## **AMETIAP Seminar**

## MET: What is wrong? What to do?

Magnolia Room, Hilton Shanghai Hotel, 25 October 2004

# **Global Trends, Challenges and Opportunities**

Rod Short, Executive Secretary, AMETIAP

## 1 Emerging global trends in the maritime transport sector

## **Demographics**

Shipping is in the forefront of global employment. It will become increasingly globalised and recruit labour from wherever the best value for money is available.

With its isolation, type of work and living conditions, seafaring is seen by many to be employment of last resort and recruitment will tend to focus on those with little choice who will accept relatively low wages. As living standards rise, there is less inclination to seek employment at sea, as evidenced in China, where there is now difficulty in recruiting seafarers from the booming coastal regions and recruitment efforts reach far inland.

Effective communication skills and an understanding of different cultures, already necessary, will become more important, especially where more ships are manned by multi-cultural crews.

#### Safety and emergency response

Stricter technical and operational standards will develop, with tighter regulatory requirements. Increasing dissatisfaction with the shipping industry, which is perceived by the 'man in the street' as a poorly regulated, polluting industry, will bring political pressures for the most influential economies to take unilateral action, eg US, EU. Increasing politicization of IMO will raise the risk of it being bypassed.

To enhance safety and security in constricted waterways, there will be greater dependence upon technology in preventing and in dealing with emergencies; eg the introduction of Automated Identifications Systems (AIS) and the 'electronic highway' concept already introduced in Malacca and Singapore Straits.

Rising public awareness and action as a result of environmental concerns will generate greater impetus to improve maritime safety. The industry will be more aware that safety and ability to respond in emergencies is dependent on training and experience and more attention will be given to the training used successfully in the airline industry – eg crew resource management, including bridge teamwork. Simulation will play a greater part in training to deal with emergencies.

#### Environment

Environmental considerations will impact increasingly on the development of marine technology and ship operations, recent examples being the introduction of double hulls, retention of waste on board, the promulgation of 'no-go' areas for shipping, the development of non-organotin based anti-fouling paints. Technology and improved training will assist in minimizing operational pollution.

Penalties for environmental damage will increase, with the seafarers involved targeted at the time of the incident. The incarceration of seafarers involved in a pollution incident, as has happened in Spain and Pakistan, is likely to increase, particularly if it becomes more difficult to identify and prosecute the owner and other beneficiaries of the vessel's operation.

Media portrayal and the activities of NGO's such as Greenpeace oblige the shipping industry and its users to do more to improve the image of the industry as one that is relatively safe, efficient and non-polluting (which, overall, it is!). Improved maritime education and training will be part of this.

## **Technology**

New and existing technology will enable:

- More extensive and increasingly reliable automation, allowing greater surveillance and shore control of ships at sea, including navigation and onboard functions associated with propulsion and preservation of cargo;
- Detailed knowledge of cargo carried and of other factors necessary to improve security;
- New designs of ships, ports and port equipment to provide faster turn-arounds and greater efficiencies there will be more ships designed for special purposes;
- Smaller crews and, eventually, some unmanned ships, eg simple bulk carriers, feeder container ships, on routes with few navigational hazards;
- Better delivery of distance education for those at sea.

#### Careers and education

Few regard seafaring as a long-term career. Increasingly automated ships will not provide career fulfillment and it will become more difficult to provide a career that attracts and retains competent people. To address this, the career should be in the maritime industry overall, with seafaring as an aspect which does however provide valuable foundational experience. The responsible realization of the wealth of the oceans will provide many opportunities for fulfilling careers.

The marketing of a maritime career needs to stress the potential for employment across the whole industry. Personnel certification should ensure mobility across the industry.

Maritime education and training must equip for the whole career, ashore and at sea, and not be limited to the needs of seafaring. Pilots and other marine employees will require more specialist

training and experience, especially those employed in major 'node' ports, which will become more complex – eg Singapore which currently experiences more than 400 ship calls per day.

There will be strong demand in the maritime industry for those with seafaring experience. A better understanding of environmental issues will be part of the education and training of seafarers and human aspects, such as inter-cultural awareness and communication, will receive more attention.

Interactive distance education will be increasingly used to provide learning for those at sea. Course developers and instructors of imagination and dedication will be needed to ensure motivation of distance education students.

## Policy and regulatory change

The traditional doctrine of 'freedom of the seas' has led to a modern industry which, in many respects, represents unfettered free enterprise, yet lacks transparency in so many of its practices; eg flags of convenience, unenforceable regulations, 'ships of shame'. This freedom will become increasingly limited as steps are taken to address major regulatory loopholes, distortions and other deficiencies. Policies will focus more on control than on 'freedom'. Steps will be taken to address the irresponsible elements, particularly of the global shipping and fishing industries, as well as to address piracy, marine terrorism and other criminal activity. Some recruitment and maritime training practices fit the 'irresponsible element' category.

It is time for initiative from within the industry to review and understand the situation with respect to training and to trigger the actions needed to ensure that maritime education and training provided is what is really needed.

## 2 Key challenges and opportunities

On a global basis, maritime education and training is in serious need of substantial improvement. Attempts to introduce minimum standards – eg STCW, 'White List' – have been only partially effective and there are still wide variations in the standards of delivery and in the competence of training academy graduates. There is widespread exploitation – ticket 'factories', and fake certificates. Standards of delivery vary widely, even across duly accredited training institutions. Few institutions are adequately resourced and many have difficulty in attracting appropriate faculty. There is a tendency to depend upon equipment rather than competent teaching staff. Although some employers – eg Norwegian and Japanese shipowners, COSCO – and some ship management and manning companies – eg Anglo-Eastern, Barber, Magsaysay – have developed their own training centers to improve the supply of competent seafarers, many on the owning and managing side of the industry do not become involved in training and operate through poaching from other employers. There is a perception that the training of seafarers is a public, rather than an industry responsibility. There are publicly funded and privately funded institutions, as well as institutions depending upon both sources of funding.

Rising global concern associated with worries about security and pollution are generating opportunities for radical change to providing the education and training needed by the maritime

industry. While a lot of attention is already being given to the technology and procedures associated with increased security, far more needs to be done to ensure the competence of the people working in the maritime transport industry and in the maritime sector overall.

The key challenge is to develop a global system of maritime education and training which provides, certifies and recognizes the competencies needed by the global industry.

Addressing this challenge will require:

- The maritime employers (in shipping as well as in other aspects of maritime activities) to play a greater part in ensuring the education and training needed by their employees;
- The educators and trainers to have greater involvement in the development of maritime education and training;
- Development of a system of recruitment, education and training and a career path associated with the whole of the maritime industry, emphasizing seafaring as providing desirable foundation skills;
- Development of a means of ensuring quality of delivery of programs of education and training.

There is now an opportunity for the global industry to take appropriate initiatives by establishing, in collaboration with the providers and the authorities, a group to identify the education, training and certification that will most effectively meet foreseeable needs and to recommend methodology for implementation.

## 3 Concluding remarks

As a primary means of transporting goods, maritime transport is critical to human welfare and is closely linked to the development of the global economy. It is however only one aspect of marine activity, which, with depletion of land-based resources, congestion and increasing cost (social and financial) of providing land transport, will become even more important to the welfare of humankind. Maritime education and training (and applied research) must adapt to provide competent people essential to all aspects of the maritime industry. It is incumbent on those involved to ensure that it does.