

To promote, develop and support in the spirit of cooperation, the common interests of its members in all matters concerning the development and quality of maritime education and training.

NEWSLETTER

SEPTEMBER – 2012

ISSUE NO. | 14 |

TRAIN, TRAIN, RETRAIN, RETAIN!



Inside this Issue

Editorial.....	1
Maersk Supply Service Launches New Seafaring Programme.....	3
Rio+20 Conference Oceans and Maritime Environment Protection.....	4
E Ship 1 – Has the Flettner Rotor Ship Finally Arrived? Old Salt Blog.....	6
Feature: Easing the Seafarer's Burden.....	7
IMO/WMU Launch EESO Model Course.....	8
Watch.....	8
ILO News – Geneva 20 August 2012.....	9
In the Arctic.....	9
Marine Garbage Pollution: an International Problem.....	10
Turanor Planet Solar Visits Malta.....	11
The Marine Electronic Highway.....	12
How do you Raise the Environmental Awareness of Seafarers?.....	13
You can Teach Old Sea Dogs New Tricks.....	14

Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision



Editorial



In the page 14 article **You can teach old sea dogs new tricks** the following question is asked "how can non-competency based professionals clearly understand, appreciate, internalise and implement a system of competence that is totally foreign to their endemic systems?" This is followed by "Everyone talks about the 'need for change' but nobody seems to be ready to implement this change." and "Those of us who have had current/recent hands-on experience in managing on-board resources do realise that most 'experts' in this field are quite antiquated and far removed from the realities of industry needs today."

Assuming you can teach sea dogs new tricks, whether old or not-so-old – and there is no doubt as to the category the writer belongs to! - following preliminary meetings with the Asian Development Bank, GlobalMET has submitted a proposal to the ADB which is summarised as follows:

There is need for an Asia Pacific regional institute to facilitate the transfer of the knowledge and skills necessary for enabling maritime teachers to use modern methodologies, such as student centered, distance and blended learning and thereby enable more effective teaching and assessment of 'Y Generation' recruits. Currently there is little opportunity for maritime teachers to learn about such developments and move away from traditional teacher-centered lecturing and instruction. The gap between the maritime education and training (MET) requirements of an efficient, safe, clean, secure global shipping industry and provision of MET to ensure seafarer competence is growing. MET providers are generally peripheral to mainstream education and have difficulty recruiting and retaining good teachers. Operation of the ships is increasingly dependent on Asian seafarers, the Philippines with 28% of the global total

being the biggest provider. Regulation of vessel operations, including fishing boats of >24 metres and the associated MET is becoming more stringent. In addition the overlap between MET required for ship and fishing vessel operations and the preservation of the marine environment and marine life is growing. This is particularly relevant to archipelagos such as the Philippines where the contribution by people with seafaring experience and relevant training would be highly beneficial. It is proposed the institute be established through implementation of a three stage project – 1) an ADB funded critical analysis, 2) formulation of a project to address needs and 3) formation of the institute.

As requested by the ADB, a presentation was given to relevant ADB staff on Monday 3 September by the ExecSec and senior Filipino personnel interested in assisting with the development of MET, including VAdm Eduardo Santos, President of the Maritime Academy of Asia and the Pacific and Vice Chairman of the GlobalMET Ltd Board of Directors.

GlobalMET is to now prepare a detailed proposal for discussion with the ADB at the time of the AGM, BoD and GlobalMET Forum in Manila, during the week commencing 12 November, which coincides with the 13th Asia Pacific Manning & Training Conference.

Referring back to the opening remarks, GlobalMET is not just talking about the 'need for change', we are striving to implement what we feel would be a very beneficial project in addressing need for change in MET in the Asia Pacific region. Now to continue working on the development of this project.

Rod Short
Executive Secretary



Maersk Supply Service Launches New Seafaring Programme

Twenty-five impatient young seamen are going to have the chance to obtain maritime skills and deploy their potential via Maersk Supply Service's new programme for seafaring for Angolans, that is going to be launched this week.

In a 1st for the firm, the cadets are going to be trained in India. The initiative is not only going to benefit Maersk Supply Service, but also help build capacity in the Angolan offshore manufacture. Angola requires international companies that operate in the country to employ 70 % of their workforce locally over time. But in a country with no seafaring tradition, the international shipping company Maersk had a challenge in building up its own pool of certified, qualified workers. The initiative is going to add twenty-five new recruits to that pool.

The group is going to spearhead a new Maersk Supply Service programme with a main goal at building up a pool of local Maersk seamen in this oil-rich country and important growth market. The Maersk Supply Service company has previously implemented plan for hiring locals in other regions of the world, but an

overseas training programme of this scope is a 1st for the firm. Very good business and the greater good The new initiative is not only a condition for doing business in Angola, though. It is also coming with a positive side-effect in that it helps to build up capacity of the offshore workforce in this energy-rich West African country.

Training Angolan people to become skilled seamen is not a 1st for Maersk. In 2010, towage company Svitzer, also part of the A.P. Moller – Maersk Group, began an innovative training programme for prospective Angolan seamen. From a pool of 500 applicants, 80 eager seamen have been chosen to spend 12 weeks in training on board the fully-rigged training vessel Danmark, cruising in the Atlantic. Prior to the on-board training the cadets experienced 6 months of on-shore pre-sea training in Angola, cooperating English language training, safety and security awareness as well as the necessary survival procedure modules for managing tugs. 67 made it through the tricky training program and many subsequently crewed Maersk Supply Service ships to acquire experience. Those people are now working on ships by the Angola LNG gas plant in Soyo, which Svitzer has a 20 year contract with.

<http://www.vesselfinder.com/news>



Rio+20 Conference Oceans and Maritime Environment Protection

Acknowledgement and Commitments

By

Jai Acharya

MSc (Maritime studies); B.E. (Hons) EEE; FIE; CEng
Technical Director
STET Maritime Pte Ltd
Singapore



Abstract

The Rio+20 International Conference, which took place in Brazil in June 2012, was quite promising. The World Ocean day was celebrated there on 16 June 2012. Certainly, the oceans had a strong voice this time. In the preparatory process and during the conference, NGOs played a decisive role for the inclusion of Oceans and Seas in the outcome document. An ocean cluster was created to push for the ocean agenda, and the International Ocean Institute (IOI) was co-facilitator of the ocean cluster. On the eve of the meeting of heads of States and delegates, it was made sure that the main concerns of the ocean community were correctly and adequately reflected in the outcome document of the conference.

The public voting on the priorities of the ocean were an implementation agreement for areas beyond national Jurisdiction included agendas on plastics and land based pollution and capacity building for developing countries.

These were the very areas that the IOI embraces and always lobbied for. They were reflected in the outcome document. The area that received greatest resistance from a major developed country was the implementation agreement on 'beyond national Jurisdiction' but finally an agreed language was adopted

The Blue economy received major attention and was quoted by many of the speakers. The IOI President Dr Awni Behnam gave a presentation on the Blue Economy under the Nexus of ocean and coastal settlements.

The Blue economy paradigm is an integrated approach to governance of the ocean and urban interface, revolving around the human dimension. The paradigm implies that there is an inclusive partnership between all stake holders that internalizes the conformity of the short term needs with long term objectives of sustainability.

The Outcome of Rio+20 Pertaining to Oceans and Seas

The following were acknowledged and strongly recognized during the Rio+20 conference:

⇒ That the oceans, seas and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical to sustaining it, and that international law, as reflected in the United Nations Convention on the Law of the Sea, provides the

legal framework for the conservation and sustainable use of the oceans and their

resources. The importance of the conservation and sustainable use of the oceans and seas and of their resources for sustainable development was strongly recognized, including through their contributions to poverty eradication, sustained economic growth, food security and creation of sustainable livelihoods and decent work, while at the same time protecting biodiversity and the marine environment and addressing the impacts of climate change. It was therefore, committed to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations, and to effectively apply an ecosystem approach and the precautionary approach in the management, in accordance with international law, of activities having an impact on the marine environment, to deliver on all three dimensions of sustainable development.

⇒ The importance of the United Nations Convention on the Law of the Sea to advancing sustainable development and its near universal adoption by States, and in this regard we urge all its parties to fully implement their obligations under the Convention.

⇒ The importance of building the capacity of developing countries to be able to benefit from the conservation and sustainable use of the oceans and seas and their resources and, in this regard, to emphasize the need for cooperation in marine scientific research to implement the provisions of the United Nations Convention on the Law of the Sea and the outcomes of the major summits on sustainable development, as well as for the transfer of technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology.

⇒ To support the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects, established under the General Assembly, and look forward to the completion of its first global integrated assessment of the state of the marine environment by 2014 and its Subsequent consideration by the Assembly and to encourage consideration by States of the assessment findings at appropriate levels.

⇒ The importance of the conservation and sustainable use of marine Bio-diversity beyond areas of national

jurisdiction. It was noted that the ongoing work under the General Assembly of an ad hoc open-ended informal working group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. Building on the work of the ad-hoc working group and before the end of the sixty-ninth session of the General Assembly, to commit to address, on an urgent basis, the issue of the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, including by taking a decision on the development of an international instrument under the United Nations Convention on the Law of the Sea (UNCLOS).

- ⇒ It was noted with concern that the health of oceans and marine biodiversity are negatively affected by marine pollution, including marine debris, especially plastic, persistent organic pollutants, heavy metals and nitrogen-based compounds, from a number of marine and land-based sources, including shipping and land run-off.
- ⇒ It was committed to take action to reduce the incidence and impacts of such pollution on marine ecosystems, including through the effective implementation of relevant conventions adopted in the framework of the International Maritime Organization (IMO), and the follow-up of the relevant initiatives such as the Global Program of Action for the Protection of the Marine Environment from Land-based Activities, as well as the adoption of co-coordinated strategies to this end. Further, it was committed to take action to, by 2025, based on collected scientific data, achieve significant reductions in marine debris to prevent harm to the coastal and marine environment.
- ⇒ It was noted that the significant threat that alien invasive species pose to marine ecosystems and resources and commit to implement measures to prevent the introduction, and manage the adverse environmental impacts, of alien invasive species, including, as appropriate, those adopted in the framework of IMO. The sea-level rise and coastal erosion are serious threats for many coastal regions and islands, particularly in developing countries, and in this regard, to call on the international community to enhance its efforts to address these challenges.
- ⇒ Call for support to initiatives that address ocean acidification and the impacts of climate change on marine and coastal ecosystems and resources. In this regard, to reiterate the need to work collectively to prevent further ocean acidification, as well as enhance the resilience of marine ecosystems and of the communities whose livelihoods depend on them, and to support marine scientific research, monitoring and observation of ocean acidification and particularly vulnerable ecosystems, including through enhanced international cooperation in this regard.

Small-Island Developing States

It was reaffirmed that small island developing States remain a special case for sustainable development in view of their unique and particular vulnerabilities, including their small size, remoteness, narrow resource and export base, and exposure to global environmental challenges and external economic shocks, including to a large range of impacts from climate change and potentially more frequent and intense natural disasters.

It was noted with concern that the outcome of the five-year review of the Mauritius Strategy concluded that small island developing States have made less progress than most other groupings, or even regressed, in economic terms, especially in terms of poverty reduction and debt sustainability.

Sea-level rise and other adverse impacts of climate change continue to pose a significant risk to small island developing States and their efforts to achieve sustainable development, and for many represent the gravest of threats to their survival and viability, including for some through the loss of territory.

It was expressed with concern that, while small island developing States have progressed in the areas of gender, health, education and the environment, their overall progress towards achieving the Millennium Development Goals has been uneven. There should be continued and enhanced efforts to assist small-island developing States in implementing the Barbados Program of Action and the Mauritius Strategy. The call for a strengthening of United Nations System support to small-island developing States in keeping with the multiple ongoing and emerging challenges faced by these States in achieving sustainable development.

Building on the Barbados Program of Action and the Mauritius Strategy, to call for the convening in 2014 of a third international conference on Small Island developing States, recognizing the importance of coordinated, balanced and integrated actions to address the sustainable development challenges facing small island developing States, and we invite the General Assembly

Conclusion

The Rio+20 international meet was quite comprehensive and vast in contents, part of which could only be completed in my next write-up.

A consistent work on effective implementation of Rio+20 commitments would be a great contribution towards the well being of our oceans, its inhabitants, humankind and finally to our living planet 'mother earth'.

Acknowledgements with Thanks

1. IOI (International Ocean Institute) (www.ioinst.org)
2. IOI President and Executive Director
3. Information from Rio+20 Conference at Brazil in June 2012
4. UN NEPC Reports



E Ship 1 – Has the Flettner Rotor Ship Finally Arrived? Old Salt Blog

Posted on August 17, 2010 by Rick Spilman



Buckau

The *E Ship 1* arrived in Dublin last week with a cargo of wind turbines manufactured by Enercon. What was striking was the ship itself, with four tall pillars rising vertically from the ship, two forward and two aft. The pillars are Flettner rotors, first developed in the 1920s by German engineer Anton Flettner. They are in essence, motor powered sails, 27 meters tall and 4 meters in diameter. The spinning vertical rotors develop aerodynamic lift using the Magnus effect. As the wind blows across the spinning rotors, they develop lift similar that of an airfoil shape of a conventional sail. Unlike masts and sails, however, the vertical Flettner rotor does not interfere with cargo operations. The Flettner rotors are expected to save 30-40% in fuel costs at 16 knots. The *E Ship 1* is owned by Enercon and is intended to

demonstrate energy saving technology as well as to deliver Enercon wind turbine assemblies to customers. In addition to the Flettner rotors, the ship is powered by diesel engines driving twin propellers. Exhaust gas from the engines power a downstream steam turbine, which drives the four Enercon-developed Flettner rotors.

The basic design of the Flettner rotor has been around for almost 90 years. Flettner applied for his patent on the design in 1922. The Flettner rotor ship *Buckau* set sail in 1925, first crossing the North Sea and then the Atlantic. While technically successful, the low cost of fuel and the limitations on bearing design made conventional ships more cost effective.

With advances in engineering and dramatically higher fuel costs, has the Flettner rotor finally arrived as a viable technology? Time will tell, though it is interesting to read the predictions of F.O. Willhafft, former Professor of Mechanical Engineering at Columbia University, as reported in the *New York Times* on May 3, 1925. In a paper given to the American Institute, he wrote:

“The outstanding fact is that rotating cylinders produce about ten times the propulsive force as canvas sails of the same area and that the actual results obtained in the trial trips of the Buckau confirmed the laboratory results with remarkable exactness.

“All that one can predict with certainty, basing the estimate with actual results obtained on the Buckau and on meteorological statistics, is that a motorship equipped with rotors will save not less than 25 percent on fuel, on the average, year after year, for the average trade route. I consider the Flettner rotor ship as a link only in the chain of evolution of the harnessing of wind power.”

Eighty five years later, the E Ship 1, may finally begin to prove Professor Willhafft right.

Feature: Easing the Seafarer's Burden

By Andrew Guest

Attempts to reduce the amount of paperwork weighing down shipping have so far had limited success, but a new survey of seafarers suggests there are good reasons why efforts should not be abandoned.

Dealing with the administrative burdens of both regulations and companies' quality management systems (QMS) can now occupy a fifth of an officer's working day and put them in danger of breaching working-time rules.

Some among the 800 Danish seafarers who took part in a survey entitled "From Craft to Control: Danish Seafarers' Perceptions of Administrative Burdens in The Maritime Sector" see some administrative work as counter-productive, with safety, security and the environment potentially at risk as paperwork-laden officers are unable to give them their full attention.

Seafarers in the Danish survey recognised the importance and necessity of some of the administrative work they do, particularly when it involved safety and the environment. Other work was also seen as routine and something in which they had become practised.

As the survey's fictional but typical Master says, "It is not easy to put a finger on a single specific burden that needs to be removed because the problem is more the sum of papers and forms we must fill out".

The survey and a parallel one into the administrative burdens faced by shipping company office staff ("Administrative Burdens In Shipowners' Offices") were carried out on behalf of the Danish Maritime Authority (DMA), a persistent advocate at the International Maritime Organization (IMO) for a reduction in the administrative burdens created by regulations.

Among seafarers the two administrative burdens that cause most annoyance are complying with the International Ship and Port Security (ISPS) Code and QMS. The first caused annoyance because it was seen as ineffective and often unnecessary, with the requirement to post a 24-hour security guard even in "safe" ports cited as a prime example.

QMS work was said to be the most time-consuming, with the need to document "correct behaviour" perceived to be more important than "to follow through on environment-friendly or safe ship operations", the report says.

The International Safety Management (ISM) Code, when implemented through a company's QMS, was also a source of annoyance as it had become "over-complicated" and had developed into a "control regime" which left seafarers little scope for exercising their professional judgment and decision-making. "The system grows larger and larger and eventually becomes so incomprehensible that no-one has an overview," the report says.

The researchers did concede, however, that some companies - usually larger ones - had "user-friendly" systems that allowed seafarers to "work smart", entering and updating data digitally. They suggested that in online systems well-performing senior officers such as Masters and Chief Engineers could be given authority to "co-develop and co-maintain" the QMS.

Many of the seafarers surveyed also felt they were ignored when new QMS procedures were introduced, that they were the last link in the chain and had limited opportunities to provide feedback. This has led to a feeling of alienation and the belief that new rules were "constructed in an office" far from the reality of the seafarer.

There are, again, exceptions to this general criticism, with the report noting one company's success in reducing, with the

active support of its seafarers, the number of its procedures from 4,500 to fewer than 2,000.

Another source of frustration was in the vetting that some charterers, particularly oil companies, insist on before accepting a ship. Getting the paperwork right is seen as crucial but this has developed, researchers were told, into a belief that the paperwork was more important than the actual standards of the ship.

"Inspection thereby becomes the 'control of control', with a tendency to evaluate the quality of the control system rather than the quality of the ship and crew," the report says.

Again, frustration was voiced by seafarers over the lack of a standard format for some information such as pre-arrival documents and at the continuing need for manual copies of data already held in digitalised form to be produced and rubber-stamped.

The parallel survey into how staff in Danish shipping company offices perceive their administrative burdens found similar frustrations, although the time spent on such work was on average lower than that at sea.

Dealing with crewing issues such as seafarers' taxes and training and certification produced the highest levels of irritation among shore staff, while keeping the QMS up-to-date and compliant with national and international regulations with their variations in interpretation also rated highly.

Some large companies even have special units whose sole function is to analyse changing regulations and adapt them to the QMS while trying to avoid increasing the administrative burden on seafarers. Smaller companies without such resources risk the potentially costly consequences of failing to keep their QMS constantly updated.

The DMA has said it hopes to launch initiatives based on the two surveys in the Autumn. Administrative requirements, the DMA added, could be changed or a common understanding of their necessity and value created.

If it could be established, the survey of seafarers says, that an increase in administrative work results in a reduction in accidents, the burdens would be seen in a more positive light. But, it adds, "Danish safety statistics do not seem to indicate a strong relation between the two".

The survey and its findings suggest that companies can do more to help reduce the burden on their seafarers, particularly if they are persuaded that levels of efficiency are being impaired and that safety and the environment are jeopardised by time wasted on dealing with cumbersome administration.

Companies' ability to reduce the burdens is limited, however, by the need to stay compliant with regulations. In turn, regulators and those responsible for the implementation and enforcement of rules have to tread a fine line between being seen to be too hard or too soft.

The IMO has already promised to review the ISPS Code and last month agreed to establish a steering group to consider ways of reducing the regulatory burden.

At the same time, however, new regulations such as the Maritime Labour Convention are poised to enter into force and threaten to increase rather than ease the burden.

Editor's Note: Andrew Guest is a freelance journalist. **Feature articles written by outside contributors do not necessarily reflect the views or policy of BIMCO.**

1 August



IMO/WMU Launch EESO Model Course

The launching of the WMU developed Energy Efficient Ship Operation model course project at IMO on September 3rd, 2012 gathered various experts and stakeholders in order to share knowledge and to make sure the course encompasses all issues relevant to this topic. The training package is to support the Energy Efficient Operation of Ships and will highlight its various related aspects. The pre-designed course constitutes five modules, but the outline is not yet fixed.

The Energy Efficiency Design Index (EEDI) was made mandatory for new ships and the Ship Energy Efficiency Management Plan (SEEMP) for all ships at MEPC 62 (July 2011) with the adoption of amendments to MARPOL Annex VI (resolution MEPC.203(62)), by Parties to MARPOL Annex VI.

This was the first legally binding climate change treaty to be adopted since the Kyoto Protocol. Since this breakthrough MEPC 63 (March 2012) adopted four important guidelines (resolutions MEPC.212(63), MEPC.213(63), MEPC.214(63) and MEPC.215(63)) aimed at assisting the implementation of the mandatory

regulations on Energy Efficiency for Ships in MARPOL Annex VI.

The EEDI for new ships is the most important technical measure and it aims at promoting the use of more energy efficient (less polluting) equipment and engines. The EEDI requires a minimum energy efficiency level per capacity mile (e.g. tonne mile) for different ship type and size segments. From 1 January 2013, following an initial two year phase zero when new ship design will need to meet the reference level for their ship type, the level is to be tightened incrementally every five years, and so the EEDI is expected to stimulate continued innovation and technical development of all the components influencing the fuel efficiency of a ship from its design phase. The EEDI is a non-prescriptive, performance-based mechanism that leaves the choice of technologies to use in a specific ship design to the industry. As long as the required energy efficiency level is attained, ship designers and builders are free to use the most cost-efficient solutions for the ship to comply with the regulations. The EEDI provides a specific figure for an individual ship design, expressed in grams of carbon dioxide (CO₂) per ship's capacity-mile (the smaller the EEDI the more energy efficient ship design) and is calculated by a formula based on the technical design parameters for a given ship.

Watch

From Lloyd's List Blog 2 August

Craig Eason • Technology is all well and good, but it's the user that has to interpret its message.

Navigation officers today (the Xbox, iPad generation) have higher trust in the technology, but as many old salts who have sailed only with paper charts and the sextant will remark, there still needs to be an eye out of the bridge window. Having said that Stuart Davey has a point about the ability to fly a 747 from London to Singapore, though there is of course still a window in the cockpit for the pilot to look at the clouds.

I've seen huge developments in navigation technology in recent years, with the link with communication becoming stronger and more critical. The concern I have is that there is a lot happening very quickly and training establishments can not keep up so cadets become young navigation officers without a full understanding of what is happening. (I know of cadets that are unable to get proper ECDIS training at their maritime college as the school can not afford one)

I did my cadetship in Plymouth from 1985 and learnt about Decca, Racon, Loran, and other navigation aids that I have long forgotten, never sailed with at sea, or will never see again. Perhaps the latest generation will have the same problem

Simon Robinson MIET • In my opinion and experience, the new navigation officers are far more reliant on electronic 'aids' to navigation than their predecessors. They are also far more adept at their use, however when and if these 'aids' fail they tend to be far less able to use the more conventional instruments at their disposal.

This is of course the natural course of things, and I am sure as the systems become ever more 'intelligent' and backed up by suitable fail safe equipment and procedures safety will be maintained and maybe even 'human error' reduced.

Duncan Jeffcock • Certainly human error is far more dangerous than the possibility of an electronic failure but that said many of the one fingered brigade can barely make a judgement on the info they have access to because they appear to have little or no background training in what constitutes a safe nav watch. The various academies produce substandard low cost personnel for crewing agencies to fill spaces. Then it's left up to the Masters to train them up to a reasonable standard to allow some fitful sleep. Improved technology is terrific, I for one don't want to go back to the days of no internet so long may the progress towards technical excellence continue, BUT the running of the new kit should not take the watch keepers attention away from the primary role of keeping a safe navigational watch. Key word WATCH.

ILO News – Geneva 20 August 2012

The ILO has received the 30th ratification of the **Maritime Labour Convention, 2006 (MLC, 2006)** fulfilling the last condition for the first global standard that spans continents and oceans to go into effect in a year's time.

"This is great news for the world's more than 1.2 million seafarers," said ILO Director General Juan Somavia. "It was a dream of the ILO as early as 1920, and I pay tribute to the international maritime community for having made it a reality."

The MLC, 2006 was adopted unanimously in 2006 but there were two requirements still to be met before it could come into force. The ratification by Russia and the Philippines fulfills the requirement that at least 30 ILO member countries ratify the Convention. The other requirement - that ratifying countries represent 33 percent of the world's gross shipping tonnage - was met in 2009.

Under the MLC, 2006 every seafarer has the right to:

- A safe and secure workplace that complies with safety standards
- Fair terms of employment
- decent working and living conditions on board ship
- Health protection, medical care, welfare measures and other forms of social protection

The 30 countries represent nearly 60 percent of the shipping tonnage. This means that seafarers working on more than 50 per cent of the world's international shipping will be covered by the new Convention. "This is a remarkable achievement," Somavia said. "Not only are these first 30 ratifications drawn from almost every region of the world, but the tonnage level is nearly double the required amount."

The MLC, 2006 establishes minimum requirements for almost all aspects of working conditions for seafarers including conditions of employment, hours of work and rest, accommodation, recreational facilities, food and catering, health protection, medical care, welfare and social security protection.

"Each State is tasked not only with ensuring that ships flying its flag meet the 'decent work' requirements set out in the

Convention, but also with certifying that those ships comply with the requirements relating to labour conditions," said Cleopatra Doumbia-Henry, Director of the ILO's International Labour Standards Department.

This certification will also facilitate inspections of ships. The Convention places great reliance on the system allowing for inspections to be carried out by other countries, known as port State control. There is also a mechanism which records seafarers' complaints, as well as a reporting mechanism which spots failures no matter where a ship travels.

"The maritime labour inspection and certification system is a big step forward by the ILO in taking concrete and specific action to address the very serious problems that arise because of international ownership of ships and the inability of some countries to ensure that their ships meet international standards for quality shipping," Doumbia-Henry said. She added that the industry has been active in implementing the MLC ever since it was adopted and often well ahead of the legal process for national ratification.

The following countries have ratified MLC, 2006

Liberia, Marshall Islands, Bahamas, Panama, Norway, Bosnia and Herzegovina, Spain, Croatia, Bulgaria, Canada, Saint Vincent and the Grenadines, Switzerland, Benin, Singapore, Denmark, Antigua and Barbuda, Latvia, Luxembourg, Kiribati, Netherlands, Australia, St Kitts and Nevis, Tuvalu, Togo, Poland, Palau, Sweden, Cyprus, Russian Federation, Philippines.

When it comes into effect, the MLC, 2006 will replace 37 existing ILO maritime Conventions and related Recommendations adopted since 1920.

For more information

Please contact Jean-Luc Martinage, ILO Press officer at martinage@ilo.org - Tel: 022/799-8046 or communication@ilo.org - Tel: +41(0)22/799-7912

Tags: decent work, seafarer, ILO conventions, sea transport
Regions and countries covered: Philippines, Russian Federation
Unit responsible: Communication and Public Information

In the Arctic

Based on certain estimates, this route could reduce sailing distances and operating costs by 40 per cent as compared with ships that sail between Asia and Europe via the Suez Canal.

Namely, ships heading from Yokohama to Rotterdam travel about

21,000 kilometers if they sail via the Strait of Malacca and the Suez Canal. The Arctic route would shorten their journey to roughly 13,000 kilometers. Moreover, the new route would reduce the sailing time from 31 to 25 days, thus cutting CO₂ emissions from vessels as well.



Marine Garbage Pollution: an International Problem

Marine garbage pollution resulting from the shipping trade is an eminent problem

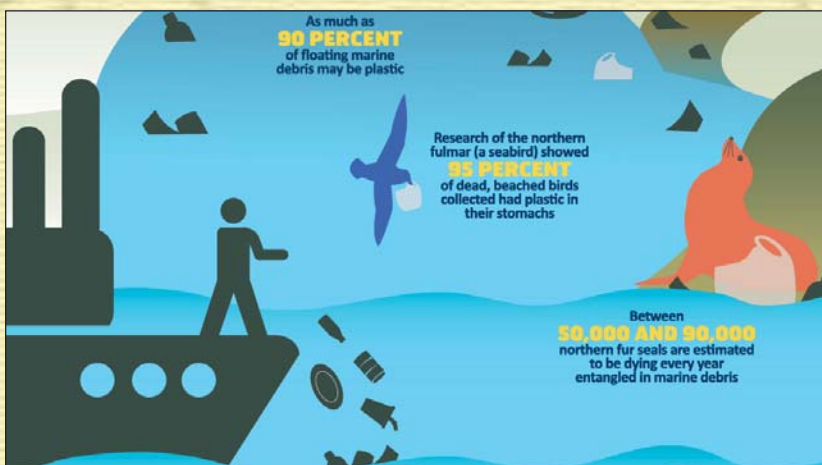


For a very long time it was generally believed that the oceans could absorb anything that was thrown into them. Fortunately this attitude has changed, particularly over the last 30 years or so which coincided with the increase in environmental awareness and scientific research observing the effects of various sources of marine pollution.

Not to be underestimated

Marine garbage pollution resulting from the shipping trade is an eminent problem. It is also an obvious problem, but in certain respects highly underestimated. Garbage from ships can be just as deadly to marine life and human health as oil or chemicals. The latter two receive a lot more attention at a regional and international level because they are more apparent and can quickly become political as a consequence.

Environmental concerns during the 1970s concentrated on the potential for environmentally sound commercial activities. There was a rise in external pressures from various sources, particularly from environmental non-governmental organisations stressing the importance of conservation.



The MARPOL Convention 73/78 is the main international Convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. It is a combination of two treaties adopted in 1973

and 1978, and updated by amendments through the years. Annex V of the Convention deals with garbage.

It is clear that a good deal of the garbage washed up on beaches comes from people on shore - holidaymakers who leave their rubbish on the beach, for instance. But in some areas most of the rubbish found comes from passing ships which find it convenient to throw rubbish overboard rather than dispose of it in ports.

The MARPOL Convention sought to eliminate and reduce the amounts of garbage being dumped into the sea from ships by imposing general rights and obligations on its Member States to ensure that ships flying their flag do not discharge waste into the sea. It also imposes on the States the duty to provide reception facilities in order to adequately dispose of the garbage produced in the course of a shipping operation.

Flaws

Unlike other Annexes of the Convention, the provisions of Annex V address the discharge from ships but do not stipulate the equipment required to do so. This leaves a dangerous technical gap to be filled by Member States as they see fit, particularly by those who safely hide behind their status as "developing nations" and claim they do not have the technological power to fulfil their obligation under Annex V. As a result, the environment suffers.

The technical Annexes to the MARPOL Convention 73/78 can be amended by a simple acceptance procedure called "tactic acceptance". This procedure provides that amendments shall enter into force at a particular time unless before that date objections to these amendments are received by International Maritime Organisation (IMO) from a particular number of States.

The Convention's implementation system has not eliminated risks, especially due to the increased use of "flags of convenience" and the questionable role of some private and very powerful players in the transport industry. Although the Convention embodies rather sophisticated monitoring mechanisms (such as certificates and ship inspections), their implementation is sometimes inadequate. There are several possible reasons for these inadequacies, including the lack of a legally-binding procedure for failure to comply or even of qualified personnel in the State where the flag is registered.

Moreover, the considerable cost of compliance with the MARPOL regulations curbs the desire of many countries to ratify it into their national law. That said, a total of 139 countries are party to the Convention, which represents over 97% of the world's tonnage.

Death by Plastic



It is estimated that between 60 and 80% of marine debris is made up of plastic, and that plastic is accumulating in the oceans because of its disposable nature. Discharging from ships alone has been estimated to contribute around 6.5 million tons of plastic a year. While some plastics can last virtually intact for centuries, recent research has discovered widespread accumulation of microscopic plastic and fibre particles in coastal sediments and pelagic waters, evidently a result of the breakdown of larger items. The environmental consequences of this type of pollutant are not known, but ingestion of such particles by marine species - particularly large mammals such as the humpback whale or the bottlenose dolphin - may result in death.

The MARPOL Convention has been able to mitigate the marine garbage crisis so far. The International Maritime Organisation along with its Member States have set up various technical cooperation committees all over the world in order to better implement Annex V regulations for the prevention of this type of pollution at a regional level.

The industry continues to grow at a fast pace and persistent pollution will have long-term consequences,

the severity of which has not yet been established, but the general concern is the implications of this problem on future generations, and whether the on-going pollution will prevent them from enjoying ocean resources as the previous generations did.

The relatively new concept of intergenerational equity in environmental matters requires us to find ways to ensure that the consequences of our actions for future generations are a regular staple of analysis and decision-making.

In many ways, the rights of the present persons are being viewed as superior to the rights and priorities of future ones. It is important to move towards developing effective and legitimate environmental policies to deal with the complexities of this trans-boundary problem.

The consequences of marine garbage pollution are yet unknown, but it has become clear that continuous unmitigated pollution could cause undesirable changes in biological and economic productivity. This could become more evident, especially in small island states that depend on ocean resources to fulfil their economic social and dietary needs.

Undoubtedly the sustainable and clean use of the ocean should be maintained and reinforced to minimize the risk of unpleasant changes for this generation and for the next ones.

By Sarah Cruz Lima
Sarah Cruz Lima, of the Institute for Shipping and Trade Law at Swansea University, describes the imperfect efforts to curb dumping at sea, a classic case of short-term expediency with clear long-term - hence intergenerational - implications

Source: if.org.uk

Turanor Planet Solar Visits Malta

The Swiss flagged "TURANOR Planet Solar" visiting Malta, and seen berthed at Grand Harbour Marina. Photos : Gaetano Spiteri ©

The Turanor PlanetSolar, also known under the project name PlanetSolar, is the largest solar-powered boat in the world. The vessel was designed by LOMOcean Design, built by Knierim Yachtbau in Kiel, Germany, and launched on 31 March 2010. In May 2012 it became the first ever solar electric vehicle to circumnavigate the globe.

The boat is covered in over 500 square meters of solar panels rated 93 kW, which in turn connect to one of the two electric motors in each hull. Although its hull is capable of hosting 200 persons, the shape of the boat means that it is able to reach speeds of up to fourteen knots. The boat's hull has been model tested in wind tunnels and has been tank tested to determine the hydrodynamics and aerodynamics of the hull.

This 31 meter long boat has been designed to be used as a luxury yacht after the record attempt is finished.

The boat is registered in Switzerland and was financed by a German entrepreneur. Construction cost was € 12.5 million. The name Turanor, derived from J.R.R. Tolkien's novel The Lord of the Rings, translates to "The Power of the Sun".



The Marine Electronic Highway



The Marine Electronic Highway (MEH) Information Technology System for the Straits of Malacca and Singapore, which had been managed by the International Maritime Organization (IMO), has been handed over to the Government of Indonesia in a formal ceremony in Batam, Indonesia, marking the final stages of a demonstration project and the potential move towards a full-scale MEH project in the Straits, under the ownership of the littoral States.

IMO Secretary-General Mr. Koji Sekimizu formally handed over the Batam MEH IT System to Mr. Leon Muhamad, Director General of the Directorate General of Sea Transportation (DGST), Indonesia, during a special ceremony on Friday (3 August 2012), which was also attended by representatives from ministries and agencies of Indonesia, the Local Government of Batam, the Marine Department of Malaysia, the Maritime and Port Authority of Singapore, Ministry of Land, Transport and Maritime Affairs of the Republic of Korea, the International Hydrographic Organization, Nippon Maritime Center and the shipping industry.

"What we are handing over today is a functioning facility that harnesses the power of information technology to assist safe navigation through a defined and limited part of the Straits," Mr. Sekimizu said.

The Batam MEH IT System is one of the major deliverables of the MEH Demonstration Project, which has been under implementation since 2006, funded by the Global Environment Facility (GEF)/International Bank for Reconstruction and Development (IBRD) (World Bank), with IMO as the executing agency. The Republic of Korea, through the Ministry of Land, Transport and Maritime Affairs (MLTM), also provided a grant amounting to US\$850,000, which was used to develop and establish the system.

The overall objective of the demonstration project has been to determine whether a full-scale MEH in the Straits of Malacca and Singapore can be economically justified and made financially feasible. The project is a co-operative arrangement with the three littoral States of Indonesia, Malaysia and Singapore, in partnership with the Republic of Korea, the International Hydrographic Organization (IHO), the International Association of Independent Tanker Owners (INTERTANKO) and the International Chamber of Shipping (ICS).

The geographic boundary of the MEH Demonstration Project extends from One Fathom Bank in the Malacca Strait to Horsburgh Lighthouse in the Singapore Strait, including adjacent coastal provinces/states of Indonesia, peninsular Malaysia and Singapore. This covers the whole traffic separation scheme for the Straits of Malacca and Singapore.

The MEH Demonstration Project has been extended until the end of 2012, so that all its tasks can be completed and technical and financial evaluations of the Batam facility can be carried out. Indonesia now takes on the responsibility for the operation, maintenance and management of the MEH IT System in Batam, while also working closely with Malaysia and Singapore on the regional MEH system beyond the demonstration phase.

Funding from the World Bank has been allocated to Indonesia in order to accelerate the implementation of activities that will enhance the safety of navigation along the Sumatran coast of the Straits of Malacca and Singapore by putting in place the relevant maritime safety infrastructure, not only to provide data to the MEH IT System but also to enhance the monitoring and management of the Indonesian coasts of the Straits of Malacca and Singapore.

"This handover of the MEH IT System to the DGST is a great opportunity for Indonesia to step up as one of the key partners in the establishment of a regional MEH System, together with Malaysia and Singapore," Mr. Sekimizu said.

"We stand here today, not at the end of an initiative, but at the beginning of a wonderful new opportunity to help usher shipping into a new era of safety, efficiency and environmental sensitivity. For me, the development of the maritime infrastructure and the move towards new and improved ways of achieving enhanced navigation and traffic control are among the pillars of sustainable maritime development," Mr. Sekimizu said.

"I firmly believe that the Marine Electronic Highway can be a great success – indeed, that it can provide a blueprint for similar schemes in other parts of the world; and that, collectively, they can have a massive beneficial effect on our global society which depends so much on the safe, secure, efficient and green carriage of trade, by sea", Mr. Sekimizu said.

It is anticipated that the next steps in the creation of the MEH will involve Malaysia and Singapore establishing MEH Data Centres to house and operate MEH IT Systems similar to the Batam MEH IT System, in order to establish a regional network, to be called the MEH System.

The Marine Electronic Highway of the Straits of Malacca and Singapore

The Straits of Malacca and Singapore, situated between Sumatra and the Malay peninsula, are approximately 1,000 kilometres long, 300 kilometres wide at their north-

west entrance, and just 12 kilometres wide at their south-east entrance, between Singapore and Indonesia's Riau Archipelago.

The Straits are shallow, with narrow channels, irregular tides and shifting bottom topography, and hence are hazardous to navigation for large ships. Despite their difficult navigational features, the Straits are the shortest and hence the preferred shipping route between the Indian Ocean and the South China Sea, and for oil tankers trading between the Persian Gulf and East Asia.

The MEH system has both maritime safety and environmental modules. Its environmental modules can be used in marine pollution response and control, for example, to predict the direction and speed of oil spills, and thereby assist in response and clean-up operations. It is also possible to use it to identify and track ships that illegally discharge their bilges or dump other oily wastes.

How do you Raise the Environmental Awareness of Seafarers?

The Nautical Institute, GlobalMET, and World Wildlife Fund have joined forces with Maritime Training Services to raise the marine environmental awareness of seafarers by developing a **series of posters** depicting **sensitive sea areas** frequented by ships and the associated environmental and marine life features.

There is a tradition on many ships whereby a **wide area chart**, pinned up in the crew quarters, is updated with

a noon position in order to give the crew an awareness of where they are along the voyage.

Such a chart could be **augmented with educational environmental information** that could raise the crew's awareness of when they were operating in these areas. They may then be persuaded to **better manage onboard recycling** and to manage the legal dumping and discharge of waste to **reduce the environmental impact**.

The **Sargasso Sea** was chosen as the first project and the poster/chart is completed and available for distribution to vessels. Orders and expressions of interest have already been received for almost **1000 posters** - with special thanks to **Anglo Eastern Ship Management** and **BW Gas** for their early support.

- Cost: **\$10** + shipping
- **100%** of the profits donated to GlobalMET for the production of future posters
- Designed and distributed by **Maritime Training Services**
- Future poster designs to feature the **Mediterranean Sea**, **Baltic Sea**, and the **Coral Triangle** in South East Asia

For more information or to purchase the poster please visit: www.maritimetraining.com/Product/Sargasso-Sea-Poster

SARGASSO SEA
Track your ship's passage through this highly sensitive sea area - aim for clean ships and healthy seas - nothing over the side.

Humpback Whale
These humpback whales migrate up to 20,000 kilometres per year to breed in the waters of the Sargasso Sea. In the event of a pollution spill, the whales are at risk of ingesting oil and other pollutants. They are also at risk of being struck by ships.

Sargassum Weed
Life in the Sargasso Sea is often disrupted by pollution. Oil and other pollutants can block the sunlight that the Sargassum needs to grow. This can lead to a decline in the number of Sargassum plants and the animals that depend on them for food.

Flying Fish
Flying fish are found throughout the Sargasso Sea. They are often seen leaping out of the water to escape predators. Flying fish are also important prey for many seabirds and marine mammals.

Sargassum Anglerfish
Sargassum anglerfish are found in the Sargassum. They are a type of deep-sea fish that use bioluminescence to attract prey. They are also important prey for many other marine animals.

Navigating Cleaner, Healthier Seas
This poster is intended to alert seafarers about the sensitive nature of the Sargasso Sea, which is a highly productive area. The Sargasso Sea supports many unique and endangered species and some are found nowhere else. These plants and animals are suffering from illegal fishing, pollution and garbage dumped from ships. Help preserve the Sargasso Sea, the heart of the area and stop it from being used as a dumping ground for waste. Regularly maintain your ship, especially oil and plastics. For further information, or to contact us, please go to: www.sargassosea.com

Logos: Bormuda, SARGASSO SEA ALLIANCE, The Nautical Institute, GlobalMET, WWF, MTS Maritime Training Services.

You can Teach Old Sea Dogs New Tricks

From entries on the [Linked In Maritime Education and Training - MET Network](#) -

SukernaAmirapu • Dear Richard, You have made a valid point - how can non-competency based professionals clearly understand, appreciate, internalise and implement a system of competence that is totally foreign to their endemic systems? You are clearly a fore-runner amongst current practicing professionals, who is not afraid to speak his mind. Everyone talks about the 'need for change' but nobody seems to be ready to implement this change. My comment is based on what I have documented over the last 10 years (apologies for not going beyond that time span). Hope you are able to convince other colleagues of yours about HOW to do this instead of trying to talk about this topic. (you often refer to Globalmet, considering you are one of their founder members). Those of us who have had current/recent hands-on experience in managing on-board resources do realise that most 'experts' in this field are quite antiquated and far removed from the realities of industry needs today. I would welcome your further views on this topic of Competence-based Training. Kind regards/SukiAmirapu

Capt Richard Teo • Billy etal, Teaching standards in most 1st world countries are very stringent and Teachers take on far more roles than in the past. Also teaching itself is not enough so the many ways in which teaching is practised must be suitably transferred to all who train, coach, mentor, lecture and so on.

The "teacher" in maritime is the most important person in any training environment , ashore and afloat, and must facilitate the learning, and assessment strategies, which fundamentally encompasses at least the following:

1. design and promulgate learning and assessment programmes for the requisite competence(s) - resources, tools, monitoring, verification, validation, fairness and so on.
2. Ensure and provide best practice - covers multitude of reqs, as in effective communications, manage the learning and environment - complete tool kit and useage.
3. Provide learning and assessment resources and manage these effectively.
4. Be competent and leaderfull in transferring knowledge, imparting sound practical skills and ethical/safe work practices.
5. Have equity, fairness, and dedication. Dont just walk in walk out as many do.
6. Many so-called "teachers" and "examiners" are unaware that a "contract" exists between learner and teacher/assessor and that there must not be any secret questions or tasks. The contract means that the assessor cannot pull out anything from his/her bag of tricks to catch the assessee unawares. Every

assessment must be fully explained to the assessee and to what degree of expectation is required to achieve the competence.

There are many more principles which I provide and transfer in my training programmes for maritime teachers/trainers and other VET disciplines. One of which is no grades to be used as each competence must be 100%. So if you leave one item out of a minum 10, you have not yet achieved the competence and then judged as "not yet competent". The assessee must request another assessment to cross the bar. CBTA can be very taxing but it is rigorous and ensures that each assessee meets the standard of practice in industry and as regulated by Flag States.

Trouble is many Flag States have sub standard examiners(non assessors), not so much as in their professional knowledge/competence but lack examination/assessment skills and competence, unless they have been suitably trained and assessed themselves.

Peter Woods • Like Billy I teach in a Maritime Centre, part of a University and have had to obtain my Post Graduate Certificate of Education leading to becoming a Member of the Higher Education Academy. At present I am also working towards a Masters in Learning and Teaching in Higher Education.

In my PG Cert my dissertation was "From Trainer to Teacher". During my 42 years at sea, including Naval Reserve Service I carried out much in the way of "training" but did that qualify me as a "teacher", I think not. However the time at sea definitely did enable me to look closely at the "competence" of my officers, crew and students. On assessing student competence on maritime courses today one of my assessment criteria remains "would I go to sleep peacefully at night with that student on the bridge alone on the 12-4 watch?"

Training for Instructors should be mandatory and ongoing. New Instructors should have a Teaching Qualification, "Train the Trainer" Course and additional training in relevant subjects or equipment as their teaching career progresses. As a Simulator Manager/Senior Lecturer since leaving the sea I have continued with CPD in the worlds of simulation, teaching and training.

The use of simulation now enables far better assessment of student competence than did lectures and exams previously. However there is still a place for all in teaching and training today.

In Maritime Teaching and Training today "You can teach old sea dogs new tricks".



Global Maritime Education & Training Association

GlobalMET Limited

Australian Company Number 103 233 754

www.globalmet.org

Chair:
New Zealand Maritime School
2 Commerce Street
Private Bag 92068
Auckland
New Zealand

Executive Secretary:
Rod Short
P O Box 307 Waikanae
Kapiti Coast 5250
New Zealand
rod.short3@gmail.com

Secretariat

P O Box 307 Waikanae
Kapiti Coast 5250 New Zealand
Tel 64 4 905 6198 Fax 64 4 905 6190
rod.short3@gmail.com

B III 3276 Vasant Kunj
New Delhi India 110070
Tel 91 11 26124221 Fax 91 11 26894188
secretariat@globalmet.org