



SUB-COMMITTEE ON STANDARDS OF
TRAINING AND WATCHKEEPING
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Agenda item 15

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ANY OTHER BUSINESS

2000 Manpower Update

Submitted by BIMCO and International Shipping Federation (ISF)

SUMMARY

Executive summary: BIMCO and ISF have updated their comprehensive analysis of the world-wide demand for and supply of seafarers.

Action to be taken: Paragraph 4

Related documents: None

1 BIMCO and ISF have published their 2000 Manpower Update - the most comprehensive analysis of the worldwide supply and demand for seafarers so far undertaken. The study estimates a global supply of some 404,000 officers, 4% short of estimated global demand, similar to the situation in 1995 when the last BIMCO/ISF manpower study was undertaken. There remains a large surplus of ratings.

2 The 2000 Update suggests that in spite of improved training levels during the 1990s, even a modest future increase in the number of ships in the world fleet will result in additional demand for seafarers since any further general reduction in manning levels is thought unlikely. This increased demand, the Update suggests, can only be met if recruitment and training are increased, the numbers which leave the industry are reduced, and selection techniques and perceptions of the industry as a career improve.

3 The full report of the BIMCO/ISF 2000 Manpower Update is available from BIMCO and ISF. However, the summary report is **attached** for information.

Action requested of the Sub-Committee

4 The Sub-Committee is invited to note the summary conclusions of the 2000 Manpower Update, including the need for improved national data on the supply of seafarers given the numerous references in the full Update highlighting the weakness of manpower data currently available in many countries.

ANNEX

Introduction

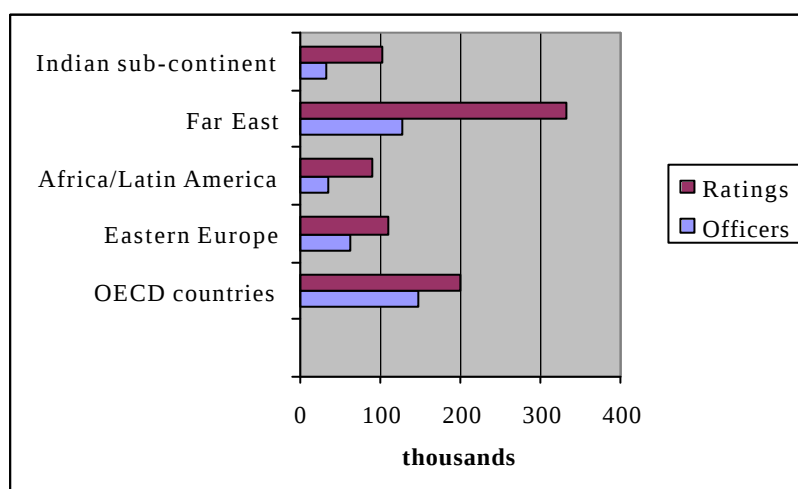
The BIMCO/ISF *2000 Manpower Update* is probably the most comprehensive study of the global supply and demand for merchant seafarers that has so far been undertaken, building on data amassed by earlier studies conducted in 1990 and 1995. This latest report has two main purposes: to describe the worldwide supply and demand situation for seafarers in 2000, and to make predictions as to the likely situation in 5-10 years' time, so that the industry can anticipate changes and, if appropriate, take necessary corrective action.

This *2000 Update* has also attempted to take full account of the views of senior executives in the shipping industry, providing a synthesis of academic analysis (using the expertise of Warwick University) with the practical experience of international employers.

Current Supply/Demand Position

An updated estimate of the global supply of seafarers has been produced by amalgamating the most recent national statistics provided by authorities in almost all of the principal labour supply countries. As a result of this exercise, the **worldwide supply** of seafarers in 2000 is estimated to be **404,000 officers** and **823,000 ratings**. The OECD countries (North America, Western Europe, Japan etc.) remain the most important source for officers, but the Far East has increased its share. The latter is by far the largest source for ratings.

Supply by Area of Domicile 2000 (Note catering and hotel staff are excluded)



Global demand estimates have been produced using the computer model developed for the 1990 and 1995 studies. This takes full account of detailed changes to the number, size and type of ships in the world fleet, as well as revised estimates of the manning levels and back-up ratios (seafarers on leave etc.) that currently apply to different national fleets.

This “raw” estimate has then been calibrated using comprehensive data supplied by almost 200 companies, weighted to reflect a representative sample of the world fleet. This includes data concerning levels of recruitment, the nationality and age structure of seafarers employed, and estimates of the number of employees that have taken jobs ashore between 1995 and 2000. Following analysis of this data, the current estimate of the **worldwide demand** for seafarers is **420,000 officers** and **599,000 ratings**.

The data in the following table shows that this translates into a modest theoretical **shortfall of officers** required to man the world fleet of **16,000** or **4 per cent** of the total workforce. For ratings there continues to be a significant overall surplus, although there are doubts about the extent to which large numbers of these ratings are qualified for international service.

Supply and Demand in 2000

			(000s)
	Supply	Demand	Balance
Officers	404	420	-16
Ratings	823	599	+224

There is some evidence that recruitment levels increased during the late 1990s, although they fell again slightly in 1999, coinciding with the difficult year for shipping that followed the Asian economic crisis. But any overall increase in training broadly seems to have been matched by an increase in the rate at which officers have left the industry. Meanwhile, the number of ships in the world fleet grew by only 1.0 per cent per annum between 1995-2000. This, together with the phasing-out of older ships which had required higher manning levels, meant that additional demand for officers was not quite so great as anticipated in the *1995 Update*. As a consequence, the overall supply/demand imbalance for seafarers is very similar in 2000 to the situation in 1995.

In practice, however, the estimated shortfall of 16,000 officers is more severe if account is taken of the obstacles which prevent surpluses of some nationalities of seafarer from compensating shortages experienced by other countries. Such barriers include cultural and language differences, lack of international experience and the nationality restrictions that apply to many flags.

Future Demand/Supply Balances

The main report presents a number of scenarios that might characterise the global balance between supply and demand in the future. However, the Project Steering Committee has selected what it believes to be a realistic “benchmark” scenario based on an analysis of developments over the last 5-10 years, taking into account the views of senior shipping executives.

This allows for a modest expected increase in the number of ships in the world fleet of around 1 per cent per annum (the observed historical growth rate over the past decade). It also assumes the maintenance of recruitment and wastage levels experienced during the past five years, based on data collected as part of this study.

Supply - Demand Balances

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

Even using these somewhat conservative assumptions, the clear message is that the current moderate shortage for officers will worsen unless training is increased or measures are taken to address the rate at which seafarers leave the industry.

However, the forecast is quite sensitive to a variety of factors, which are explored in more detail in the main report, and illustrated briefly by the examples attached to this summary.

Key Issues

The changing nationality of seafarers

The 2000 results confirm that the centre of gravity of the manpower industry has continued to move away from most of the traditional maritime countries in Europe, Japan and North America towards countries in the Far East, the Indian sub-continent and Eastern Europe. Seafarers from OECD countries currently constitute some 27.5 per cent of the marine global workforce compared to 31.5 per cent in 1995 and there have been particularly substantial reductions in the numbers of junior deck and engine officers from OECD nations. But while these changes may well have been quite dramatic at the level of an individual company or country, from a global perspective the overall decline of 4 per cent in the proportion of OECD seafarers over a five year period suggests that the changes are evolutionary rather than revolutionary.

Recruitment has increased but still needs to improve

Encouragingly, overall levels of recruitment and training appear to have increased significantly, with officer trainees comprising 1 in 10 officers compared to 1 in 13 in 1995. The numbers under training appear to have increased in virtually all nationality groups, with a particularly substantial increase in trainees recruited from OECD countries. However, the *Update* indicates that recruitment levels still need to increase further to meet anticipated additional demand for qualified officers. Specifically, the *Update* recommends that officer recruitment and training levels need to increase from 1 in 10 to 1 in 7 which equates to approximately 1.5 trainees per ship. This target will clearly represent a major challenge.

Increased future demand for seafarers

During the past decade, the number of ships in the commercial trading fleet has increased by an average of some 1 per cent per annum. Although this might suggest that demand for seafarers should have increased by a similar amount, this has not proved to be the case. Overall levels of demand for both officers and ratings have remained largely static, and may even have declined marginally, principally as a result of lower manning scales on more modern vessels. However, this *Update* suggests that this situation is likely to reverse in the future. There is little scope for further manning reductions if account is taken of the impact of international regulations such as working time legislation, and because back-up requirements may well need to increase to accommodate additional training or increased leave. Therefore, even a modest future increase in the number of ships in the world fleet will result in additional demand for seafarers which can only be accommodated if recruitment and training are increased (unless wastage is reduced).

Need to reduce wastage

While levels of recruitment and training need to increase in future, the other side of this coin is the need to reduce the number of seafarers who leave the industry each year to pursue careers in other industries. This is particularly relevant in the case of officer trainees since the *Update*

indicates that around 30 per cent fail to complete their training. This points to the need to improve selection techniques and to improve perceptions of the industry as a career. In certain countries, consideration might possibly be given to upgrading training for ratings with the necessary education and aptitude to allow them promotion to officer grades, both as a means of improving career prospects and of increasing the supply of qualified officers.

Dependence on ageing OECD officers

The world fleet continues to rely upon large numbers of officers from Europe, North America, Japan and other OECD countries. However, over 40 per cent of these officers are over 50 years old, and 18 per cent are aged over 55. 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. While senior shipping executives questioned in this survey forecast that within the next 5-10 years most senior officers will be from Asian or East European supply countries, other data in this *Update* suggests that the situation may prove more complicated.

Progress of Asian seafarers to senior positions

The data presented in this *Update* suggests that, unlike seafarers from OECD countries, relatively few officers from the Far East or the Indian sub-continent choose to remain at sea after the age of 50 (see attached age profile graphs). To some extent this explains why these nationalities remain under-represented in senior officer positions, though this may not be the only reason. It is possible that this trend might be expected in newer labour supply countries and that the age profiles will mature into something closer to the OECD pattern over time. But analysis of the evolution of age profiles over the last 10 years suggests that in Asia the trend has remained remarkably consistent. If substantial numbers of officers continue to retire at or around the age of 50, this may challenge the assumption that officers from these nations will automatically replace retiring senior officers from OECD countries.

Impact of the revised STCW Convention

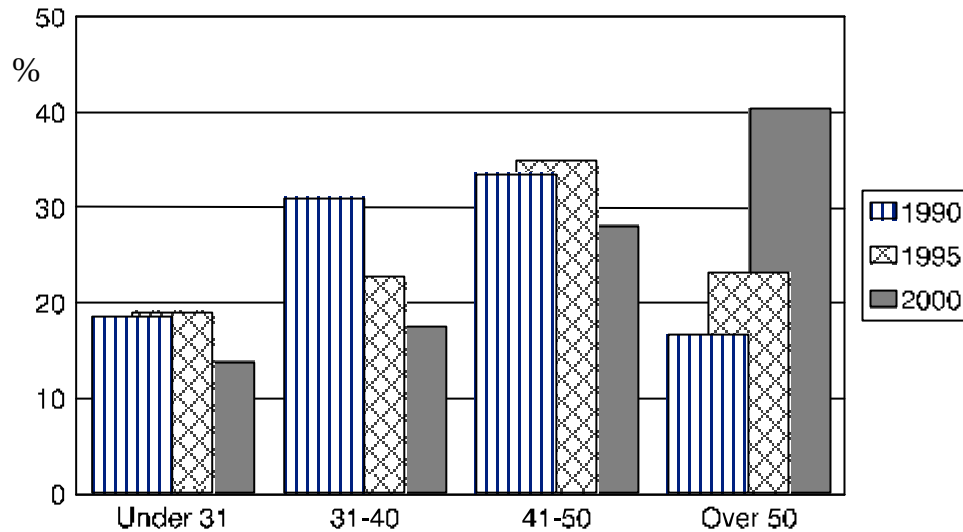
The new competence standards required by the revised IMO Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 95) will not fully take effect until 2002, and in practice their full impact will not be apparent until the middle of the current decade. Publication by IMO of the "white list" of countries which are considered, in principle, to meet the standards set by the Convention has been delayed. Fears that seafarers holding certificates issued by countries which failed to gain a place on the "white list" would become unemployable have not therefore been tested. There is evidence that many countries have upgraded training standards, and most of the senior shipping executives questioned in this survey expressed confidence that standards of competence would show an overall improvement. However, the measures in STCW 95 which might have the effect of reducing the number of qualified seafarers, such as the "white list", additional flag state requirements and stricter certificate revalidation procedures, have not yet taken full effect.

Need for improved data

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. The principal purpose of this survey is to present a global overview of the manpower situation rather than a country by country analysis. Nevertheless, the

data which are presented point to the need for initiatives to be undertaken in a number of areas at company and national level, not least to increase the number of trainees. These initiatives are likely to founder or to prove inconclusive without more accurate and reliable manpower data.

OECD Officers, Age Structure (%)



Far East Officers, Age Structure (%)

