 2/O and 3/E are the entry-level ranks in most European countries. Presently, new certificates for these ranks are issued almost exclusively to those graduating from Maritime Training Institutes. This would help to explain why the “spike” noted in the other ranks was not nearly as pronounced here. Many of those that held this rank prior to 2002, worked to upgrade their CoC to at least the next level before new advancement requirements under STCW 1995 took full effect after February of 2002. Those graduating from the institutions from at least 2000 onward were generally certified under the STCW 1995 criteria so they did not need to be re-issued in 2001/2002. The slight downward trend then, may correspond closely to dropping graduation levels from EU Maritime Training Institutes. This will be further explored during the phase 2 study when the Maritime Training Institute Data is collected. Another factor that may help to explain the slight increase in 2000 for these two ranks is that prior to the STCW 1995 implementation in 2002, it was possible for a rating to become an officer through accumulation of sea time combined with some external training and examination. This process, while theoretically still possible under STCW 1995, has become much more difficult and expensive due to increased training requirements. The slight increase noted in 2000, may have been a due to a push by some seafarers to get their CoC while they still could under the old system.

A final observation concerning this data is to note that senior officer certificates³⁷ far exceed those of junior officers³⁸. Taking 2004 as an example, 2224 new Masters CoCs were issued while only 1469 entry level Navigation CoCs (2/O + 3/O) were issued. This suggests an inverted rank pyramid that also indicates the overall supply of EU Officers (at least from the phase one Member States) will decrease as older officers retire. A similar situation exists in the engineering ranks as can also be seen in Figure 4.2. This tends to support the conclusion of the 2003 UK Seafarer Analysis, regarding UK Seafarers, that the “industry has a well qualified but seriously ageing work force”³⁹.

4.2.2 Yearly Intake of Officers

As far as Maritime Administrations go, only Denmark and Sweden were able to report on the Yearly intake of officers on national ships. Their total came to 1499. In phase two, this will hopefully be expanded to cover the same 5 year period as the CoC data to detect any trends.

³⁷ Masters, 1st Officers, Chief Engineers and 2nd Engineers

³⁸ Entry level: 3rd and 4th Engineers and 3rd and 2nd Officers

³⁹ Dowden, J., Glen, D. and McConville, J. (2004). *United Kingdom Seafarers Analysis 2003*. London: The Centre for International Transport Management, London Metropolitan University, p.25.

Data was also collected from various shipowners/operators. For approximately 2060 EU Officers employed, an average of 81 or 4% retire or take up employment ashore each year and 119 or 6% new officers are hired. These statistics need to be viewed with the following considerations:

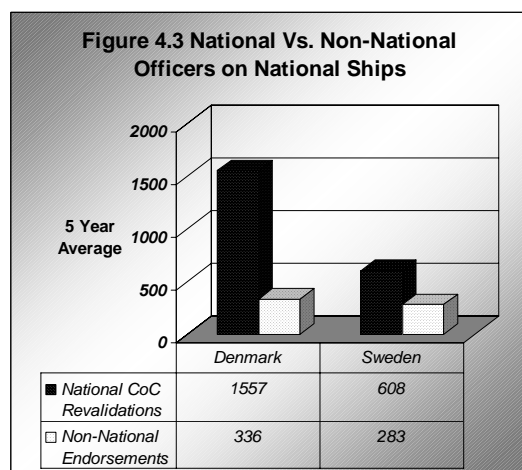
- Many operators indicated that their retirement rates vary greatly from year to year and were only able to provide a “best guess” average as opposed to one based on statistical data.
- Hiring rates were based on long-term need projections.
- The data provided was not necessarily representative of the EU community as a whole because the responses were from a limited region with a low response rate.

It is hoped that the phase two data will be more complete and representative.

4.3 Demand

4.3.1 Nationals vs. Non-nationals Employed on National Ships

One objective of the study is to compare the number of An EU Member State’s national officers working on their national ships, to the number of non-nationals (including EU and non-EU officers) by comparing the number of revalidation CoCs issued (to nationals) to the number of endorsements issued (to non-nationals). Sweden and Denmark provided information summarized in Figure 4.3.



Of the combined totals, Denmark issued 82% revalidations and Sweden 68%. During phase two, it is hoped that more countries will be able to provide this data to enable a more conclusive picture of the trend throughout the EU.

4.3.2 Number of Officers Required to Man National Ships

Insufficient data was collected during phase one of the study. During phase two, a specific data request will be added to the Maritime Administration Questionnaire. This may be supplemented by an independent ship registry search.

4.3.3 Former Officers Employed and Required Ashore in Maritime Related Activities

An EU Social Fund sponsored programme on Career Mapping for the Maritime Industries, led by Southampton Institute and NUMAST, is currently underway that includes statistical research in this area. The results should to be published in September 2005.

4.3.4 Further Data Analysis

Further detailed analysis of seafarer numbers and their impact on the industry, current balance of seafarers in member states and forecasts on the growth of the seafaring population will be addressed in phase two when a more complete data picture is presented. However, given the identified challenges in collecting uniform data from the Member States, it is not expected that this analysis will be in anyway conclusive.

5 MANNING LEVELS

5.1 Sample manning Levels

[APPENDIX C](#) is a minimum manning level summary for three selected ship types. Most of the administrations did provide general information on how they issue manning certificates. However, many were not specific enough to actually extract representative figures. Cyprus, Sweden and Denmark were able to provide actual sample data or sufficient information to create the data. Examining this data it is interesting to note that for Product Tankers and Feeder Container Ships, all three countries were similar (but not exactly the same). The biggest difference was observed in the Ro-Ro Passenger Vessel in which Cyprus required 22 personnel to Denmark's 14 and Sweden's 13. Errors could exist in these figures because they were derived at by each country based on some interpretation of the exact size and voyage of each ship. For phase two, the sample ship types will be specifically defined and copies of actual ship's manning certificates will again be requested.

5.2 Alterations in Manning Levels

None of the Member States that replied indicated any intention to alter their current manning levels. Some of the States indicated they were evaluating a potential impact on manning levels in the future depending on how the shipping industry is able to respond to the extra security duties and responsibilities now required with the introduction of the ISPS Code⁴⁰ early in 2004. While not directly mentioned by any of the Member States, another current issue that may ultimately affect manning level requirements involves crew mandatory rest periods⁴¹. Currently manning certificates are issued with an eye toward safe operations at sea. In most cases, this level does not take into account frequent and intensive port operations involved with cargo loading and discharge. This can be especially critical for short sea ships that may have port calls every day with short voyages between.

5.3 Manning Level Factors

In reviewing the various Maritime Administrations policies regarding the issuance of minimum manning certificates, the following were identified as common factors:

1. Vessel size (<500 GRT, other ships)
2. Vessel Type (tanker, passenger, cargo)
3. Vessel Power Plant (Steam, Diesel)
4. Level of Automation (Attended/Unattended Engine room)
5. Number of Passengers (if applicable)

⁴⁰ International Ship and Port Facility Security Code

⁴¹ STCW 95 Section A-VIII/1 specifies minimum requirements to prevent crew fatigue

6. Voyage Area & Duration (International, Restricted, Middle)
7. Crew fatigue levels at sea in accordance with STCW 95, Section A-VIII/I

It also interesting to note the different methods used for determining a Manning Certificate in each Member State. Cyprus and Denmark both provided copies of their legislation that include generic tables that take into account the type of ship, voyage and power plant, to provide a baseline from which to further work. Sweden provided a general interpretative guidance on their procedure that is essentially a case-by-case review of each application. All three countries noted that they typically receive an application for a manning certificate from a company that includes the company's recommendation. They then review the request in accordance with their guidelines and appropriate legislation for approval.

6 EXPERT GROUP REVIEW AND CONCLUSIONS

The MTCP Expert Group on Human Resource and Maritime Education and Training met to review this study on 7 March 2005. During that meeting, it was generally agreed that given the study's limited time and available resources, the scope of the complete study (including Phase Two) is too large to provide the desired insight into the key issues. It is expected that the results of phase two will be generally similar to those of phase one, even if some the suggested changes in methodology are implemented. One of the primary reasons for this is the current lack of uniform seafarer data maintained by the Member States. One of the subordinate tasks of this study is to identify what data is available from the Member States. It is suggested here that this idea is actually important enough to be the subject of an individual study. The study would not only see if requested data could be obtained in a timely manner, but also provide a much more detailed analysis of how data is maintained in each Member State. This information is crucial to enable the European Commission to identify and examine seafarer issues from a single European Union perspective.

Addressing issues of seafarer supply and demand through statistical data of number of certificates issued can provide an incomplete and possibly even misleading picture. Shipping company and MET Institution information is needed to balance this view. In reviewing the BIMCO/ISF, OECD and UK studies mentioned earlier, identifying the actual population of EU Shipping Companies and obtaining a statistically significant sample set in order to obtain information that could be interpreted with a given degree of confidence has not been done yet. This study could simply not be conducted with this level of detail if it were conducted as part of the current phase two study as outlined. As suggested above, this could be the focus of a separate study that might produce some very detailed information on seafarer supply and demand within Europe. This study could also include a separate survey to collect graduate and drop out rate data from all applicable EU Maritime Training Institutions.

With regard to time and resources, the manning level study is clearly a separate study that has very little to do with the answers sought in seafarer supply and demand. The Expert Group suggests that this study be separated completely from the Supply and Demand Study.

7 APPENDIX A: MARITIME ADMINISTRATION DATA

7.1 Maritime Administration Questionnaire

Information to be collected from Maritime Administrations:

Number of new certificates of competency issued each year:

	1999	2000	2001	2002	2003	2004
3 rd mate						
2 nd mate						
1 st mate						
Master						
4 th Eng						
3 rd Eng						
2 nd Eng						
Ch.Eng						

Number of revalidation - certificates of competency issued each year:

	1999	2000	2001	2002	2003	2004
3 rd mate						
2 nd mate						
1 st mate						
Master						
4 th Eng						
3 rd Eng						
2 nd Eng						
Ch.Eng						

Number of endorsement - certificates issued each year: (EU and non-EU)

	1999		2000		2001		2002		2003		2004	
	EU	N-EU	EU	N-EU	EU	N-EU	EU	N-EU	EU	N-EU	EU	N-EU
3 rd mate												
2 nd mate												
1 st mate												
Master												
4 th Eng												
3 rd Eng												
2 nd Eng												
Ch.Eng												

Does the Administration have (or is aware of sources of) information on the following:

1. Total number of national seafarers; (Officers and ratings)
2. Total number of seafarers working on national flag ships; (officers and ratings)
3. Yearly intake of new officers onboard national ships.

Manning levels:

Basis of the national regulation for setting minimum manning levels;

What information does the administration require in issuing a manning certificate?

Administration to be invited to support MTCP by using their national system in providing minimum manning requirements for the following ships;

- Feeder container ship
- Tanker (product carrier)
- Ro-Ro passenger vessel

Does the Government/Administration have any plans or foresees any changes to the regulations concerning the manning standards for merchant ships

Number of ex-seafarers currently working in the Maritime Administration?

Value and role of ex-seafarers in the work of the Administration?

Value and role of ex-seafarers in other maritime shore based sectors?

What subjects do they consider important for ex-seafarers in order to gain shore based employment?

7.2 Maritime Administration Data Summary

Seafarer Data Summary by Country

	Country						Total	
	Cyprus	Denmark*	Sweden	Poland	Greece**	France		Latvia*
<i>Total National Seafarers (2004)</i>	579	4346		40000	17336		24000	86261
<i>Total Seafarers working on National Flag Ships (2004)</i>		9961	9300		22690		4600	46551
<i>Total 3rd Country endorsements/Certificates</i>	75163			2				75165
<i>Yearly Intake of New Officers on National Flag Ships</i>		299	1200				0	1499
<i>Ex-seafarers working in MA & other gov't related shipping</i>	93	60	80	249			42	524
<i>Average no./yr of new CoC issued last 5 years</i>								
3/O				777				777
2/O		101	403	105			428	1037
1/O		166	134	508			514	1322
Master		647	627	787			709	2770
4/E				712				712
3/E		204	225	66			206	701
2/E		153	76	456			568	1253
C/E		286	360	776			134	1556
<i>Average #/yr of revalidation CoCs issued last 5 years</i>								
3/O								0
2/O		101	134		1062		428	1725
1/O		166	45		693		514	1418
Master		647	209		717		709	2282
4/E								0
3/E		204	75		1100		206	1585
2/E		153	25		381		568	1127
C/E		286	120		578		134	1118
<i>Average #/yr of endorsements to CoCs issued last 5 years</i>								0
3/O								0
2/O		120						120
1/O		54						54
Master								0
4/E								0
3/E		86						86
2/E		51						51
C/E		25						25
<i>(combined avg)</i>		336	283					619

Notes: *Data for New Certificate and Revalidations is combined

** Greek Total Seafarer and Total National Seafarer data from 2002

8 APPENDIX B: SHIP OPERATORS DATA

8.1 Ship Operator Questionnaire

Ship Operator Questionnaire

This questionnaire is in support of a 2004-2005 Directorate-General Energy and Transport, European Commission (DG TREN) study of the current supply and demand of the EU seafaring population. It is headed by the World Maritime University in Malmö, Sweden and is part of a larger Commission project entitled the *Maritime Transport Coordination Platform (MTCP)*. As a ship operator, the information and comments you provide will be vital in providing DG TREN with meaningful insight and recommendations on this issue. All information you provide on this questionnaire will be kept strictly confidential. This form may be filled in on a PC or printed and filled in manually. The completed questionnaire should be emailed prior to **31 January 2005** to mtcp@wmu.se or faxed to +46 40 128442. Alternatively, it may be mailed to WMU at the address indicated at the bottom of the page. Thank you in advance for taking the time to assist us with this study.

Company Name	Date
Contact (Name of person completing this form and job title)	Telephone
	Email

Please answer each question in the space provided. Comments will be requested on page 2.

1	The total number of ships your company operates (all flags)	
2	How many of your ships carry a Flag from a EU member State? Please list the EU Flags your ships carry in the space below:	
3	Total number of officers (deck and engine) employed on all your ships (please also include those needed for rotation and holiday)	
4	Total number of officers, employed aboard your ships, that hold a certificate of competency from an EU member State	
5	Total number of seafarers (other than officers) employed on your ships	
6	Total number of EU seafarers (other than officers) on your ships	
7	Total number of former shipboard officers employed with your company ashore	
8	Average number/year of EU shipboard officers that retire or take up permanent employment ashore	
9	Average number of new EU shipboard officers you hire each year	
10	Has your company faced any shortages or challenges in finding qualified EU officers to meet the manning requirements of your EU National Flagged vessels? YES <input type="checkbox"/> NO <input type="checkbox"/> If YES, which officer ranks did you find difficult to fill (check all that apply)? Master <input type="checkbox"/> Ch Off <input type="checkbox"/> 2 nd Off <input type="checkbox"/> 3 rd Off <input type="checkbox"/> Ch Eng <input type="checkbox"/> 2 nd Eng <input type="checkbox"/> 3 rd Eng <input type="checkbox"/> 4 th Eng <input type="checkbox"/>	
11	Does your company routinely offer opportunities for officers who have served on your ships to work for your company ashore? YES <input type="checkbox"/> NO <input type="checkbox"/>	
12	Does your company participate in training EU seafarers by engaging officer cadets and/or providing rating training? YES <input type="checkbox"/> NO <input type="checkbox"/>	

Please comment below

Do you believe that recruiting of EU seafarers will become increasingly difficult? Why or Why not?

Please provide any other comments you would like regarding the status of the EU seafarer.

Question Number from Questionnaire

ID#	Country	1	2	3	4	5	6	7	8	9	10 yes	10 no	10 Mstr	10 C/O	10 2/O	10 3/O	10 C/E	10 2/E	10 3/E	10 4/E	11 yes	11 no	12 yes	12 no	Comments s Top	Comments Bottom
1	SE	33	28	475	455	3000	2900	85	20	15	1	0	0	0	0	0	0	1	1	0	1	0	1	0	1	1
2	SE	5	5	46	32	35	13	2	1	0	1	0	1	1	0	0	1	0	0	0	0	1	1	0	1	0
3	SE	12	9	152	124	153	92	9	4	4	1	0	0	0	0	0	1	1	0	0	1	0	1	0	1	1
4	SE	2	2	16	1	20	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0
5	SE	4	4	60	60	80	80	2	8	8	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	1
6	SE	24	20	284	246	176	76	6	10	6	1	0	0	0	0	0	0	1	0	0	1	0	1	0	1	1
7	SE	5	5	70	44	30	24	3	0	0	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0
8	UK	44	44	160	160	120	120	12	8	8	0	1	0	0	0	0	0	0	0	0	0	1	1	0	1	1
9	UK	3	1	40	35	33	3	4	1	4	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0
10	UK	8	1	77	37	64	12	5	1	1	0	1	0	0	0	0	0	0	0	0	1	0	1	0	1	0
11	UK	3	1	38	38	37	37	2	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	1	0
12	DK	86	12	891	90	1032	40	10		6	1	0	0	0	0	0	1	1	0	0	1	0	1	0	1	1
13	SE	12	12	23	23	23	23	0	0	5	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0
14	SE	2	2	25	25	22	24	0	0	0	1	0	0	0	0	0	1	1	0	0	0	1	1	0	1	0
15	SE	26	26	326	237	742	400	25	10	20	1	0	0	0	0	0	0	1	1	0	1	0	1	0	1	1
16	UK	33	0	515	66	828	0	22	2	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1	1
17	UK	80	10	150	4	880	0	30	0	4	0	1	0	0	0	0	0	0	0	0	0	1	1	0	1	0
18	DK	10	9	88	74	116	78	0		10	1	0	0	0	1	1	0	1	1	0	0	1	0	1	0	0
19	SE	3	3	91	91	1102	1102	2	5	3	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0
20	UK	7	3	23	4	37	4	2		3	1	0	1	0	0	0	0	0	0	0	1	0	1	0	1	1
21	SE	17	17	280	210	180	108	12	3	10	0	1	0	0	0	0	0	0	0	0	0	1	1	0	1	0
Totals		420	216	3833	2060	8715	5142	240	81	119	10	11	2	1	1	1	4	8	3	0	9	12	15	6	17	9
21	Percentages										48%	52%	10%	5%	5%	5%	19%	38%	14%	0%	43%	57%	71%	29%	81%	43%

8.2 Summary of Questionnaire Data

Summary of Ship Operator Comments	
Do you believe that recruiting of EU seafarers will become increasingly difficult? Why or Why not?	Please provide any other comments you would like regarding the status of the EU seafarer.
I believe that it will be more and more difficult. Seafaring does not seem to inspire young people to stay very long with the trade. The same goes for officers, even after a relatively long training and learning period many seem to leave the trade after 5-6 years.	It does seem to be helpful that we can recruit from "new" EU states, providing we can overcome language barriers.
I think that there will be even bigger difficulties in recruiting seafarers. The competition between small Swedish tanker shipping companies is increasing since many of them expand.	
Today it is common to have national senior officers and junior officers from a labour supplying country - typically from Far East or from Eastern Europe. This means that there is very little room for officering national junior officers employment in order for them to gain experience and consequently it will be increasingly difficult to get national senior officers with the right skills and experience. Instead you see younger and younger junior officers being promoted and sometimes before they are prepared to be so - both with regard to experience as well as with leadership. In general this is a risk for any company.	I think that the only solution to this problem is to allow all kind of nationalities to serve on all vessels irrespective of flag. It has not been proved that officers coming from EU are more qualified than officers coming from the labour supplying countries outside EU. Today we have the officers divided into two groups, as mentioned above, in which the junior officers from the labour supplying countries know that they will not be able to achieve promotion into the senior ranks. This fact and the fact that most officers from the labour supplying countries are only employed on a contract to contract basis means that their initiative and motivation is very low which puts more demands on the few national senior officers who are left on board, and as mentioned above they get younger and younger and less experienced. So the solution is to let the international market be free so you may employ the best qualified for the position irrespective of nationality and to ensure that the crew are company employed in order to gain more knowledge and stability on board the vessels. In order for this to materialise the national unions will have to look forward and go into an international cooperation which you already see today on the "flag of convenience" where contract conditions are negotiated between IMEC and ITF on a world wide basis. Today national unions are very protectionistic. Likewise the flag states also need to be less protectionistic by allowing other nationalities to take command of the vessels.
No problem in our company	
Our company is normally operating 4 own vessels with total "in-house-management" and all officers and crew Swedish. In order to lower the average age of our fleet, 3 vessels were sold 2002-2003 and for time being we have one vessel only. We are now in the process of order newbuildings and when our fleet renewal is completed we will be back on 4 vessels again. Therefore Lower figure = present Situation, Higher Figure= Normal Situation We see no real problem in recruiting Swedish Seafarers as long as we keep the Swedish flag.	In Sweden we have the best as well as the worse Seafarers in the world. As long as we are able to pick the best ones there are no problems.
It seems that the TAP system for Swedish flag vsl's gives a shortage of Swedish ratings. However, every company must offer good vessel and good working conditions to eliminate this as far as possible.	At the moment we are only using Swedes except for the Filipinos. We will probably not go for the eastern European seafarers yet due to the language barrier. We need a "working language".

Summary of Ship Operator Comments	
Do you believe that recruiting of EU seafarers will become increasingly difficult? Why or Why not?	Please provide any other comments you would like regarding the status of the EU seafarer.
Our industry sector is in harbour towage. We find no difficulty at present as wages , term and conditons are good, particularly for 'second phase' seafarers, i.e. those wanting a job closer to home.We have engaged in extensive training prgrammes in our industry in last five yaers and this is expected to cover our requirements.	Flexibility of work is very important to us and we would be very damaged by increases to terms and conditons based on for example less flexibility in hours of work.EU work legislation must not damage flexible working of seafarers.EU legislaton must take into account the smaller shipping sectors of industry such as tug operators
If EU seafarers are not available then we will recruit from non EU nations as we are already starting to do	
As costs continue to equalise among EU countries it will become economically difficult to recruit from some of these nations.	
No. EU is expanding and abilities and reliability of less familiar seafarers is becoming more and more common knowledge, this is encouraging Owners / Managers to test them out. As far as we can see, these "new" countries have an abundant seafaring workforce.	
Yes it will be more difficult and there are several reasons I believe. The most obvious reason is ofcourse that we have replaced western seafarer with cheaper seafarer in order to reduce OPEX over the last 2, 3 decades. As a consequense the entire recruiting foundation and educational structure in the western countries has been undermined.However, I firmly believe that we are facing a lot bigger problems talking about recruitment of young EU citizens to the sea work. The legislative and adminastrative burdens put on the seafarers shoulders require a heavey and long education - they can be educated lawyers or doctors in the same timeframe... further legislation such as the ISPS code has isolated seafarers more than ever and in some cases even crimnalised them on beforehand.	The world wide culture and lifestyle of young people change dramatically and rapidly these years and traditional shipping have not yet started the adjustment to the new "mobile- and sapping-culture". It will be very difficult to attract and keep youngsters in sea jobs under the social conditions onboard ships today, the companies and governments must start figure out how the social conditions onboard ships can fit in to the new generation - this is a world wide issue and not only a problem among young westerners.
Probably, because of more competition from other states which can scare away those who still find it interesting to be away from their families.	
Yes. We feel that many persons will look for job closer to home in the future. Our way of meeting this is by higher wages.	Quality is our only chance to compete.
Yes. We have not directly recruited any EU officers since Jan 03 due to a change in our crewing policies, which will phase out our expensive EU officers through natural wastage. We are now concentrating our recruitment and training in more cost effective countires like the Philippines, Croatia, Russia and probably in the near future India.	The old sentiment or statement that British / European is best is not generally shared by many operators. Therefore, the requirement for employing expensive EU officers cannot be justified. In our experience the introduction of STCW 95 has levelled the playing field.
Yes, going to sea is not an attractive career	

Summary of Ship Operator Comments	
Do you believe that recruiting of EU seafarers will become increasingly difficult? Why or Why not?	Please provide any other comments you would like regarding the status of the EU seafarer.
Yes, as no one is training them and what training is present doesn't give a guaranteed career structure	An increasingly diminishing figure with little or no status. It is becoming apparent that with the degradation of professional standards they are increasingly going from managers to operators. They have little influence on their operation due to outside pressures and threats of replacement with cheaper workers who will 'do what they are told'. The ISM code has had little effect and the STCW Code an adverse effect on seafarer quality.
I think that as long as you as employer have a good personnel policy and shows that you really are interested in keeping your seafarers in the company for long time you will not have a problem. Those companies that have not understood that you have to spend (investigate) to keep your crew, they will most probably get much more problems. I think for example that an updated and relevant training plan is a must in order to motivate your crew to stay in the company.	

9 APPENDIX C: MANNING LEVEL DATA SUMMARY

Sample Minimum Manning Comparisons 2004

Vessel Type	Manning	Country						
		Cyprus	Denmark	Sweden	Poland*	Greece*	France*	Latvia*
<i>Ro-Ro Passenger Vessel >10,000 GRT, attended engine room >8000 kw, on international voyage</i>	Master	1	1	1				
	C/O	1	1	1				
	Officer	2	2	1				
	Rating A	6	7	5				
	Rating B	6		0				
	C/E	1	1	1				
	2/E	1	1	1				
	Eng	1	1	1				
	Rating A	2		2				
	Rating B	1		0				
	Total		22	14	13	0	0	0
<i>Product Tankers 10,000-20000 GRT, attended engine room >8000 kw, on international voyage</i>	Master	1	1	1				
	C/O	1	1	1				
	Officer	1	2	1				
	Rating A	3	4	3				
	Rating B	1	1	0				
	C/E	1	1	1				
	2/E	1	1	1				
	Eng	1	1	1				
	Rating A	3		1				
	Rating B	0		0				
Total		13	12	10	0	0	0	0
<i>Feeder Container Ship 5,000-10,000 GRT, attended engine room 3000 to 6000 kw, on international voyage</i>	Master	1	1	1				
	C/O	1	1	1				
	Officer	1		2				
	Rating A	3		3				
	Rating B	1		0				
	C/E	1	1	1				
	2/E	1	1	1				
	Eng	0		1				
	Rating A	1	3	1				
Rating B	1		0					
Total		11	7	11	0	0	0	0

Note: * Insufficient information provided