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BULLETIN

VOLUME 110
APRIL 2015

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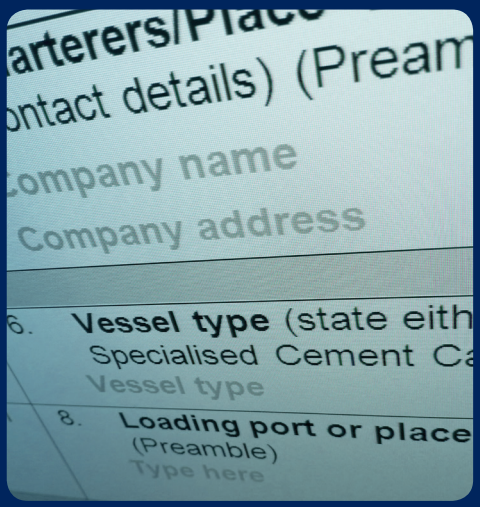

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Details of publication dates and deadlines for advertising may be obtained by applying to the Editor.

ISSN 0901-814X.

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Printed in compliance with
Enviromental Certificate DS/ES ISO 14001

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Keeping people in charge

Do computers empower their users, or do they distance them from the reality of hands-on practice?

It is a question that is wholly relevant to the marine industry, with each successive generation of ships becoming more electronically sophisticated than its predecessor. It is a topical question too, the turn of the year seeing widespread debate about the new book *The Glass Cage*, in which author Nicholas Carr suggests that users are effectively losing certain valuable skills to those helpful computers in their workplaces.

He does not directly engage with the marine sector, but in both aviation and medicine, there are uncomfortable parallels with marine practice in the increasing reliance of man upon machine. And while the machine is functioning perfectly, as it does most of the time, the operator, who once was fully active in the processes, becomes a monitor, the busy computer carrying out all the tasks he or she once undertook, allegedly "freeing up" the operator to do other subordinate tasks.

But if something goes wrong, it may well be that the operator, distracted by the task which had taken him away from the main function, will be ill-prepared to deal with the emergency. Of even greater concern is that he is used to the computer undertaking all the action, so he may react in an inappropriate fashion and make the situation infinitely worse.

We can see an example of this in aviation, where a flight deck crew no longer "fly" the aircraft and have feedback from the controls. On occasion, most notably with a large aircraft which crashed in the Atlantic, they may have no spatial awareness of the reality of the situation when called upon to take over from the computers. In the world of medicine, the problem of a physician focusing upon the computer, rather than the symptoms exhibited by the patient, is an illustration of a relationship between man and machine that can actively, it is asserted, cause harm.

In the maritime world, there is nothing new about complaints that people are over-reliant upon equipment that is designed to do the job better than they can. There have been concerns about technical advances "de-skilling" people – a century ago there were complaints in professional journals about the "new-fangled" automatic pilots making it difficult to find a good helmsman to steer the ship in canals, and in and out of port! Since then, in succession, we have had "radar-assisted" collisions, over-reliance on satellite navigation, accidents caused by misunderstanding over VHF conversations between ships in close proximity, troubles brought about by the misuse of automated identification systems and now all manner of concerns about the implementation of electronic navigation equipment and the increasingly sophisticated equipment in the engine room.

There is a certain common thread to these difficulties that have led to such a great deal of mangled metal and wrecked machinery down through the years. There may or may not have been adequate training in the particular use of the new devices, but even when proper training has been provided, this may not have given the user an adequate understanding of the way in which the overall task has been changed and how new procedures and equipment must now be integrated into the ship's normal safety regime.

The US National Transportation Safety Board, which investigates accidents in all modes of transport, has identified "distraction" as a major problem and the contributor to accidents in every form of transport. This manifests itself in a number of very familiar ways. The fact that the ship is sailing along its computer-generated track, with all apparently in order, allows the officer of the watch to get on with some important paperwork, or chart corrections. There

is a sense of security; the lookout might be sent off on some other task, and such is the degree of concentration that the warning signals are not seen until too late. The "post-mortem" reveals that because the navigational system never went wrong before, it was assumed it never would, and the requirement to check the situation by alternative means was regarded as something of a waste of time. "Complacency" might be a verdict encapsulating the incident, which might have been a grounding or collision, but "overconfidence leading to the neglect of first principles" could be more revealing.

Young and old, inexperienced and expert, all would appear to be vulnerable to the apparent ease conferred by the computer. The young have grown up with their "devices", are fearless in their apparent familiarity with complex systems and may fail to see the relevance of all the cautionary advice to check everything. The computer never goes wrong, so they may not see the point of using alternative means, such as looking out of the wheelhouse windows to identify the buoy or the small boat that has eluded the radar. The instruments can be relied upon, so there is no need for a visual check around the engine room, to feel bearings that might be running hot, listen for strange vibrations or sniff for the first signs of smoke, all of which would have guided the routines of earlier generations.

The older officer, trained in a less automated age, might be bewildered by the new equipment, over-reliant on the youngsters' apparent skills with keyboards, but unable to detect when this has been misplaced.

This equipment is not going to go away, so how do the people who operate it do so with greater safety, having recognised the snares and pitfalls into which these clever machines can lead the unprepared? Training would appear to be the solution, not merely functional training in the respective equipment, but education in the correct approach to its use. More use of simulation, in the assessing of both techniques and behaviour, has been suggested as a useful tool for improvement, enabling faults to be identified and ironed out in a painless manner. The use of navigational auditing, in which voyage data recorder records are scrutinised in "surprise" inspections, may identify bad habits, non-conformities or areas which need correction.

It might have taken rather too long, but it would seem that there is a growing realisation that people cannot be expected to cope with technological changes just by "getting on with it". Those who make this clever equipment, for land, sea or air, need to consider its "user-friendliness" at the same time as its functionality. "Human-centred design" ensures that people remain in charge of the machinery!

Under the "cascade"

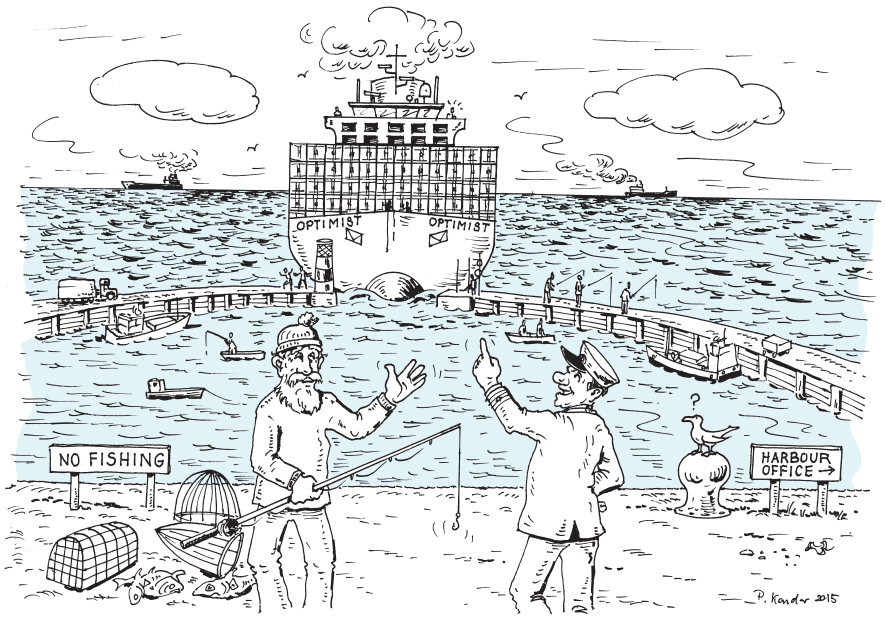
These are exciting times in the liner trades, with practically each new month revealing a "world's biggest" container ship arriving from East Asia to a fanfare of publicity.

The sheer size and scale of these ships and the spectacle they provide to the general public should be welcomed for the "awareness" they raise. Goodness – all our goods don't come by aircraft, after all!

The arrival of the giant ships in the main hub ports of Europe and the East is also a signal that scale economics are being applied in other parts of the world, with the displacement of rather smaller ships to new routes. The term "cascading" has been coined for this process in which almost every route sees an increase in the capacity of ships operating it. It is probably good news for shippers, who can make use of the capacity and keep unit prices down. It may be rather less welcome for port and terminal operators, who will have to move fast to accommodate their next generation of ships. It might appear to be an easy decision to shift a mainline ship to a secondary route – less so for the port or terminal operator, who has to cope with the new dimensions, with demands for everything from deeper water to bigger cranes.

There is, of course, more to this "upscaling" than the ships which are the focus of so much attention, with excited articles speculating on just how far this process might take the industry. Will we really see 24,000-TEU ships turning up with containers 11 high on the hatches and 25 boxes across?

Perhaps rather more to the point is how the logistic chain that will accommodate these huge container exchanges in the major hub ports can be strengthened. Can the roads cope with the 2,500 trucks which must arrive and depart from a major port to service just one mega-ship? Can the railways find the track space for the additional trains? Are there berths for the barges, slots for the feeders? Bigger ships exchanging far more boxes in a single call challenge everyone right down that logistics chain, from the terminal onwards.



"I think their cascading might have been a trifle optimistic!"

BY LAURA WANG

BIMCO welcomes a delegation from Shanghai Pudong

On 15 January, BIMCO House welcomed a dedicated delegation from Shanghai Pudong Government which consisted of five Chinese governmental officials from Economic and Information Technology Commission of Shanghai Pudong New Area, International Shipping Service Department, China (Shanghai) Pilot Free Trade Zone Administration, and Lujiazui Finance & Trade Zone Administration respectively. The objective of this visit was to examine the existing co-operative plans with BIMCO and explore new ones.

The BIMCO team, headed by Mr Søren Larsen, the Deputy Secretary General, warmly received the delegation. Mr Larsen took this opportunity to express sincere gratitude to Shanghai Pudong for the unwavering support to BIMCO, among other things, since the establishment of BIMCO Shanghai Office back on 25 February 2013. Mr Zhang Ai Ping, Deputy Director of the Commission, highly appreciated the vital role that BIMCO played, and he was very impressed by BIMCO's great contribution to the world shipping industry. As far as he is aware, now BIMCO Shanghai Office has been widely recognised as one of the most influential shipping associations in China, namely, it enables members to gain timely access to BIMCO's professional services, ranging from operational, legal, technical and security to educational arenas. On top of that, BIMCO Shanghai office promoted constructive communication between the Chinese shipping community and the international stakeholders.

Mr Ma, the Chief Officer of shipping service department, explained that as the largest container port in the world for four consecutive years, Shanghai reached the container throughput of 33.773 million TEU in 2013. Frankly speaking, Shanghai has one of the best shipping infrastructures and cargo outputs in the world. However, it is still lagging far behind in terms of the advanced shipping services when compared with other maritime hubs. Therefore, Shanghai will endeavour to develop its shipping service industries where BIMCO is well known for shipping trade, shipping finance, consultation, education and marine technology.

As Mr Ma explained, Shanghai has plans to become an international finance and shipping centre by the year 2020, a date set by the State Council. In following this path, Pudong is taking its place at the forefront of Shanghai's shipping industry. Over the past five years, the Ministry of Communications and Shanghai Municipal Government has invested tremendous manpower as well as resources to speed up the progress of such development. The local government encourages all experts with a relevant economic or shipping background to conduct in-depth studies on the necessity, urgency, developmental strategies and targets of the programme. In this respect, Mr Zhang highlighted that BIMCO could help the Chinese shipping industry boost their voice on the world stage, particularly regarding international shipping standards and trade rules.

Diverse topics were discussed during the meeting, including the free trade zone, smart cities, the significance of how to develop shipping services and shipping finance, among others. Both parties touched upon the possibility of hosting the BIMCO Annual General Meeting 2016 in Shanghai, subject to the decision made at BIMCO's upcoming Board of Directors (BoD) meeting in Edinburgh this June. It was recalled that BIMCO hosted its 2001 AGM in Beijing, which turned out to be a great success.

Mr Larsen elaborated on the current relationship between BIMCO and China. At present, BIMCO has one Chinese BoD member, Mr Li Zhen from SINOTRANS&CSC Group, together with 20 other members from various big shipping countries as per BIMCO's membership contribution. Meanwhile, Mr Sun Jiadi from COSCO was chosen as one of the working group members for the NYPE 93 revision project. BIMCO also invited a bank representative from Industrial and Commercial Bank of China as one of the shipping finance working group members, together with four other banker representatives from different countries. For this project, it was expected that the first meeting would take place this March.

Both parties believe that it is mutually beneficial to maintain a close dialogue and cooperate in many aspects, including conferences, seminars and educational events. After the meeting, Laura Wang, one of BIMCO's new staff members, accompanied the Pudong delegation on a visit to the Danish Shipowners Association.

Welcome to BIMCO!

BIMCO would like to extend a warm welcome to the following new members, admitted during the period from 1 December 2014 to 28 February 2015.

Owner Members

Shanghai, China	Pacific Glory Shipping Pte Ltd
Shandong Province, China	Tongli Shipping Co., Ltd
Singapore, Singapore	OMC Shipping Pte. Ltd.
Singapore, Singapore	Vale International SA
Amsterdam, The Netherlands	ASM Maritime B.V.
Lagos, Nigeria	Hudson Pacific Energy Limited
Istanbul, Turkey	Armador Ship Management Co. Ltd.
Sharjah, United Arab Emirates	Infiniti Marine International FZE
London, United Kingdom	Sovereign Global UK Ltd
Stamford, Connecticut, United States	Sea Trade Holdings Inc
Newport, Rhode Island, United States	Phoenix Bulk Carriers

Broker Members

Humble, Texas, United States	Panalpina, Inc.
Balzan, Malta	Bluhull Marine Agency
Dubai, United Arab Emirates	Trans Maritime Carriers Fze
Dublin, Ireland	Irish Shipbrokers & Chartering Ltd

Agency Members

Guayaquil, Ecuador	Citikold S.A. Shipping Agency
Port Said, Egypt	Elephant Marine Services Co.
Tehran, Iran	Petroasia Shipping Agency
Instabul, Turkey	Netship Agency Co. Ltd.
Dubai, United Arab Emirates	Tehama Shipping Services co., LLC
Vancouver, Canada	Empire Shipping Agency Ltd
Anchorage, Alaska, United States	Alaska Maritime Agencies
Pasadena, California, United States	General Steamship Corporation, Ltd.
Philadelphia, Pennsylvania, United States	General Steamship Corporation, Ltd.
Chennai, India	Infinity Shipping Pvt Ltd

Associate Members

Dubai, United Arab Emirates	DA-Desk FZ-LLC
Tallinn, Estonia	Estonian Maritime Academy of TUT
Limassol, Cyprus	Four Shield Solutions Ltd
Bristol, United Kingdom	Citadel Maritime Limited
Athens, Greece	Aspida Maritime Security Corp.
Sao Paolo, Brazil	MTS Do Brasil Ltd

BY PETER GRUBE

An insight into BIMCO's live courses and seminars

BIMCO's education team continues to travel the world on a mission to keep up professional standards, with our carefully selected courses and seminars. Read more about our recent visits to Aberdeen, Genoa, Hong Kong, Rotterdam, Antwerp and Dubai.

Full house in Aberdeen on SUPPLYTIME

"Using SUPPLYTIME" seminar has been conducted worldwide by BIMCO since 2009 and is intended as a guide to issues arising in time chartering ships for work in the offshore industry. Although the seminar is based on BIMCO's SUPPLYTIME forms, the speakers are all independent of BIMCO and also discuss other forms in the marketplace and some possible amendments and/or rider clauses to the SUPPLYTIME form. Two special case studies on SUPPLYTIME are part of the programme. With 43 participants from a wide spectrum of the offshore industry, we had a full house in Aberdeen.

Trading and Carrying Goods by Sea, Genoa

Most other BIMCO workshops are designed to examine specific aspects of international sales, insurance or carriage, but the aim of this workshop is to consider the situation as a whole. The close links between the sale contract, the insurance contract and the carriage contract will be examined in presentations and case studies to see why and how the various documents which are customarily issued interrelate. Each aspect of the arrangement (ie the cargo sale, the cargo insurance and the carriage contracts) is considered both separately and in relation to the other relevant aspects.

BIMCO Masterclass on Time Chartering, Hong Kong

As one of the "classical" subjects on the Masterclass agenda, time chartering is always well attended. The Masterclass in Hong Kong was covered by the Hong Kong Maritime and Aviation Training Fund, which no doubt contributed to a good turnout of 32 participants. The Masterclass is conducted by a local team, consisting of Philip Yang and Andrew Rigden-Green from Stephenson Harwood, Hong Kong.

New Masterclass on Project and Heavy Lift, Rotterdam

Apart from the practical considerations and the important voyage planning that arise in relation to heavy-lift cargoes, there are also some very specific and distinct contractual needs in this trade. To assist those entering into charter parties for project and heavy-lift cargoes in identifying suitable terms to govern their contracts of carriage, BIMCO has produced a range of documents, including HEAVYCON 2007, HEAVYLIFTVOY, TOWCON 2008/TOWHIRE 2008, PROJECTCON and BARGEHIRE 2008. However, there are significant differences in their application and use, and often, a project will involve using several of the contracts in combination.

The first Masterclass took place in Rotterdam in November 2014 with 32 participants registered. Further Masterclasses will take place in Singapore from 23 to 25 March and Houston from 26 to 28 October 2015.

BIMCO Masterclass on Bills of Lading, Antwerp

"A bill of lading is a document of dignity, and courts should do everything in their power to preserve its integrity in international trade, for there, especially, confidence is of the essence."

The famous (at least in shipping circles) words by Judge Woolsey from The Carso case back in

The new BIMCO Masterclass on Project & Heavylift in Rotterdam. Case studies on real scenarios are an important tool for giving context to participants.

Stephen Mackin from Eversheeds LLP presenting at the BIMCO Masterclass on Agency in Dubai from 10-12 February 2015.

Ian Perrott from E.R. Offshore, Hamburg taking the participants in Aberdeen through the commercial aspects of working with SUPPLYTIME 2005.

1930 still echo when we conduct the BIMCO Masterclass on Bills of Lading. The Masterclass deals with a range of issues and problems relating to the use of this essential document. Representing a broad spectrum of the industry, the case studies are particularly useful in discussing the different needs and requirements each side may have.

BIMCO Masterclass on Agency, Dubai

The Agency Masterclass included a number of presentations and case studies with direct relevance for the ship agency industry. It also provided an ideal opportunity for the 26 participants to discuss current issues, as well as network.

Participants at the BIMCO Masterclass on Bills of Lading in Antwerp working hard on one of the case studies.

We are delighted to announce that Peter Grube has now been with BIMCO for 25 years!

Many readers will know Peter from his career with BIMCO and have met him on his travels round the world to various conferences, courses and meetings.

There will be a small reception at BIMCO House on 16 April 2015 to celebrate Peter's tenure and he is contactable at *pg@bimco.org*.

Ongoing IMO shipping issues

After the winter break, BIMCO participated in the second session of the International Maritime Organization (IMO)'s Sub-Committee on Pollution Prevention and Response (PPR 2) and the second session of the Sub-Committee on Human Element, Training and Watchkeeping (HTW 2). This article gives a brief overview of the most important items that were discussed at the two meetings.

PPR 2

The Sub-Committee on Pollution Prevention and Response (PPR 2) deals with environmental-related matters in addition to its traditional work on bulk liquid cargoes. PPR 2 took place at the IMO in London, from 19 to 23 January 2015.

Emissions of black carbon

The Marine Environment Protection Committee (MEPC) has tasked PPR 2 with continuing the discussions on the impact on the Arctic of emissions of black carbon from international shipping. A definition of black carbon was still needed, which should make it possible to identify appropriate methods for systematic measurements of black carbon emissions. This could then form the basis of possible new requirements.

Following long discussions, a technical description of black carbon was defined. The definition is widely supported by the scientific community and permits different types of measuring methods. It does not exclude some forms of black carbon, as other definitions do. Most importantly, the definition does not specifically limit the technology or instruments that could be used to measure black carbon. Instead it defines properties that instruments need to be capable of measuring.

At the meeting there were different expectations for the use of the new definition. It was therefore proposed to initiate further studies in order to gain better experience of applying the definition and of measurement instruments, and to enable a comparison of the measurement methods.

Wash water from scrubbers

PPR 2 finalised a calculation-based method determining the pH value of the wash water discharge from scrubbers according to the 2009 Guidelines for exhaust gas cleaning systems (IMO resolution MEPC.184 (59)). The current criteria is a pH value of no less than 6.5, 4 metres from the discharge outlet. It requires this to be verified by physical measurement when the ship is not moving, and this is obviously inconvenient. It is very difficult to test the engine at full load when alongside in ports, and PPR 2 have discussed a calculation-based methodology as an alternative method.

PPR 2 further agreed to review the 2009 Guidelines wash water discharge criteria two years after adoption in order to ensure they are relevant and correct. It was agreed that any future changes made to the 2009 Guidelines would only apply to new installations.

The reader should note that the 2009 Guidelines are relevant to exhaust gas cleaning systems under both Scheme A and B ("Scheme A" – initial certification of performance followed by periodic survey with parameter and emission checks to confirm performance in service; and "Scheme B" – performance confirmation by continuous monitoring of emissions with parameter checks).

Prevention of air pollution from ships

PPR 2 considered amendments to the Bunker Delivery Note (BDN) declaration and any possible need for consequential amendments to Regulation 18 of MARPOL Annex VI on Prevention of Air Pollution from Ships. The provisions aimed to clarify that non-compliant fuel could be supplied to a ship if, for example, a scrubber system is installed onboard as being an equivalent solution according to Regulation 4 (Equivalents).

Following extensive discussions, an agreement could not be reached, although all the participants agreed on the necessity to develop new text to clarify the issue. Many of the delegates argued that the fuel oil supplier should be obliged to declare that the oil delivered to the ship is in full compliance with the MARPOL regulations when burned in the systems installed on board. Such a declaration would, obviously, require in-depth knowledge by the fuel oil supplier of all systems, and this was seen as being unrealistic. BIMCO, therefore, together with other delegations, argued that the BDN declaration should require the fuel oil supplier to confirm that the fuel oil supplied complied with Regulation 18.3 of MARPOL Annex VI only, and be in accordance with the BDN.

Carriage of used cooking oil

MARPOL Annex V relates to the disposal of cooking oils. PPR 2 had long discussions on this issue, and the views were divided. Some Member States held the view that used cooking oil should only be discharged to a reception facility or be incinerated. Other Member States argued that fuel blending of such used cooking oil should be considered an appropriate solution, if the Garbage Management Plan contained instructions for such operations. PPR will continue the discussions at the next meeting in spring 2016.

2015 Pollution Prevention and Response Sub-Committee. (Photo: International Maritime Organization*)*

Until agreement is reached on the disposal of used cooking oil, ships should continue to comply with the appropriate requirements in MARPOL Annex V.

Offshore Support Vessels Chemical Code
PPR 2 continued its work on developing a draft Code for the Transport and Handling of Limited Amounts of Hazardous and Noxious Liquid Substances in Bulk in Offshore Support Vessels (OSV Chemical Code) and re-established the correspondence group to finalise the text.

The aim is to develop a consistent regulatory framework for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels, with a single certification scheme for these types of ships.

Ballast Water Management (BWM)
PPR 2 agreed on a number of amendments to the guidance on ballast water sampling and analysis (BWM.1/Circ.42). It was noted that a new indicative analysis method is currently being developed, and this may call for further assessment during a two- to three-year trial period for Port State Control (PSC) and sampling. PSC will refrain from detaining a ship or taking criminal sanctions in the event that a Ballast Water Management system (BWMS) does not meet the discharge standards. This will allow time for PSC to determine which sampling and testing techniques work in practice and will also allow the industry to identify any further problems associated with the operation of type-approved BWMSs.

PPR 2 in principle agreed to develop a "Harmonised procedure on exemptions under Regulation A-4" to ensure that exemptions are granted in a consistent manner without risking damage to the environment, human health, property or resources. Exemptions may be:

- granted to a ship or ships on a voyage or voyages between specified ports or locations, or to a ship which operates exclusively between specified ports or locations

- effective for a period of no more than five years subject to intermediate review and granted to ships that do not mix ballast water or sediments other than between the ports or locations.

Such exemptions shall be recorded in the Ballast Water Record Book.

A face-to-face meeting of the correspondence group established which has been tasked to amend the Guidelines for the approval of ballast water management systems (G8) was held during the PPR 2 meeting.

The members of the correspondence group recognised that the fundamental principle of the G8 Guidelines will have to fully comply with the BWM Convention. They further noted that there may be operational difficulties for certain BWMSs that operate within specific physical parameters, such as, but not limited to, extreme low temperatures, fresh water, variable flow rates or high temperature.

Several uncompleted proposals have been tabled, and they may provide some suggestions of a route forward to ensure the continued efficacy of a BWMS when in service. The meeting was not an official part of PPR 2, and the work will continue at MEPC 68.

Inventories of hazardous materials
The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships was adopted in May 2009. So far, only three countries have ratified the Convention, so we are still a long way away from the needed 15 States, representing 40% of world merchant shipping by gross tonnage. As per December 2014, Congo, France and Norway have ratified the Hong Kong Convention.

In accordance with the Convention, ships will be required to carry an inventory of onboard hazardous materials (IHM) specific to each ship. Some time ago, BIMCO and other industry organisations called for the need for the development of threshold levels and exemptions applicable to the materials which are to be listed in the IHM.

The work on developing the threshold values and exemptions was finalised at this session of PPR. A number of amendments to the Guidelines regarding the development of the IHM have been prepared and will be sent to MEPC 68 for adoption.

One of the issues which has caused a lot of discussion was a threshold level for asbestos of 0.1%. As an interim measure, 1% is allowed if properly recorded in the IHM. The 1% should no more be used five years after the entry into force of the Convention. The IHM will be mandatory to carry as soon as the Convention enters into force and sooner for ships calling into European ports.

BIMCO as well as other delegations expressed concern that the inclusion of the revised threshold values and the footnote explaining the revised value on the Form of Material Declaration may conflict with the general ban on the installation of asbestos under SOLAS (SOLAS II-1/3-5), and that this may result in confusion throughout the equipment supply chain. PPR 2 did not come to any conclusion on the concerns raised by the industry.

The Human Element, Training and Watchkeeping (HTW) Sub-Committee

The Sub-Committee addresses issues relating to the human element, which through certification, training and watchkeeping set the minimum standards of competence for seafarers focusing on maritime safety, security and environmental protection. HTW 2 took place at IMO, London from 2 to 6 February 2015.

Polar Code

HTW 2 agreed on additional training for deck officers who operate in the polar areas as defined in the Polar Code. The training requirements will be written into Chapter V, Standards regarding special training requirements for personnel on certain types of ships, of the Standards of Training, Certification and Watchkeeping (STCW) Convention and Code. There will be two levels of training: basic and advanced. A certificate for ships operating in polar waters will be issued to deck officers who have finished the training. The certificate will have to be renewed every five years.

See Table 1.

Revision of fatigue guidance

The 94th session of the Maritime Safety Committee (MSC 94) agreed to review MSC/Circ.1014 on Guidelines on fatigue mitigation and management and assigned the HTW as the co-ordinating organ. The HTW 2 gave preliminary consideration to the new agenda item. The work should be completed over the next two sessions of the Sub-Committee.

The HTW 2 agreed that the review of the guidelines on fatigue should be holistic, taking into account a risk-based approach and the impact of fatigue at all levels, and that the outcome should provide practical tools for shipboard fatigue management.

Electronic Chart Display and Information System (ECDIS) training

The HTW 2 endorsed ECDIS training and the use of simulators as laid out in the draft MSC circular on ECDIS – Guidance for good practice, which will be sent for approval by the next session of the MSC. The guidance includes advice on how to address operating anomalies, as well as how to maintain the ECDIS.

Guidelines for Port State Control Officers (PSCOs)

The HTW 2 endorsed a draft set of Guidelines for PSCOs on the International Safety Management (ISM) Code. Guidance to PSCOs is provided to harmonise the application of related technical or operational deficiencies found in relation to the ISM Code during a PSC inspection. The Guidelines will be sent to the Sub-Committee on Implementation of IMO Instruments (III) for review. After this it is expected that the MSC 96 and the MEPC 69 will consider them for final approval and adoption.

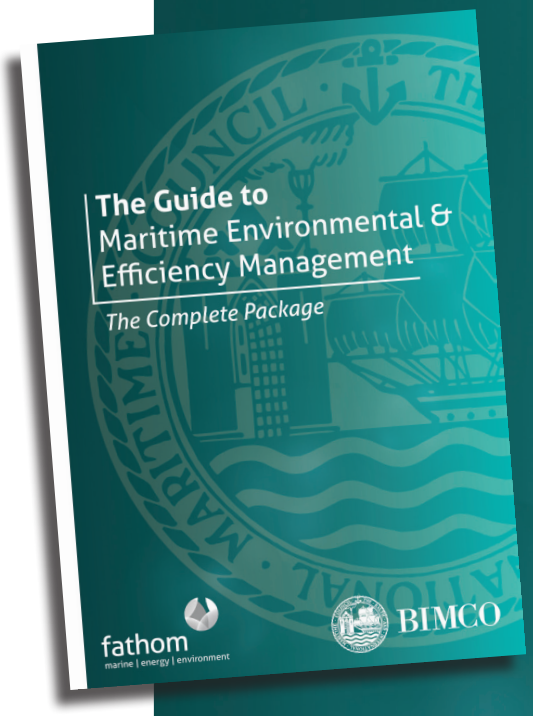
Guidelines in relation to the carriage of dangerous goods in packaged form

The HTW 2 endorsed training provisions via a draft MSC Circular on Guidelines on consolidated IMO provisions for the safe carriage of dangerous goods in packaged form by sea. The guidelines are aimed at organisations responsible for the provision of suitable training of personnel involved with the transport of dangerous goods in packaged form by sea to ensure that the requirements of existing IMO instruments are met. (AFS)

Table 1: Training should be addressed on basic and advanced levels as follows:

Ship name	Tankers	Passenger ships	Other ship types
Ice Free (no ice present)	Not applicable	Not applicable	Not applicable
Open Waters (ice coverage below 10%)	Basic training for Master, chief mate and officers in charge of a navigational watch	Basic training for Master, chief mate and officers in charge of a navigational watch	Not applicable
Above Open Waters (ice coverage above 10%)	Advanced training for Master and chief mate Basic training for officers in charge of a navigational watch	Advanced training for Master and chief mate Basic training for officers in charge of a navigational watch	Advanced training for Master and chief mate Basic training for officers in charge of a navigational watch

Before entering the advanced training, a seagoing service of at least two months within polar waters or other equivalent seagoing service will have to be approved.



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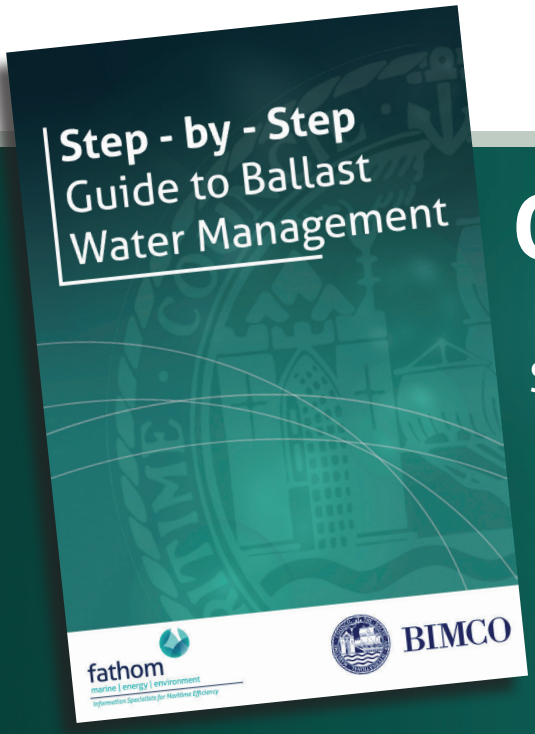

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BY MICHAEL GREY

Seafarers' welfare – becoming better organised

An explicit provision of the Maritime Labour Convention 2006 (MLC 2006), now being globally implemented, requires seafarers to have "access to shore-based facilities and services to secure their health and well-being".

It might be suggested that such facilities have been available for many years, thanks to the various welfare providers, both religious and secular in origin, which are a visible presence in many ports around the world. But it must be recognised that such provisions are patchy, with no facilities whatsoever in many of the ports in which seafarers may find themselves. The provision indeed covers the full range, from excellent and comprehensive, with well-organised and properly funded facilities, through to some places where the visiting seafarer must stay aboard his ship and is not permitted to set foot ashore, welfare being effectively non-existent.

MLC 2006 in its Regulation 4-4 makes it clear that the Member states subscribing to the convention *"...shall ensure that shore-based welfare facilities, where they exist, are easily accessible. The Member shall also promote the development of welfare facilities, such as those listed in the Code, in designated ports to provide seafarers on ships that are in its ports with access to adequate welfare facilities and services."*

In the past, the provision of any such facilities has been left to mainly charitable bodies, largely funded as such, with the industry generally content to support their work through donations, along with those from the general public. Organisations such as The Mission to Seafarers, the Sailors' Society or the Apostleship of the Sea, along with a number of national welfare providers, have traditionally provided a global network of welfare support, insofar as they have been able to fund these from the charitable giving of others. MLC 2006 provides a template for spreading this provision more widely and perhaps organising seafarer welfare more systematically.

To make this organisation easier, the MLC standards provide for Member states to encourage the establishment of welfare boards that can oversee welfare provisions in that country. Here again, there may be nothing entirely new in this, as there are port welfare committees around the world bringing together interests in a port to make the provision of facilities more efficient. The MLC, however, recognises that the provision needs to be spread wider, and also that changes in the industry itself – technical, operational and other developments – require the welfare provisions to be kept up to date to reflect these.

New ports will emerge that can justify facilities for seafarers. Others will move their location away from traditional city centres to provide deeper water, leaving the seafarers' centre miles from its clients. A well-provisioned static seafarer centre may be inappropriate where the traffic has changed to ships that are turned around in hours and spend insufficient time in port for crew to get ashore, with alternative welfare provision becoming necessary. One of the most positive changes in recent years has been for the voluntary organisations to work more closely together, providing, for instance, a single seafarer centre in a port rather than each providing separate facilities. The convention guidelines recognise the value of systems that allow for the pooling of amenities and services. A welfare board is able to keep all such issues under review and ensure that the provisions are appropriate for the time and place, in accordance with the convention advice.

As part of an effort to assist with the formation of the welfare boards recommended by the convention, the Southampton-based Merchant Navy Welfare Board (MNWB) last month launched a new website that explains their role and where they fit into the provision of assistance for visiting seafarers. A project managed on behalf of the International Seafarers' Welfare Assistance Network (ISWAN), the website, explains

A meeting of the London & South East Ports Welfare Committee

MNWB deputy chief executive Peter Tomlin, provides information, guidance and advice to assist in the establishment of welfare boards where they have not previously existed. The aim is that using this information might offer something of a "model", always recognising that every port is unique and there is no easy "one size fits all" solution. The project may be examined in more detail at *www.portwelfare.org.*

The ISWAN project will also assess the operational effectiveness of existing welfare boards around the world, while helping to establish minimum standards and promoting best practice. The successful welfare board, like its well-functioning port welfare committee, will be a co-operative partnership within the whole maritime community. It will hopefully involve the participation of both individuals and agencies such as local shipowners, harbour masters, port agents, port health, seafaring unions, voluntary organisations and the welfare providers, along with local authorities.

Funding of welfare provision is another major issue. The MLC 2006 guideline suggests that in accordance with national conditions and practice, financial support for port welfare facilities should be made available through one or more of the following: grants from public funds, levies or other special dues from shipping sources, voluntary contributions from ship owners, seafarers or their organisations and voluntary contributions from other sources. This recognises the reality of the present varied arrangements, although it is fair to suggest that the significant dependence upon charitable donations gives those in charge of voluntary organisations sleepless nights.

The shipping industry, even in those countries which have been termed "traditional" shipping nations, tends to operate largely unseen by the general public, so it is increasingly a struggle to maintain or increase the level of charitable donations amid the plethora of other worthy causes which might be more familiar to the giver. Those involved in the provision of welfare tend to incline towards a greater dependence upon port levies to finance it, although this may sometimes prove unpopular among those required to pay them. The convention notes that where such levies are imposed, "they should be used only for those purposes for which they are raised".

For its part, the MNWB considers that port levies provide "an essential stream of funding to enhance and sustain port welfare". A project working group, with representatives from the principal welfare providers, has the aim of encouraging ports to adopt a port levy scheme that will provide a more reliable system of funding, this being evidenced by existing schemes. It is hoped that draft documentation for new port levies in the UK will be produced this year.

Good ideas are said to flow across borders and it is hoped that the MLC 2006 focus upon welfare provision will lead to much "best practice" in the provision of seafarer welfare spreading around the world. Thus the Sailors' Society "Wellness at Sea" project, which emanated from work undertaken in South Africa, takes a different approach to "welfare" in making available training courses to promote social, emotional, physical, intellectual and spiritual wellness among serving seafarers. Sponsored by ship operators Wah Kwong, Wallem, Pacific Basin and the RightShip organisation, the scheme aims to empower masters and senior officers to identify problems aboard their ships and deal with them at an early stage.

In its turn, this scheme has drawn on valuable work that has been done on mental health of seafarers in Australia, and there is hope that general well-being, maritime safety and staff retention will be enhanced by this greater understanding of the stresses suffered by serving seafarers in the high-intensity world of modern ship operation. A number of maritime colleges around the world are providing modules for training, helping to prepare cadets for life at sea, while other modules can be made available for more senior staff for delivery at company management training seminars.

Other useful work that contributes to seafarers' welfare comes from the uncomplicated provision of information about the unfamiliar ports they may be visiting. Some years ago the MNWB produced templates for port information leaflets that ship visitors of agents can use to help the visitors find their way around a port. Typically these leaflets, which are distributed in a large number of UK ports and increasingly seen overseas, will provide information on transport, the location of seafarers' centres, post offices, shops and relevant telephone numbers. Some exceptionally well-organised ports around the world also manage to have such information provision sponsored by the firms who might wish to see seafaring customers!

Michael Grey

The MNWB has also produced a useful "guide to who does what" in the event of arrested and detained ships and abandoned seafarers, and it has organised a scheme to replace minibuses and other vehicles used by the seafarer charities, funding partners being the MNWB, Trinity House, International Transport Workers' Federation (ITF) Seafarers' Trust and Seafarers UK, which has involved the renewal of a fleet of nearly 70 vehicles used in UK ports.

Another new project has been a revival of the 80-year-old Watch Ashore, an organisation that supports the dependants of seafarers. It has provided social media training to help those whose loved ones are at sea become more "connected".

"Welfare", it will be apparent, comes in many different forms. The implementation of MLC 2006, however, moves its provision from an "optional extra", that might be available because of the charity and voluntary efforts of the few, to an integral part of the whole seafaring "package", within a regulatory framework.

Editor's Note: Michael Grey is BIMCO's Correspondent in London. He is a former Editor of Lloyd's List and a regular contributor to many maritime publications.

BY MICHAEL GREY

Keys to navigational safety

Marine safety, as might be discerned from the expressions of public outrage that follow a prominent casualty, with demands for fearsome penalties for the guilty, is today a non-negotiable given.

A population, at least in the industrialised world, is encouraged to believe that no accident is ever acceptable and that all are preventable. The fact that this same population is probably more insulated from any knowledge about the sea and ships than any of its predecessors is largely irrelevant, when perception is the most important factor.

The shipping industry, despite a number of well-publicised casualties and others which largely escape public attention, does not have a bad record, considering the increase in the number of units in the world fleet and the potentially hazardous environment in which it operates. For the last ten years, total losses have declined and are presently running at around 100 ships per annum.

Against that, of course, must be set the value of these casualties, which, while few in number, are increasingly expensive. It is also of concern that fatalities at sea, half of them in accidents, number around 2,000 annually, a statistic which has provoked the secretary-general of the International Maritime Organization to call for a concerted effort to reduce these by 90% in short order.

The number of serious accidents attributable to navigational error, however, remains stubbornly static or even on the increase, despite the amount of money and effort which has been ploughed into sophisticated position-finding and other navigational equipment in recent years. Commenting on this depressing statistic recently, Tor Svensen of the classification society DNV GL suggests that, with much of this accounted for by human error, issues of competence require to be addressed.

The trends are confirmed by P&I Club claims records. According to The Swedish Club and its latest publication, *Navigational Claims**, half of the costs of hull and machinery claims handled by the club have risen owing to accidents involving collisions, groundings or contacts.

The Britannia Steam Ship P&I Club chairman, Captain Nigel Palmer, speaking at a recent Nautical Institute Command Seminar, notes that 59% of the claims handled by the club are collisions. Navigation, which ought to be increasingly foolproof and reliable, is thus under the spotlight.

Considering ships are better equipped for safe navigation than they ever have been, these statistics would appear to indicate that something is going wrong. But if competence is identified as a problem, how is it that the Standards of Training Certification and Watchkeeping Convention, along with its various improvements and amendments, is failing to ensure that real competence matches the paper qualifications?

Analysis of accidents and claims arising tends to confirm the fact that lack of competence is a major contributor, this being demonstrated by the failure to follow proper laid-down procedures. The Swedish Club's publication, which analyses large numbers of casualties in every category, producing the root cause for each, lists a lack of planning, poor lines of communication, ignoring procedures, poor teamwork and a lack of leadership in many of these incidents, frequently a chain of causation that in the end leads to the regrettable result.

Tor Svensen, who emphasises the need for "barriers" that will prevent accidents, suggests that there is insufficient effort made to share the underlying causes of casualties, with the lessons from accident investigations not being promulgated in the way that the Safety of Life at Sea (SOLAS) Convention requires. Some flag states are clearly not fulfilling their obligations in this respect, with only a minority carrying out adequate investigations.

What can be done to make some impression on these stubborn navigational accident statistics? An "effective training programme for officers" is urged by The Swedish Club's Lars Malm, who points out that their study shows most claims can be prevented "by simply ensuring that all crew follow proper procedures and consult with each other before making major decisions".

Tor Svensen points out that a change in "mindset" is overdue and the shipping world would probably benefit from the

Lars Malm of The Swedish Club

thinking in other industries. He believes that there is much that can be learned from the example of the offshore industry. Others have suggested that the spectacular safety improvements which have been witnessed in the tanker sector over the past 10-15 years offer lessons for other parts of the shipping industry which have yet to see such gains.

The use of navigational audits has been suggested as a useful prescription that will hopefully identify such problems before they result in accidents. There is, perhaps, nothing altogether new in such a solution – at the beginning of the last century, the huge fleet of the Liverpool shipowner Alfred Holt, which was self-insured, closely scrutinised the charts of every ship at the end of each voyage, to ensure that the prescribed tracks had been followed!

The greater use of simulators has been suggested, not least to inculcate the proper procedures in the minds of officers, and to test the actual competence of individuals and their ability to work together as a team. But how can it be ensured that the behaviour which has been monitored in the conditions of a simulator will be replicated on the bridges of ships scattered around the world? The use of training captains to "ride" ships, in order to assess the degree of compliance with procedures and overall safety awareness, is one possibility.

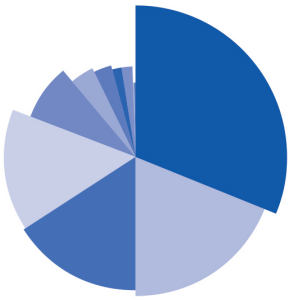
At a recent Nautical Institute Command Seminar, V.Ships' Mike Bradshaw revealed that the ship manager has been using the voyage data recorders fitted to ships to take a random picture of procedures on board, which can be subsequently audited. This, it is suggested, benefits from the element of surprise, showing the ship's team operating their normal routine, which is more likely to show non-compliance or failure to follow procedures than would be revealed by a conventional navigational audit, or under the scrutiny of a ship-riding safety superintendent, where everyone would be endeavouring to do everything "by the book!"

Is the degree of electronic assistance available to today's navigator making him or her into a more passive participant in the conduct of the ship? (See Watchkeeper column in this issue). This, once again, involves "mindset" and the sort of training that has been provided as officers have developed their careers. It might be that the designers of navigational equipment need to take a step back and examine the degree of participation that is needed to operate their equipment and keep the ship safe. Tor Svensen of DNV GL implies this in his remarks when he suggests that there is "a critical need to design ship systems for human performance".

A perennial complaint has been the fact that every manufacturer of navigational equipment believes that their system is the best and that it is impractical to require any element of standardisation in functionality or controls. Even succeeding models from the same manufacturer demonstrate their "novelty" as an advantage, requiring users to learn how to operate them afresh.

H&M collision: Number of claims and category

2004 – 2013
>= USD 10,000

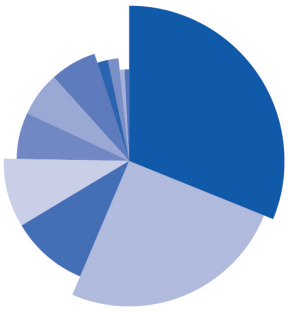


Vessel Type

192	Container	50	Roro	11	Offshore
116	Bulker	23	Miscellaneous	2	Combination
98	Tanker	19	Passenger/Ferry	1	Unknown
92	Dry Cargo	11	Reefer		

H&M collision: Number of claims and category, immediate cause

2004 – 2013
>= USD 10,000



Value

38	Lack of situational awareness	8	Faliure to set priorities
31	Not applicable	2	Failure to utilise available data and resources
12	Insufficient watch-keeping	2	Failure to comply with standard procedures
11	The ship losing her manoeuvrability	1	Faliure to challenge incorrect decisions
8	Collision regulation	1	Failure to communicate intentions
8	Underestimating natural forces (interaction)		

The need to match equipment design to the needs of those who will use it has been a continuous theme of the Lloyd's Register-Nautical Institute *Alert!* Human Element Bulletin. It is one thing to provide brilliant navigational equipment that frees up the officer of the watch from the more mundane navigational tasks. If he is entirely "free" he may well be distanced from his principal tasks of lookout and safe navigation! The issue of "complacency" and, as The Swedish Club research notes, "lack of situational awareness" feature too often in the causation chain leading to a navigational accident. Distraction, or the failure to keep one's mind on the job, can be fatal in any mode of transport.

How many of these accidents, especially where the failure to follow proper procedures has been identified, will be attributable to what might be described as "bad habits", perhaps cultivated over many years? It has sometimes been suggested that, in this instance, the shipping industry needs to take some lessons from aviation, where there are regular assessments of those on the flight deck, both on operations and in simulators. The cost implications here are considerable, although it is significant that a number of shipping companies, notably those operating passenger ships and tankers, undertake these regular assessments of their officers' skills. It is perhaps arguable that the procedure for revalidation of certificates needs to be made less of an academic exercise, with the far greater availability of simulators perhaps providing a useful tool for this work.

How can the "mindset" which is seen by so many as a key to safer navigation be positively changed? There are sufficient regulations surrounding safe navigation, so we probably need to look elsewhere, in the regions of leadership, professional pride, motivation and the relationship between employers and employed. A change from a culture of blaming and shaming to one that seeks to learn from errors has been emphasised, and companies who have applied this rule point to positive results.

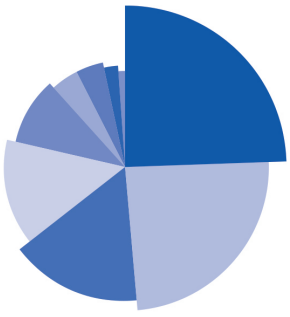
In the end, navigational safety improvement will come from people who are good professionals. In the words of the late Captain Richard A Cahill, 40 years at sea and the author of several seminal books on navigational safety, *"A superior seaman uses his superior judgement to keep out of situations requiring his superior skills"*.

*The Loss Prevention Publication "*Navigational Claims*" is available from The Swedish Club, *www.swedishclub.com*

Editor's Note: Michael Grey is BIMCO's Correspondent in London. He is a former Editor of Lloyd's List and a regular contributor to many maritime publications.

H&M grounding: Number of claims and category

2004 – 2013
>= USD 10,000

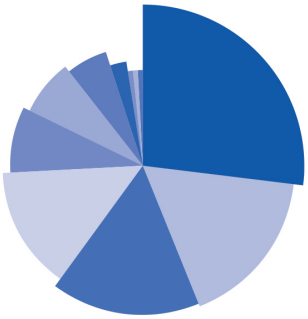


Vessel Type

133	Bulker	76	Dry Cargo	22	Miscellaneous
130	Container	52	Roro	12	Offshore
86	Tanker	23	Passenger/Ferry	6	Reefer

H&M grounding: Number of claims and category, immediate cause

2004 – 2013
>= USD 10,000



Value

34	Navigational error from Master/Office	7	Manoeuvering to avoid collision with other ship
21	Navigational error from Pilot	3	Tidal level miscalculated or ignored
20	The ship losing her manoeuvrability	1	Vessel dimensions excessive
18	Understanding natural forces (wind, tidal)	1	Speec to low i.e. drifting sideways in channel
10	Losing control of the vessel	1	Charts or nautical publications unavailable
9	Inaccurate charts or nautical publications		

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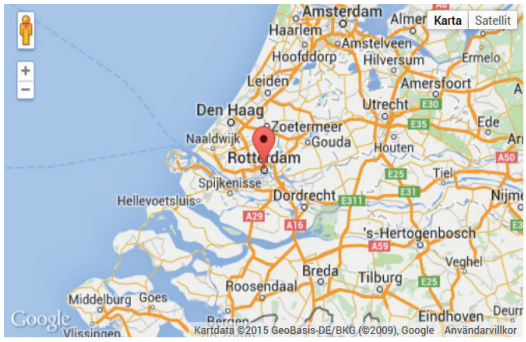


Found 20 companies operating in Rotterdam

Primary list

[redacted]

Allocation: Capelle aan den ijssel, Netherlands
Bunker operation profile: trader, broker.

1 ports associated | 2 personal contacts

VIEW COMPANY INFORMATION

Ordinary list

[redacted]

Allocation: St. Job in 't Goor, Belgium
Bunker operation profile: supplier.

1 ports associated | 2 personal contacts

VIEW COMPANY INFORMATION

BY NIKOS PETRAKAKOS

EfficientShip Finance

Financing shipowners to green profitability.

"Bunker fuel prices may have fallen recently, but overall, shipping is becoming more efficient regardless of market fluctuations. The game has changed, and it is time for operators to understand that embracing new technology is not just something to fight against, but a way to differentiate into profitability."

The shipping industry has changed dramatically since the last period of "eco-ship" discussion and falling bunker fuel prices over three decades ago. Both consumers and investors are increasingly focusing on profit tied to sustainability, and investors increasingly seek insight into shipping's internal clockwork compared to the past. This is the time for owners, charterers and financiers to invest in retrofitting ships for triple-bottom returns (financial, environmental and social). Despite the poor shipping market, scarcity of free cash and lack of meaningful discussions with charterers (even though some are under increasing consumer pressure), there is a new solution which enables ships to comply and innovate without affecting cash reserves – improving future cash flows and competitiveness for both owners and charterers – through EfficientShip Finance, a company derived from an ethos of fresh thinking in financing.

What is driving the change?

Shipping is an industry that has been struggling for over six years, with many companies facing grave financial difficulties. Driving the dagger further are continuing new regulations, such as the new 0.1% Emission Control Area (ECA) sulphur limits instated this year, upcoming ballast water regulations and the Energy Efficiency Design Index (EEDI), all applying further pressure on the industry. At the same time, many consumers and governments around the world are increasingly focusing on sustainability in industry, and funds are now being divested from "unclean" projects to more sustainable businesses. Unlike many other industries, shipping has mostly avoided these pressures given the unique extra-territorial nature of the industry and the fact that it is the most efficient mode of transport per unit of cargo. However, with the sharp increase in shipping companies having gone public in the past decade, followed by a series of private equity (PE) funds entering the market to fill the gap left by the hurting traditional shipping banks, there is a fundamental change to the historical secrecy and self-regulation of the industry – a market where more and more charterers, operators and owners will inevitably have to fold to the increasing public and investors' pressures to react to this new paradigm.

It is well-documented that shipyards which had built ships swiftly and cheaply post-recession were running dry by 2011. Having already cut prices to below cost, they started to diversify and offer "eco-ships" at the same prices – but with a consumption of 20-30% lower than prior designs. As we know, eco-ships are now the norm, and will continue to flood the market, with orderbooks filled through to 2017.

Brokers such as Poten & Partners have already started to publish separate market indices for eco-ships and standard tonnage, a trend that is expected to spread. Banks and private equity firms are jumping on the eco bandwagon as well, opting to fund projects for efficient and modern designs with a view to future regulations, expecting that this strengthens the asset value and reduces trading risks of being left idle.

A two-tier market – but where now?

All the aforementioned developments are resulting in chunks of what would traditionally have been deemed a very young fleet being viewed as obsolete – leaving many owners trapped, with scrapping not a viable option, regardless of how low the market drops or for how long this slump continues. In order for this young fleet of ships to continue to be profitable, they will need to be retrofitted. But with cash reserves drying up, or owners with sufficient cash preferring to opt for the newbuild eco-ships, and the traditional banks not willing or able to help most owners with funding of retrofits owing to the smaller project sizes, the vast majority of the existing fleet has seen a very limited improvement.

An ad hoc retrofit market is already here

Several owners – most often using a limited budget – have already started installing and testing various technologies, typically one or two at a time, resulting in small improvements that are hard to quantify and distinguish from simple changes to usual fluctuations in operations. Yet, given the limited investment, improvements are typically smaller than 5%, and therefore not striking enough of an impact to get charterers to give a premium on rates, which in turn has disheartened owners, prompting them to believe that the market does not pay premiums for efficient ships, especially in the spot and short-period market.

Lack of information and transparency

On the long-period market, with the exception of a few large players, charterers mostly have little or no knowledge about the available retrofit technologies. Moreover, often owners' technical teams are running on strict budgets and short-staffed, leaving little time or authority to go through the process of getting improvements approved by the commercial and operations teams and in turn with the charterers. This often results in owners and charterers not working together to improve the ships, despite the large potential benefit to both sides.

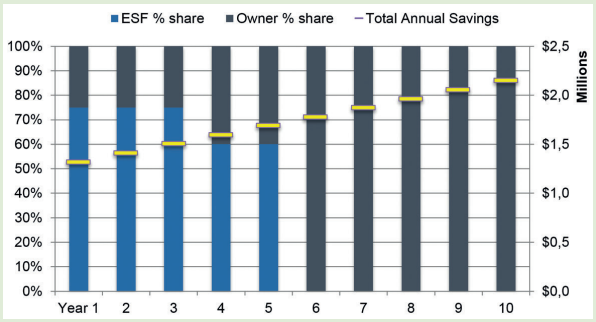
What is the solution to bring us to the next step?

Although crude price projections vary greatly, even the most bearish of them expect prices to eventually rebound over the next few years. And with the added regulatory pressures and oncoming global ECAs, the bunker bill for owners is only going to grow. Given how many ships were delivered between 2008 and 2012, many of which are now already obsolete, there is plenty of useful life in them to be around when prices are higher again, something most owners understand.

There are already clear signs in the market of the benefits of efficiency. Owners like Maersk are returning to the black primarily because of increased efficiency and reduced fuel bills (this does not include the effects of the sharp drop in bunker prices since last summer). Charterers like Cargill are backing eco-efficiency initiatives like the A-G greenhouse gas (GHG) emissions rating scale – publicly available at the Carbon War Room's and RightShip's website (*www.shippingefficiency.org*) – opting not to charter ships below a certain grade, leaving the most inefficient ships idle for longer or left ballasting longer to secure employment. Ports are offering discounts to ships with improved emissions, and flag registries are offering incentives in terms of tonnage tax discounts or otherwise. Moreover, shipping banks are increasingly scrutinising A to G ratings and other data such as a ship's EEDI when deciding to purchase "existing" ships to pay for retrofits of mortgaged ships.

THIRD-PARTY FINANCING OPPORTUNITIES

EfficientShip Finance (ESF) is a New York based specialty investment company, established by passionate finance and shipping technology experts. ESF has continued the work developed from other sectors like the office building space by the Carbon War Room, a think-tank founded by Sir Richard Branson established to fill these exact gaps in the shipping market. ESF provides a "turn-key" solution by offering the full funding for large-scale fuel efficiency and emissions retrofits during regular dry docks, with no upfront cost to an owner. ESF is reimbursed with a share of the fuel savings achieved and takes the full performance risk and the fuel price fluctuation risk, typically for a period of five to seven years (based on fuel prices, February, 2015). The owner maintains the full added value benefit and all savings after the contract has been completed. These payment shares are calculated based on each ship's operating profiles, including, for example, the consumption during slow-steaming for the majority of the days at sea.



Sample payback calculation for 9,000-TEU ship of total retrofit cost of ~USD 3.25 million

ESF installs a suite of proven and tested technologies and modifications to offer the maximum savings possible, which make a significant enough impact in consumption and costs that charterers and the market cannot oversee. With technologies including flow-improving ducts and fins and other appendages, rudder bulbs, high-efficiency propellers, premium antifouling coatings, engine optimisation, exhaust scrubbers, performance and trim optimisation software, variable-speed cooling pumps, LEDs, bulbous-bow redesigns, and draught and length increase, owners can conservatively expect upwards of 10% improvements. This is significantly over the standard "5% MOLOO" allowance in charter parties, giving more negotiating room to owners to maximise the share of savings passed down to them. And most of the technologies pose little or no risk from operating failure or requiring much crew expertise or involvement.

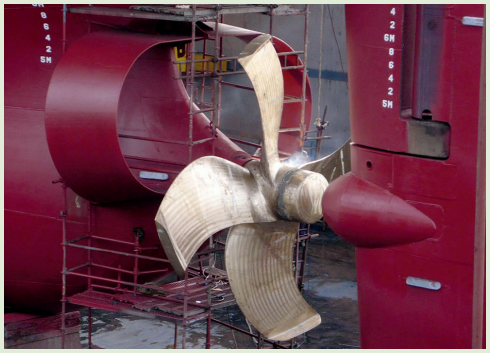


Image of pre-flow duct, high-efficiency, contracted and loaded tip (CLT) propeller and rudder bulb

ESF purchases the equipment, co-ordinates the testing (computational fluid dynamics (CFD) or tow tank), and supervises the installation with their technical team. The performance improvement is further tested with a speed trial that is compared to the newbuild sea trials, which is then verified by third parties such as UCL's Energy Institute or class societies. The latest performance-monitoring equipment is then used to ensure the performance trends continue, and for ESF and independent partners to analyse and work with the owners on further tweaks to the performance. This all helps minimise the extra work for such projects for the owners' technical teams, allowing them to continue to focus on their daily tasks.

The exact performance of a ship is obviously difficult to ascertain and a touchy subject for many owners, given all the variables from weather and operating factors. But ESF offers a very realistic and open approach to work closely with owners and come to a fair and mutually agreed consumption improvement.

EfficientShip Finance helps owners strengthen their competitiveness in the market, as well as their asset values, with some banks seeing two-fold increases in incremental asset values compared to capital expenditures. Along with the benefits from port and charterer incentives from ShippingEfficiency.org and the tonnage tax discounts from ESF's partner Liberian Registry and other parties, the total benefits for owners can quickly add up, making retrofit projects viable even at current sub-USD 400 bunker prices. All this opportunity is provided with no capital required and no risk of technology performance or fuel price to the owners or charterers.

DON'T FOLLOW; LEAD

Shipping has developed the reputation for being a slow adapter of new technologies and not being innovative. However, throughout human history the maritime world has been a source of innovation and unparalleled breakthrough, constantly surpassing human limits. At ESF, with the support of the Carbon War Room and other partners, we believe we can play a part in returning shipping to this path of pioneering, allowing for an increased uptake of efficient technologies without the added risks and financial burdens.

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Twitter: @cwarroom; @shipefficiency

BY MICHAEL GREY

New books

Staying safe in enclosed spaces

How comprehensive is the data about the enclosed spaces aboard ship? Are they properly identified, bearing in mind that a space which is perfectly safe one day can be deadly to enter the next?

These might seem rather obvious and simplistic questions, but from the grim total of deaths and injuries caused by imprudent entry into enclosed spaces, it is clear that there remains a disturbing ignorance.

This was the experience of safety expert Captain Michael Lloyd and his colleague Adam Allan from the Mines Rescue Service when they visited ships to survey their enclosed spaces. They were disappointed to discover that most of the people they interviewed aboard were unaware of the positions of the ship's enclosed spaces, the types of hazards that they might hold, and the way in which they might be accessed safely.

The deaths of people in enclosed spaces will typically involve small numbers – a single person here, two or three there – and individually will not have as great an impact as would the loss of many people at once. But they are tragedies nonetheless, devastating to the victims' loved ones, and they are futile, but wholly preventable, calamities. They take place in tanks of every kind, lockers and holds: anywhere in the honeycomb of a ship's construction. They involve carelessness, undue haste, ignorance, complacency and stupidity and the absence of adequate supervision and proper safety systems. They kill and injure young and old, the first trippers and the vastly experienced, ships' crew and visitors such as surveyors, contractors, inspectors, stevedores or superintendents.

For years the industry has attempted to reduce this awful wastage of life, with training, procedures and the provisions of regulatory efforts. The Safety of Life at Sea Convention (SOLAS) recommendations and the IMO's new "Revised Recommendations for Entering Enclosed Spaces aboard Ships" are some of the latest initiatives. If everyone followed instructions, there would be no more deaths, but this will surely take something of a cultural change.

Is it safe to enter? Check the system.

A new and interesting initiative has come from the training organisation Videotel, which along with the Mines Rescue Marine organisation has now launched its Enclosed Space Management System to assess, audit and manage enclosed spaces aboard every kind of ship. It is a good example of the marine industry going out and obtaining relevant expertise from outside the industry, because the Mines Rescue Service has more than a century of experience in maintaining safety below ground and in enclosed spaces, and reacting appropriately in the event of an accident in a mine.

The "outside eyes" applied to the design of ships reveal critical flaws, with accesses, manholes and lightening holes being too small for easy access, and, more to the point, the retrieval of a casualty. Escape routes have been found to be too tortuous, especially for people wearing breathing apparatus. It would be an improvement, the safety experts say, if designers and shipbuilders took these criticisms into consideration.

The Videotel system is a simple-to-use and practical piece of software which makes it easier to identify all safety hazards aboard the ship. Every enclosed space will be described and its particular risks outlined in a living system that will remain relevant regardless of crew changes, and to which users can add further comments and information based on their experience. Plans and photographs of the spaces, accesses and routes can be attached so the user can gain a good appreciation of any problems that may arise in entering the space. The dimensions of the accesses will be provided, along with all the data for a safe entry and exit. Used in conjunction with a ship's safety systems,

this might be thought of as an important and useful advance.

The test will be in the system's effectiveness in reducing these grim statistics and, perhaps more importantly, in changing the "culture" which fails to dissuade seafarers and others from taking possibly fatal risks in entering potentially deadly spaces. Three dying in a cable locker. Two dead in a hold trunkway after one had just gone below to retrieve a broom. Four sent ashore in coffins after entering a hold with soya beans. So it goes on. All so sad – all so preventable.

*The Enclosed Space Management System has been developed by Videotel and Mines Rescue Marine (*www.videotel.com*).*

Keeping a weather eye open

Even with the most powerful and seaworthy ships, fitted with the most sophisticated equipment, a knowledge of meteorology still matters for the professional mariner. It will impinge upon schedule keeping, on cargo handling and its out-turn and upon the very safety of the ship and those aboard her.

There are indications that world weather is becoming less predictable and occasionally more extreme. Certainly, better knowledge points to an increase in the incidence of extreme waves, with implications for those who design ships and those who handle them. As with earlier generations, the more a mariner knows about the weather, the better.

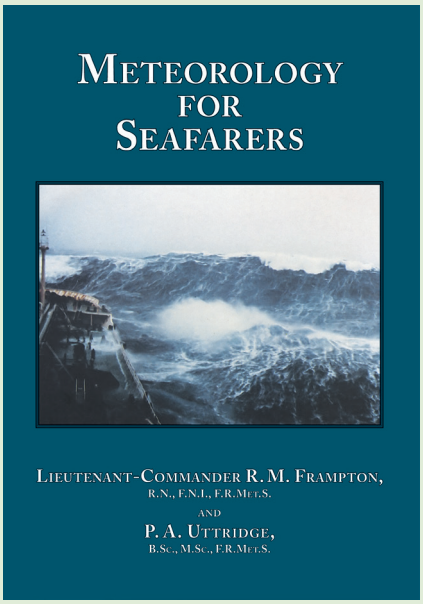
Meteorology for the Seafarer was first published in 1988 and has run into several editions, as the science has developed. This fourth edition is a comprehensive account of the latest thinking in meteorology, written and presented for the practising mariner, who might be thought of as a "consumer" of weather. It is known that meteorology is a subject that will appear in senior certificate examinations, but has always been something that the very best professionals will study as part of their acquired expertise throughout their careers. This, then, is a book that ought to be in every professional mariner's library.

There are eleven chapters in this book, well illustrated throughout, but with excellent colour plates showing developing sea states and different cloud formations. The book follows the logic of its predecessors, beginning with the atmosphere, and chapters on atmospheric pressure, temperature, water in the atmosphere, clouds, precipitation and fog, and wind. Subsequent chapters cover temperate, polar zone, tropical and subtropical circulation systems, providing a better understanding of the monsoons, local weather patterns and the tropical revolving storms of the intertropical convergence zone.

An area that has been subject to change is the organisation and operation of meteorological services, and a chapter deals with these in detail, showing the way in which the land-and-sea-observing network meshes with the data provided by satellites. It also summarises the importance of communications systems to transmit, share and promulgate weather information. The way this data is analysed and the techniques that forecasters employ are also usefully detailed. Most mariners these days will come into contact with ship routeing services, and these services are described.

The final chapter deals with forecasting sources, describing the continuous value of onboard observations as a means of building up a reliable picture of the weather at a known location. Even this basic information, especially when allied to local knowledge of a particular sea area, can be used to provide a short-term forecast. Today, a wealth of meteorological data is available to seafarers both at sea and in port, an incentive perhaps to encourage owners to participate in schemes for voluntary observing ships.

The book takes the reader through the more common weather bulletins, storm warnings and the maritime forecast codes. In the past the production of weather charts would be a laborious business for the "weather officer" aboard ship decoding and plotting data written down by the radio officer. Today even ocean forecasts will tend to be in plain language, and many ships will be equipped with facsimile equipment, which effectively does all the work for the "consumer" of weather. It is noted that this equipment can provide other information, such as the position of ice. Facsimile data and weather bulletins can be regarded as complementary and both will require some interpretation and scope for skill.



The book concludes with a section on extreme weather, which includes an account of a passage through a typhoon of a large container ship. This highlights the fact that, despite all the modern assistance of "space age" technology, "the position of tropical cyclones cannot be guaranteed".

Meteorology for Seafarers, by Lieut-Commander R.M. Frampton and P.A. Gutteridge, is published by Brown Son & Ferguson, Glasgow. ISBN 978-1-84927-056-4. Website: www.skipper.co.uk

BY MIKE CORKHILL

LNG fleet poised for next growth surge

Some 68 LNG carriers were contracted in 2014, boosting the order book to a record-breaking 159 ships. After languishing for three years, the world trade in LNG is poised for another major expansion phase.

From a trade point of view, 2014 was another subdued year for the LNG industry. However, it was a fantastic 12 months as regards LNG carrier (LNGC) newbuilding activity. Worldwide movements of LNG hovered at the 240 million tonnes per annum (mta) mark for the third year running, inching up only 2% over 2013 levels to finish at 246 mta.

While trade flows were stagnating once again in 2014, 34 LNG carriers were delivered to bring the in-service fleet up to 426 ships. The total of completions last year has only been bettered twice before, in 2008 and 2009, when 52 and 42 such ships, respectively, were delivered. In addition, orders were placed for a further 68 newbuildings last year, a number which equalled the record-breaking level set in 2004 and boosted the order book to an unsurpassed 159 ships.

Aligning projects and ships

The dichotomy between trade levels and newbuilding activity highlights the difficulties in achieving perfect alignment between the commissioning of new LNG production capacity and the delivery of new tonnage. LNG projects are expensive undertakings, with long lead times. While the established LNG carrier shipyards have ship construction down to a fine art and no trouble in adhering to scheduled delivery dates, engineering companies engaged in a five-year project to develop a liquefaction plant and associated terminal facilities are prone to delays and cost overruns.

Last year is a case in point. The 34 LNGC completions proved to be somewhat in advance of the start of operations at the terminals for which they were intended, leading to a build-up in excess tonnage. This fleet oversupply situation should ease somewhat in 2015 as a number of new liquefaction plants come on stream and start the ramp-up towards plateau production.

The inaugural cargo at QCLNG launches a new era that will push Australia to the top of the LNG exporters' league table.

Although global trade levels remained little changed, LNG shipowners enjoyed three buoyant years following the Japanese earthquake and tsunami in March 2011. The subsequent closure of the country's 50-plus nuclear reactors for safety checks created a demand for an extra 20 mta of LNG virtually overnight. A strengthening appetite for gas in China at the time added to the surging demand for LNG in Asia.

The developments in Asia coincided with the exploitation of the new-found shale gas in the US and the deepening of Europe's economic recession. The collapse of the Atlantic Basin LNG market was fortuitous for shipowners because they were able to redirect their ships eastwards to meet the burgeoning demand for gas in North East Asia. The long sea voyages quickly assimilated all the available tonnage, and by summer 2012 LNGC freight rates had climbed to unprecedented levels, touching USD 150,000 per day for spot cargoes at one point. These giddy heights encouraged a number of speculative newbuilding orders.

Fleet oversupply

As a result of the high level of newbuilding deliveries in recent years, including the 18 ships handed over to their owners in 2013, that LNG shipping market bubble has now burst. In addition, the growth surge in Asian LNG purchases has slackened off. A slowing demand for gas, warm weather and high inventories have introduced a bearish flavour to the Asian market.

The final straw has been the recent collapse in oil and gas prices worldwide. The cost of LNG delivered to Asia is now down by

almost two-thirds compared to 12 months ago, to about USD 7 per million Btu. This puts Asian prices at parity with, and often even lower than, European levels. The situation has erased arbitrage opportunities for European gas sellers and reduced the call for long eastbound LNG delivery voyages. It has also idled about a dozen LNG carriers at anchorages in South East Asia and sent another half-dozen to earlier-than-planned dry-dockings for their class renewal surveys. Average spot cargo rates for modern tonnage are now at around the USD 50,000/day level.

Australia to the rescue

LNGC owners are now looking to the introduction of a major new tranche of Australian LNG production capacity to ease the current overtonnaging situation. The country has seven new LNG export projects coming to fruition which will add 65 mta of production capacity to the national total, boosting it to 86 mta by 2018. This will propel Australia to the top of the LNG exporters' league table, ahead of Qatar, which is currently supplying LNG to the global market to the tune of 77 mta.

The Australian projects are those for which most of the recently delivered ships were ordered. The vast majority of the new output has been booked under long-term sales and purchase agreements (SPAs) and the necessary shipping has been fixed on similarly extended charters.

The first of the new Australian projects to begin producing – Queensland Curtis LNG (QCLNG) at Gladstone in the state of Queensland – exported its first cargo in December 2014. Three more of the schemes – Gladstone LNG (GLNG), Australia Pacific LNG (APLNG) and Gorgon LNG – will commence operations in 2015, while Wheatstone and Ichthys LNG will follow in 2016 and the Prelude floating LNG production (FLNG) ship in 2017.

US poised in the wings

The US is poised to follow Australia as the next major force in LNG production. A surfeit of shale gas has prompted a number of owners of idle US LNG import terminals to add liquefaction plants and give their facilities the bidirectional ability to export cargoes. Several other operators have proposed new, greenfield export terminals that would make use of competitive liquefaction processes. The combination of low US natural gas prices and LNG production requiring lower investments than in most other locations worldwide has attracted many buyers.

Mike Corkhill

If all the 25-plus US LNG export projects that have been tabled in recent years were to be realised, the existing worldwide trade in the product would be doubled. The industry acknowledges that such a scenario will never come to pass and that only a handful of the proposals will achieve success. Nevertheless, the US Federal Energy Regulatory Commission (FERC) has already given environmental approval to five of the schemes, and the backers of four of these have made their final investment decisions and are pressing ahead with construction work.

Sabine Pass will soon be able to liquefy as well as regasify cargoes.

With an LNGC order book topping 50 ships, Daewoo is currently the leading builder of this type of ship.

The industry expects the US to be exporting LNG at a rate approaching 62 mta by 2020. A large percentage of the 68 ships ordered in 2014 will be utilised in the carriage of US exports. The first of the country's projects due on stream is Sabine Pass LNG, an initiative which is transforming an import facility in western Louisiana near the Texas border through the construction of up to six 4.5 mta liquefaction trains. Sabine Pass Trains 1 and 2, which are two years ahead of any US rivals in terms of LNG availability, will start producing cargoes in the first half of 2016 while Trains 3 and 4 will come on stream a year later. Cheniere Energy, the owner of Sabine Pass, is close to final investment decision (FID) on the construction of Trains 5 and 6.

Four of the five projects approved by FERC as well as the majority of the additional LNG export facilities proposed for the US are earmarked for locations in the Gulf region, along the coastlines of Texas and Louisiana. The fact that Asian buyers have signed up for the bulk of this output has prompted the emergence of a new popular size of LNG carrier. "Pacificmax" ships of 170-180,000m3 will allow economy-of-scale benefits to be realised on eastbound voyages through the enlarged Panama Canal, the opening of which is set to coincide with the start of operations at Sabine Pass. Pacificmax ships have cargo-carrying capacities about 13% greater than those of the previous generation of conventional-size LNG carriers.

The propulsion evolution

The combination of low US gas prices, competitive liquefaction costs and the long sea voyage means that the shipping element will account for a relatively large share of the delivered cost of Texas and Louisiana LNG in Asia. In the drive to reduce transport costs, the LNG industry has embraced a new propulsion system technology over the past year.

The LNG shipping industry celebrated its 50th anniversary in October 2014, and for the first four decades of this history the reliable, if not very efficient, steam turbine was the propulsion system of choice for shipowners. Such turbines can utilise cargo boil-off gas (BOG) as fuel and any excess gas can be easily dumped into the system's condenser.

Over the past decade the dual-fuel diesel-electric (DFDE) configuration has gained favour as a means of propelling LNG carriers. The specification of four or five medium-speed, four-stroke engines per ship, each able to move seamlessly between the use of cargo BOG and oil fuel, to power electric motors has yielded significant efficiency and redundancy advantages over traditional steam turbines. As of 1 January 2015, there were 97 DFDE-powered LNG carriers in service, while 114 of the 159 such ships on order were specified with this particular propulsion system.

DFDE propulsion has not come without challenges. These include higher maintenance bills and achieving a suitable balance between ship speed, cargo BOG rates and fuel consumption that minimises lost revenues due to excess gas. Ships with DFDE systems are required to be fitted with gas combustion units (GCUs) to burn off any BOG that is surplus to requirements. Several recently ordered DFDE ships have also been specified with partial reliquefaction systems. These units enable excess BOG to be processed and returned to the cargo tanks as LNG.

See Table 1 below.

Dual-fuel two strokes

The "new kid on the block" among LNGC propulsion systems is a version of the traditional low-speed, two-stroke diesel engine that is capable of duel-fuel running. MAN Diesel & Turbo has developed ME-GI, a technology that enables the injection of gas at high pressure into its electronically controlled diesel engines.

The first LNG carrier to be provided with ME-GI will be Rasheeda, a 266,000m3 Q-max ship completed in 2010. The ship is one of a fleet of 31 Q-flex and 14 Q-max ships delivered during the 2007-10 period for charter to Qatargas and RasGas and the carriage of large parcels of Qatari LNG to world markets. The ships were ordered a decade ago, when the price of oil was low, even lower than today, and that for gas comparatively high. As a result, the charterers specified that each of the ships should be provided with a pair of conventional, oil-burning, low-speed diesel engines as well as a powerful reliquefaction plant to process all the BOG and thus optimise the volume of cargo delivered to customers.

As the oil and gas pricing positions have reversed in recent years, Qatar has decided to convert the two diesel engines on Rasheeda to the ME-GI configuration as a test case. The work will be carried out in a two-month retrofit programme during the ship's first five-year dry-docking in spring 2015. Depending on the performance of Rasheeda as a dual-fuel ship, further Q-flex and Q-max conversions of this type could be carried out in the years ahead.

ME-GI engines for newbuilds

Irrespective of the outcome with the conversions of the Qatari ships, ME-GI has caught on with shipowners specifying newbuildings. The breakthrough order came in December 2012 when Teekay specified ME-GI engines as the propulsion system for two 173,400m3 LNG carriers it had ordered at Daewoo Shipbuilding & Marine Engineering (DSME). Coincidentally, the pair will be chartered on delivery in 2016 by Cheniere Energy to transport its share of the output from Sabine Pass Trains 1 and 2.

Table 1: LNG carrier deliveries and orders over the past decade (number of ships, all types and sizes)

Year	Ships delivered	Ships ordered
2004	21	68
2005	20	49
2006	27	29
2007	32	24
2008	52	7
2009	42	0
2010	26	11
2011	16	61
2012	2	36
2013	20	51
2014	34	68
2015	39*	-
2016	34*	-
2017	32*	-
2018	35*	-

*estimated number of ship deliveries

The tally of ME-GI LNG carriers that Teekay has contracted at DSME in the two years since has risen to eight, and other owners are also opting for this propulsion system. Almost half of all new LNGCs ordered in 2014 were specified with ME-GI engines, and as of 1 January 2015 there were 30 such ships in the LNG carrier order book. In addition, in the early weeks of 2015 several LNGC newbuildings that had originally been contracted with DFDE propulsion systems have been respecified with ME-GI engines.

ME-GI engines do pose technical challenges, not least the safety and mechanical issues associated with the supply of gas at high pressure to the cylinders. These challenges have been met through the use of purpose-designed fuel gas supply systems (FGSSs) and double-wall piping. MAN points out that the use of its gas-injection engines can yield efficiency savings of 20% compared to a DFDE-powered ship of the same size. Furthermore, the capital cost of the ship is no greater and, if anything, the environmental performance in terms of atmospheric emissions is superior because there is no methane slip.

The Daewoo yard in Korea has been particularly successful as regards new ME-GI ship orders, with 26 of the 30 newbuildings of this type on its books. The shipbuilder has developed its own designs of FGSS and partial reliquefaction plant as well a cargo tank "sealing system" which enables the GTT No 96 membrane tanks on its ships to accommodate the slow pressure build-up that occurs in the vapour space owing to the generation of BOG. This configuration enables ships to sit at anchorage for up to 25 days without any loss of cargo. It also allows them to sail at 15 knots and return all the BOG to the tank, obviating the need for the ship to be fitted with a GCU.

Daewoo's success with ME-GI ships and its competitive pricing helped it gain 41 of the 68 orders for LNG carriers placed in 2014. No yard has ever been so dominant in the LNG newbuilding sector before. Competition is likely to pick up in 2015, however, as two further yards in Korea and two yards in Japan have recently secured their initial orders for ME-GI ships.

Other exporters and importers

Aside from the major liquefaction projects underway in Australia and the US, several other nations will be making incremental additions to the global LNG production total. In 2014 the two-train Papua New Guinea plant commenced operations as did a new train in each of the two Algerian liquefaction complexes, at Arzew and Skikda.

This year, in addition to the three Australian start-ups, the Angola LNG export plant is finally expected to get underway in earnest after extensive repair and modification work. Following on, new production facilities are due on stream in Indonesia, Malaysia and Russia over the 2016-18 timeframe while FID time is now approaching for several other potential projects. Colombia had been expected to commence producing LNG for export in 2015, but the recent collapse in oil and gas prices has prompted a project rethink.

On the receiving end, the ranks of the LNG import nations continue to swell. In 2014 Lithuania joined the club, its Klaipėda-based floating storage and regasification unit (FSRU) being one of seven new LNG-receiving facilities commissioned during the year. This year Pakistan, Egypt, Jordan, Poland and Uruguay are all expected to commence import operations for the first time. By the end of 2015, there will be 35 countries importing LNG and 18 exporting the world's fastest-growing seaborne energy product.

Lithuania became the world's 30th LNG import nation when the floating storage and regasification unit Independence received its first cargo in October 2014

Editor's Note: Mike Corkhill is a technical journalist and consultant specialising in oil, gas and chemical transport, including tanker shipping. A qualified naval architect, he has been the editor of LNG World Shipping for the past 10 years and from its inception. Although recently retired from the post, he remains involved with the publication as contributing editor.

BY SØREN WOLMAR

Chemical tanker market outlook

Two types of shipowners, two schools of thought.

The chemical tanker trade today consists of two categories of shipowners, the well-established owners and the newcomers. The well-established owners are those which have a long-term presence in several or all segments of the trade. The newcomers presently have either had a limited presence or no presence at all until now. These two categories of owners have a very different view of the future of the market, expressed both by their words as well as their actions.

Some of the established owners, having been faced with six years of mostly poor economic results and a profound uncertainty of when any market improvement may occur, are now implementing cost-cutting measures and reorganisations. They are contracting new ships at below replacement level, or not at all. They are in a phase of contraction and consolidation rather than expansion. They are apparently preparing themselves for an extended period of poor demand for their ships.

On the other hand, the newcomers are building new ships in unprecedented numbers and talking about additional heavy expansions. The financing of the newcomers is mostly equity fund based and with the hope on the part of some of them for an opportunity to enter the stock market with an Initial Public Offering (IPO). The fact that some shipping IPOs have failed earlier last year and stock prices of publicly quoted shipping companies are volatile has so far not discouraged these funds.

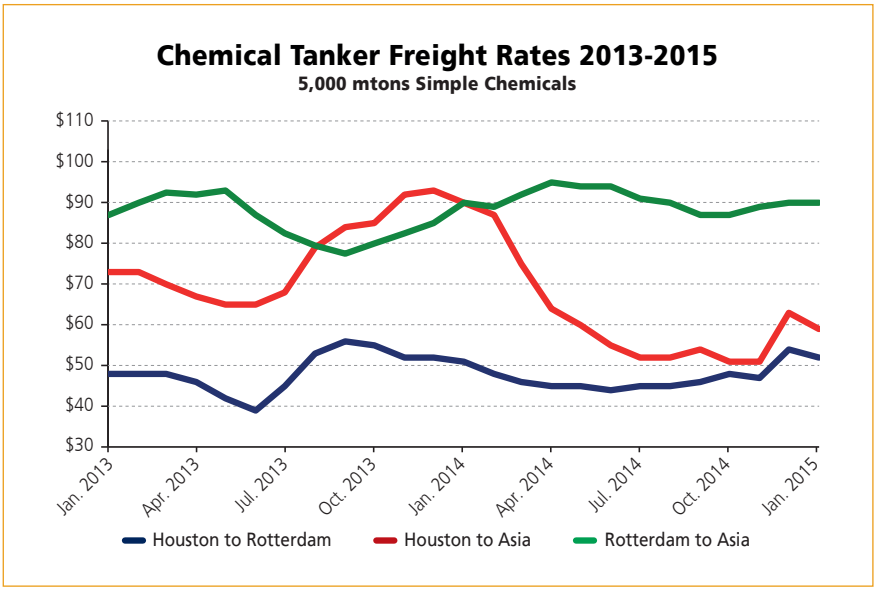
The strategies and plans of both types of owners represent an enormous gamble. This gamble will play itself out on the roulette table of the world economy. The "winning number" will be the timing of the return of a healthy demand for chemical tankers. Since the 2008 collapse of the world economy, the demand for these ships has, with a few short-lived exceptions, been very sluggish.

As to sluggish market conditions, 2014 was no exception, and there is no indication that 2015 will be any better for the owners.

The demand is clearly linked to the world economy, and it is anybody's guess as to when it will return to the pre-2008 conditions. If the demand for chemical tankers returns soon, both the established owners and the newcomers could be winners. If it comes after the newcomers' ships have been delivered, the established owners could lose market share. If the demand returns even later, the equity funds behind the newcomers could lose their patience and move to liquidate their investments. The general perception is that the equity funds' time frame for obtaining substantial capital gains is about five years.

What is often lost in the financial discussion is the fact that the chemical tanker market is a small niche market, and as such, assets can be very difficult to liquidate. There can be long periods during which there are no buyers for ships, and often the daily costs of owning and operating them continues uninterrupted.

Turning to the supply side of the equation, it is worth noting that the present fleet of chemical tankers with stainless steel tanks between 19,000 and 50,000 DWT stands at about 383 ships or 9.9 million DWT. This type of ship is the work horse of the deep-sea chemical and parcel tanker trade. There are presently about 111 or 2.9 million DWT of such ships on order with the shipyards for delivery between 2015 and 2017. In other words the new building tonnage total is about 29% of the existing fleet in terms of number of ships and also 29% in terms of DWT. The average age of the existing fleet is slightly less than ten years. In 2008, at the peak of chemical tanker demand, the stainless steel fleet stood at about 272 ships and 7.5 million DWT.



Søren Wolmar

As far as the coated ships are concerned, the picture is different. The current order book for newbuildings stands at about 20% of the existing tonnage. With over 1,000 ships, this fleet is larger than the stainless steel fleet, but many of these ships are actually product carriers and will never carry a single ton of chemicals. Their fortune lies more in the clean petroleum product market than the chemical market.

It is far from certain that all the new ships presently on order will actually be delivered as shipyard delays combined with a prolonged poor freight market could lead to cancellations. There is also a question of the viability of some of the shipyards involved. We should point out, however, that in addition to confirmed orders, shipowners today hold an undetermined number of options for additional ships. There has recently been a sharp decline in ordering new ships across the shipping industry, and it is unlikely that many of these options will be declared.

Even so, there has never been such a large expansion of the fleet. The timing of this expansion is surprising in light of the persistent low freight market. This oversupply of ships will inevitably delay the return to a balanced market.

The charterers are on pace to enjoy a prolonged period of low transportation costs. However, there is a concern that prolonged low freight rates will affect service reliability, thereby impacting their ability to keep their complex supply chain programmes functioning smoothly.

Another noteworthy change in the marketplace is the organisational structure of some of the new shipowners. From top to bottom, tasks are outsourced and entities performing such tasks may make money even if the venture itself is unprofitable. The people putting the financial deals together make fees and commissions which are unaffected by later losses. In addition, commercial management is placed in the hands of pools which also make fees and commissions even if the ships lose money. Technical management of the ship is also outsourced, and again their charges are unrelated to the earnings of the ship. In short, there is still a lot of money to be made in shipping, but at the end of the day somebody will be left holding the bag.

How the chips will fall, and who will be the winners and losers among established owners, newcomers and charterers is far from certain at this point in time.

Editor's Note: Søren Wolmar is a ship broker and partner with Quincannon Associates, Inc. a New York ship broker firm specializing in the chartering of Chemical, Gas and Product Tankers.

Macro Economics

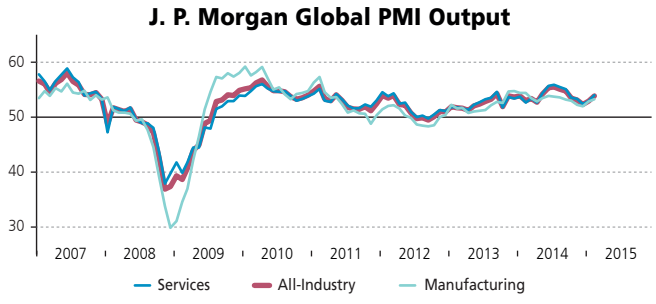
Growth improving in the advanced economies while the emerging and developing are losing some steam

Global economy

Global economic activity is once again at the centre of attention as the shipping industry looks for guidance on the overall future demand. The good news is that International Monetary Fund (IMF) projections point towards increased Gross Domestic Product (GDP) growth with the US leading the way forward, while falling commodity prices negatively affect the potential growth for commodity exporters among the emerging and developing economies.

From a helicopter point of view, the US has outperformed expectations while Japan has again fallen short of the same. The IMF has also revised in negative direction the prospects of future growth in the euro area, China and Russia.

This affects shipping demand in multiple ways. For instance, lower commodity prices should, in theory, spur demand if the commodity is price-elastic (a measurement for responsiveness of demand to price changes). Will this be the case for iron ore? Perhaps. Will the lower oil price improve the fundamental conditions in the tanker market in itself? Unlikely, as oil is considered to be overall inelastic. Will the slower GDP growth in emerging and developing markets result in a reduced import of containerised goods? It is likely it will.



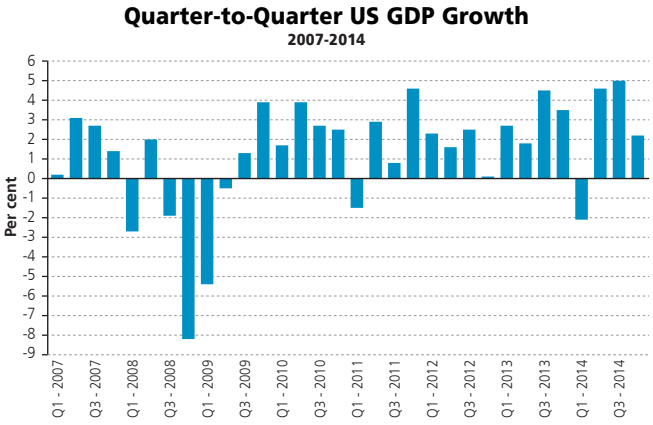
Source: BIMCO, Markit Economics, J. P. Morgan

Global economic growth accelerated to a five-month high in February. According to the J.P. Morgan composite indicator, the scope of optimism and economic expansion is strengthening for both the service and manufacturing industries. New orders came at faster rates, output expanded and the rate of employment expansion was still rising.

Among the movements below the radar was Brazil's return to expansionary growth, while Japan slipped back into stagnation. Moreover, the Russian economy kept looking down the abyss with its all-industry output level declining at the sharpest rate since 2009. The reciprocal sanctions, the lower oil price and the tumbling value of the Russian rouble is certainly taking its toll on the Russian economy, affecting the economies of the Former Soviet Union (FSU) negatively too.

US

Real GDP increased by 2.4% in 2014, up from 2.2% in 2013. The increase in GDP was positively affected by higher private consumption expenditures (PCE) and negatively affected by decreasing federal government spending and falling net exports. Consumer spending, which accounts for around 70% of US economic activity, holds the key to the recovery. With PCE growing at 4.2% in Q4, close to an eight-year high, that is not what is holding the US central bank – the Federal Reserve (Fed) – back from hiking interest rates, now that the quantitative easing has come to an end.



Source: BIMCO, Bureau of Economic Analysis

Chairperson of the Fed, Janet Yellen, said that "if economic conditions continue to improve, as the [Federal Open Market] committee anticipates, the committee will begin, at some point, to consider a hike of interest rates". Yellen is carefully continuing with the job of creating more normalised conditions for the economy with higher inflation and higher interest rates, while protecting the positive employment situation.

The US unemployment rate increased marginally in January to 5.7% of the labour force. At the most recent low point of the unemployment rate in 2006-2007, 4.4% of the labour force was without a job.

Asia

The Chinese central bank has just cut both its lending and saving rates for the second time in three months in a move to soften the slowdown of the economy. Although the economic growth in China remains high compared to the rest of the world, it continues to lose momentum. Last year the Chinese economy slowed to the lowest growth rate in 24 years, growing by 7.4%, even missing China's own objective of 7.5%. In January, inflation was 0.8%, a five-year low and below the target of 1.0%.

Judging by the Purchasing Manufacturing Index (PMI) there is, however, still room for optimism. The Markit/HSBC (PMI) for February stood at a

seven-month high at 50.7, up from 49.7 in January. While most conditions improved, employment declined somewhat. On an overall basis, 13.2 million jobs were created in China last year, according to the Chinese Prime Minister.

Chinese Prime Minister Li Keqiang announced that the growth target for 2015 is 7.0% as China will face greater difficulties than last year, as will its trading partners, and he hopes to direct China towards a slower more sustainable growth.

Across the sea from China, Japan's production of goods rose for the seventh consecutive month in February. This contrasts somewhat with the negative news about lacking structural reforms and an economy slipping back into recession. It comes naturally on the back of the weaker yen and the positive effect this has on exports. Downside was also felt, as input cost rose.

While both industries are still expanding, the Indian service industry currently goes from strength to strength, whereas the manufacturing industry has lost a bit of momentum recently. In Q4-2014, the overall economy grew by 7.5% year-on-year following an 8.2% y-o-y leap forward in Q3. The new government seems to have started well if judged by the economic performance. Going forward, even more eyes will follow what is going on in India, as the growth momentum potentially shifts somewhat from China to India.

EU

In Europe, small signs of recovery are appearing prior to the implementation of the EUR 1 trillion stimulus programme constructed by the European Central Bank (ECB).

With a negative inflation of 0.6% in January, it was feared that consumer spending in the euro area would come to a halt, with consumers holding back purchases in hopes of costs going down. However, new statistics from Eurostat indicate this was not the case. Although consumer prices fell, it was still less than what was expected, and inflation for the euro area climbed from -0.6% to -0.3% in February. Retail sales grew by 1.1% from December 2014 to January 2015. A development like this is a very positive one for the container shipping industry as it provide impetus on the world's trading lanes.

Job creation in Europe is assisting the recovery in gaining a foothold, and the unemployment rate for both the euro area and EU-28 has diminished since the second half of 2013. They now stand at 11.2% and 9.8% respectively, down from 12.1% and 11.0% at the peak.

The strengthening numbers from the euro area take place before a single euro has been spent from the EUR 60 billion a month stimulus programme laid out by the ECB. It proves that clear and understandable central bank guidance is vital to turn the heat up on economic performance as the track back to stronger growth and vital job creation continues.

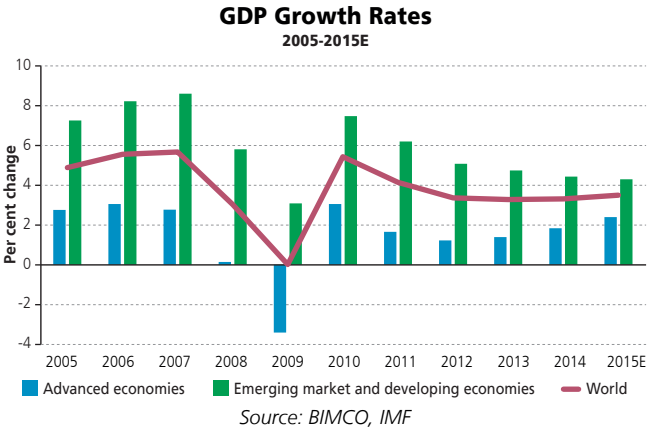
Outlook

Finally, we can say that the ECB has started to use some of the "big guns" that have proven so successful in the US and UK, where expansionary monetary policies were taken on board rapidly. Conditions are different, the set-up too prolonged and the results may not be as convincing as seen elsewhere. So far, the euro area recovery has been lethargic and unsustainable since the outbreak of the crisis. Hopefully, this positive move will assist the region's recovery.

The US is heading for an estimated GDP growth in 2015 of 3.6% by the IMF, an outstandingly strong performance that will assist many other economies in their recovery, as imports are likely to increase in the US.

The large oil-consuming countries and regions should also benefit from lower energy prices as it frees up money to spend elsewhere and lowers input cost for businesses.

Recent years have resulted in a slightly more balanced global economic development. Advanced economies have been growing at a stronger pace for the third year running in 2015, while the emerging and developing economies have been growing at a weaker pace over the same period of time.



Source: BIMCO, IMF

Global seaborne trade is dependent on global growth, thus it is vital if general shipping demand is to go forward that a smooth transition from a sustained recovery to normalized demand become successful. The article was finalised on 9 March 2015. Read about the impact on shipping on the following pages...

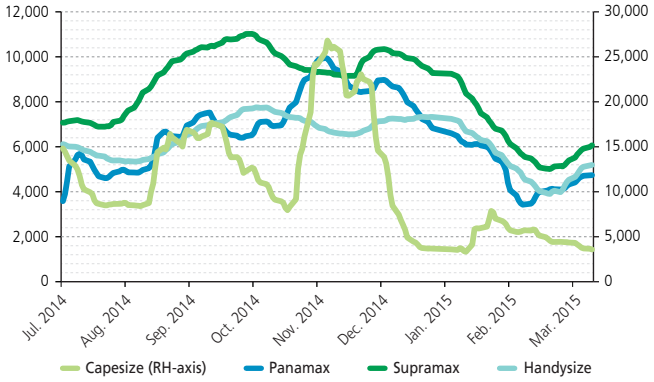
Dry Bulk Shipping

After all-time low Baltic Dry Index (BDI), stronger volumes in Q2 are likely to support the freight market

Demand

How bad can a market be? Extremely bad if you look at the dry bulk shipping market since early December 2014. The fourth quarter of 2014 was hugely disappointing, ending in complete despair, with Capesize rates diving below USD 5,000 per day in mid-December. On 18 February, the BDI hit an all-time low of 509; Supramax freight rates were the only ones above USD 5,000 at USD 5,002 per day .

Average of Time Charter Routes for Baltic Indices
2014-2015, USD per day



Source: BIMCO, Clarksons

The development of the dry bulk market is closely tied with that of China's appetite for commodities; this goes for the good times in the past as well as the current challenging times. Despite the fact that GDP growth is still running high in China at 7.4%, the need for imported commodities was somewhat weak last year. Iron ore imports were a strong support once again, growing by 112.6 million tons (13.7%) helped along by a large drop in price, but coal was a devastating story in spite of a drop in prices too. Thermal coal imports were down from 192 million tons in 2013 to 165.5 million in 2014, with the trend likely to continue if hydropower generation hits another strong year. Moreover, the new Chinese import regulations on coal quality (sulphur and ash content) contributed further to the decline in imports in January when total volumes (including coking coal and lignite) were at their lowest monthly level since May 2011 according to SSY.

Despite Chinese steel production surging to a new all-time high of 822.7 million tons in 2014 (+0.9%), coking coal imports were down by 14.6 million tons to 60.8 million tons in 2014 (-31.6%). With falling domestic demand for steel, tax rebates assisted a surge in exports to neighbouring Asian customers. 2015 could see these rebates changed or removed, which would in turn reduce the incentive for steel mills to keep up production.

US coal exports were also a sad story in 2014 as their biggest export market, Europe, lowered its demand throughout the year. The US is primarily a coking coal exporter, but export demand is driven by price on the global market. As the US is the most distant of all exporters, high prices and tight supply are needed to keep up volumes; neither was present in 2014. Thermal coal exports dropped by 34% to 28.9 million tons.

According to Tradeviews.net, cement trade was one of the best performers last year with a growth rate of 10%, reaching approximately 179 million tons. Imports into South Korea were likewise strong, growing by 7% to reach 275 million tons.

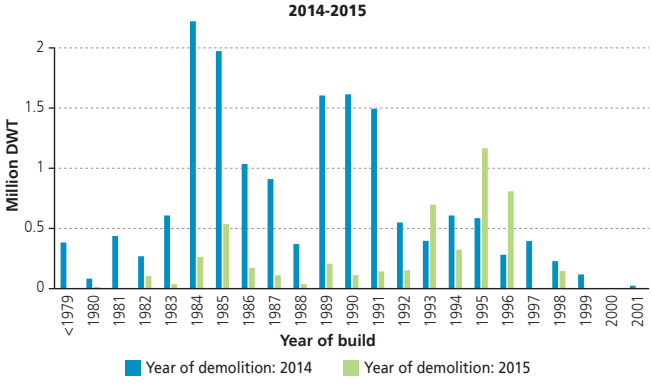
Supply

Demolition of dry bulk tonnage was relatively modest for a long time when considering the fundamental conditions of the freight market. However, recent extremely poor freight markets have stirred it up. At the end of February, 68 ships with a combined capacity of 5 million DWT had been demolished since the turn of year, out of which half were of Capesize capacity with an average age of 21 years. This compares to the 27 years average age of the Handysizes going for recycling. The tough trades of the Capesizes cut their commercial life shorter than that of Handysizes. The extremely low earnings has pushed more ships out of the market.

The youngest ships being recycled overall were a pair of Panamaxes built in 1998, followed by five Capesizes built in 1996. At the other end of the scale, 20 Handysizes built between 1980 and 1985 were recycled.

During the first two months of 2015, 11 million DWT of new dry bulk capacity were delivered into the active fleet. As BIMCO expected, we have seen the majority being newbuilt Supramaxes whereas the delivery pace

Total Demolished Capacity by "Year of Build"
2014-2015



Source: BIMCO, Clarksons

QUICK FACTS

6 March

Total fleet size (change since 1 January)
DWT million: 761.97 (+0.8%)

Rate indices (change since 5 December)
BDI: 565 (-42%)
BCI: 470 (-63%) • BPI: 587 (-46%)
BSI: 566 (-42%) • BHSI: 352 (-29%)

Latest update on Baltic Indices available at www.bimco.org

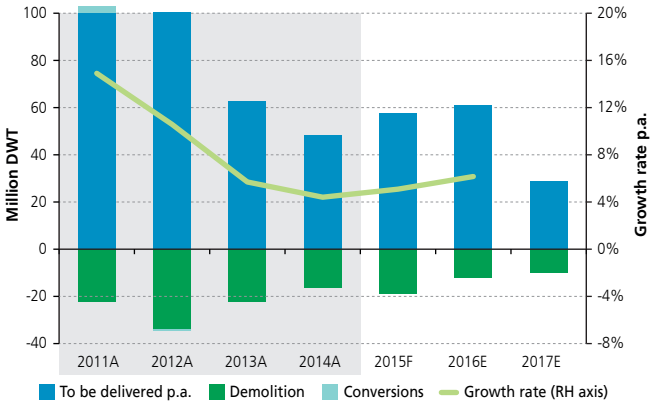
of Panamax is now coming slightly down. 54 Handymaxes/Supramaxes have already been delivered by the end of February. This compares to 199 for the full year of 2014 [40,000-67,000 DWT].

In the Panamax segment, just 22 ships have been delivered by end-February, as compared to 160 ships (4.6% in annual fleet growth) for the full year of 2014 [67,000-100,000 DWT]. For 2015 as a whole, Panamax deliveries are estimated to go as high as 150 ships (3.3% in annual fleet growth).

The troubles in the freight markets have for once also been seen in the order book where interest for new contracts has been subdued. The overall order book dropped to 158.2 million DWT from 168.6 three months ago.

It remains an imperative for a sustainable freight market recovery that new contracts remain scarce for an extended amount of time. Fortunately, the newbuilding prices offered by the shipyards are still 10-15% above the lowest of 2012-2013 and are not seen as very attractive.

Dry Bulk Supply Growth



Source: BIMCO estimates on Clarksons raw data

A is actual. F is forecast. E is estimate which will change if new orders are placed. The supply growth for 2015-2017 contains existing orders only and is estimated under the assumptions that the scheduled deliveries fall short by 10% due to various reasons and 30% of the remaining vessels on order are delayed/postponed.

Outlook

India was the beam of sunlight in an otherwise dark coal market in 2014. Going forward more support could come from India.

In China, the question that has been unanswered for a long time is will the lower and lower international iron ore price (-47% in 2014 and still falling some 15% in 2015) favour imports and eventually lead to large-scale shutdown of inefficient low-quality Chinese iron ore mines? The jury is still out on that one.

Facts are as follows: in 2014, the amount of domestically mined iron ore was up by 4.3% while the iron ore quality of the same went down from an estimated Fe-content of 21% in 2013 to 17% in 2014. Meanwhile iron ore imports with a Fe-content of 62% went up by 13.7% in 2014 from a year earlier.

Will it become reality or remain a dream – and to what effect will it matter to the Capesize market? Australian exporters won the battle in 2014, much to the regret of the freight market. BIMCO expects that they will not let go of the lead, at the expense of long-haul shipping demand from Brazil. All mining majors have expansion plans in place for 2015 and 2016, and yet another Aussie, the new Roy Hill iron ore mine, will join them towards the end of 2015. The site is set for 55 million tonnes a year once fully operational.

Q2 is the peak season for South American exports of soya. Volumes will go higher to the primary benefit of Panamax and Supramax; whether freight rates will follow suit remains to be seen, as too many ships being in position for the season will cap the upside, just as we saw last year. For the Capesizes to find support, the seasonality must kick in here too. Iron ore exports from both Australia and Brazil are expected to increase as we move further into the year. Overall, iron ore volumes are expected to be higher for the full year, though not as strong as in 2014 where several factors moved in a positive direction.

Russian wheat exports are on course to beat last season's volume. However, exports from July to January have been strong enough to have already eclipsed last year's total, so it seems that more troubles lie ahead for the already reeling Black Sea market as Russian export restrictions kick in.

To sum up, our forecast for March/May: BIMCO assesses that the Capesize time charter (T/C) average rates will be in the range of USD 3,000-9,000 per day. Panamax T/C average rates will stay around USD 5,000-9,000 per day. For the Supramax segment, BIMCO forecasts freight rates in the range of USD 6,000-9,000 per day, whereas Handysize freight rates are expected around USD 5,000-7,500 per day.

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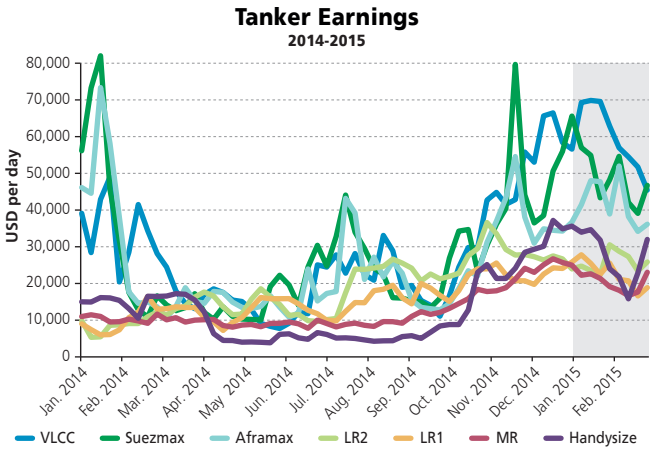
Tanker Shipping

Stronger tanker markets prolonged on strong fundamentals

Demand

Demand for crude oil and oil product tankers is currently strong and both segments are enjoying an extended winter season with high earnings. Spot market earnings in January for VLCC and Suezmax reached USD 70,000 and USD 65,000 per day at the peak respectively.

For the product tankers, Handysizes peaked at USD 35,000 per day in Q4 before heading south as the other product tanker segments did in January, only to rebound in the second half of February.



Source: BIMCO, Clarksons

In the product tanker market, freight rates on the spot market shot up in October and have managed to stay high since then. They have also enjoyed increased demand from the drop in oil prices as more arbitrage opportunities (taking advantage of a price difference between two or more markets) developed in combination with a strong season uptick.

It seems confirmed that crude oil tankers are now responding to the improved trading environment by sailing at higher speed. In the previous BIMCO tanker report it was advocated that slow steaming is important to ensure that product tankers do not depress freight rates.

Not since the first half of 2010 have we seen a "normal" priced T/C market for VLCC. Just before Christmas 2014, the one-year T/C rate for a 310,000-DWT modern VLCC returned above the three-year and five-year quotes at USD 40,000 per day. This is illustrative both of the excitement in the market and an indicator that the significant oversupply seen in recent years has somewhat eased. The one-year T/C rates went as low as USD 18,000 per day in 2013 on the back of limited fixture activity as no owners wanted to commit on such low levels; at the same time the five-year T/C rate struck a multi-year low too at USD 26,000 per day. At the end of February, the one-, three- and five-year T/C rates stood equal at USD 43,000 per day.

A lot of talk about the steep contango in oil prices (where the forward price is higher than spot price) has circulated during the winter on whether or not it could translate into a widespread employment of large crude oil tankers to floating storage. Such a development could boost demand and send freight rates higher. So far, we have not seen much pointing in this direction, as owners as well as speculators who could benefit from this price spread have been reluctant to engage. Floating storage has appeared only to a limited extent.

Supply

It is no surprise at all that the order book for crude oil tankers is growing as the only one among the major shipping segments. Twelve new VLCC orders, six Suezmax orders and four Aframaxes have been placed so far in 2015. This has lifted the crude oil tanker order book by 4.5%. Orders for VLCC have been shared among the three top builders, whereas the orders for Suezmax and Aframax have all been placed in China. China remains the builder that offers the lowest prices on newbuildings.

During 2014, 24 newbuilt VLCCs entered the trading fleet against 30 in 2013. So far three VLCCs has been delivered, with another 25 scheduled for delivery. BIMCO expect some slippage will occur that will support a stronger earnings environment. However, the window of opportunity also seems to close somewhat in 2016, which currently has 54 VLCCs scheduled for delivery.

The VLCC fleet grew last year by 2.3% and is on course for 3.1% in 2015, taking an unchanged level of demolition into account.
Looking at product tankers, the LR2 segment is where action on the supply side is taking place in 2015. For a total fleet that consists of 239 units at the start of the year, the addition of 32 (including slippage) will inevitably be quite a mouthful.

BIMCO assesses the overall product tanker fleet to grow by 5.0% in 2015, the fastest pace since 2010. This will result in the third consecutive year with a rise in product tanker fleet growth since it bottomed out in 2012 at 2.0%.

BIMCO expects demolition in both tanker segments to be around the same level as in 2014, with no significant one-off events likely to rock that boat. So far the demolition activity in 2015 has naturally been very low with strong markets, just six old product tankers and two VLCCs built in 1989 and 1992.

QUICK FACTS

6 March

Fleet sizes (change since 1 January)
Crude (DWT million): 377.27 (+0.5%)
Product (DWT million): 134.51 (+0.9%)

Rate indices (change since 5 December)
BDTI: 848 (+4%) • BCTI: 677 (-13%)

Latest update on Baltic Indices available at www.bimco.org

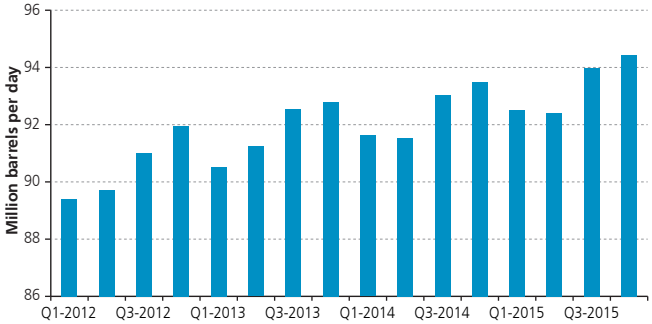
Outlook

Following the peak in global oil demand in Q4 of 2014 at 93.53 million barrels per day (mb/d) as estimated by the International Energy Agency (IEA), the first half of 2015 provides a slowdown to an average of 92.50 mb/d. For 2015 as a whole, IEA forecast demand growth of 0.9 mb/d (1%) up from 0.7 mb/d (0.8%) in 2014. Growth is expected purely in non-OECD (Organisation for Economic Co-operation and Development) areas, with +0.1 mb/d in the Americas, +0.2 mb/d in Africa, the Middle East and China, +0.5 mb/d in "other Asia" and then -0.3 mb/d in FSU to strike the balance.

Global oil supply is likewise expected to go higher, though not as much as demand. This will narrow the oversupply gap somewhat. IEA notes that the market response to lower oil prices is asymmetrical in the sense that the supply side has become more price-elastic, whereas demand less so.

Global oil supply is a volatile element, one that affects the tanker markets somewhat – not by creating uncertainty but it sure makes a difference to tons-miles demand if oil supply comes from the US, Libya or Iraq that alone sold nearly 3 mb/d in December. In January 2015, Iraq only exported 2.5 mb/d. Normally the Organization of the Petroleum Exporting Countries (OPEC) exports benefit the crude oil tanker markets as they traditionally go long-haul, so the lack of OPEC supply may explain some of the sliding freight rates seen since the start of year.

World Oil Demand



Source: BIMCO, OECD/IEA

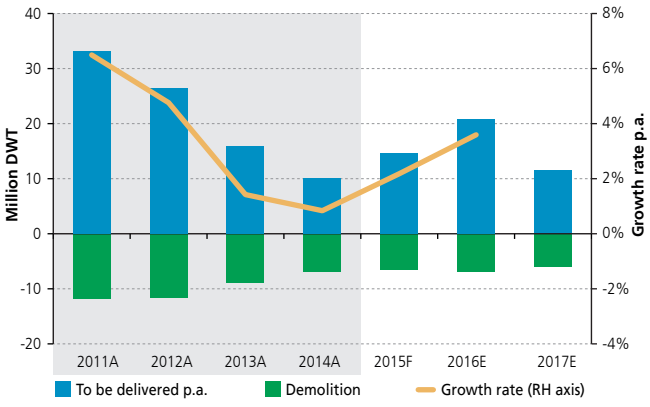
Meanwhile in the US, shale oil producers are scaling down the number of rigs drilling for oil in their response to the lower oil prices. Whether this actually brings down supply significantly or only cuts costs for the marginal barrel remains to be seen. Until now, none of the large oil-producing nations has announced large cuts in oil production.

Adding to that positive story is the Middle East export refinery expansions coming on stream in 2015. The Yanbu facility on the west coast of Saudi Arabia along the Red Sea expects to serve customers globally with 400,000 barrels per day of refined oil products. Whereas the Yanbu refinery is export-oriented, the new large-scaled expansion of the Ruwais facility in Abu Dhabi is expected to be domestically oriented. A development like this illustrates the oil-refinery dislocation story is still very much alive, lifting hopes higher for oil product tanker demand going forward.

For March/May, BIMCO expects earnings for the VLCCs at USD 30,000-50,000 per day, for the Suezmax crude oil tankers at around USD 30,000-55,000 per day and for Aframaxes earnings are expected in the region of USD 20,000-40,000 per day.

In the product tanker segment, BIMCO expects earnings on the benchmark routes from the Arabian Gulf to Japan for LR2s to stay around USD 15,000-25,000 per day. LR1 ships are holding on to the stronger market, and BIMCO expect earnings around USD 15,000-25,000 per day. MR average rates are seen somewhat down to USD 12,000-24,000 per day, with Handysize average rates equally strong in the interval of USD 15,000-25,000 per day.

Crude Tanker Supply Growth



Source: BIMCO estimates on Clarksons raw data

A is actual. F is forecast. E is estimate which will change if new orders are placed. The supply growth for 2015-2017 contains existing orders only and is estimated under the assumptions that the scheduled deliveries fall short by 10% due to various reasons and 20% of the remaining vessels on order are delayed/postponed.

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Container Shipping

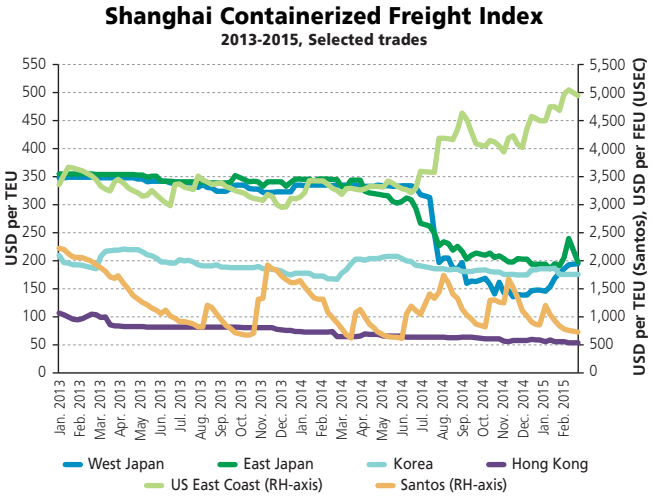
Striking the balance is tough when everyone wants to get "back into the black"

Demand

The labour conflict that caused a widespread and highly disruptive strike and subsequent congestion in most US West Coast ports, especially for the container shipping industry, ended towards the end of February. In spite of the conflict, US West Coast ports handled an increasing number of loaded inbound containers in 2014 (+3.8%). The trade in 2014 was much stronger though on the US East Coast (+10.6%), with strong numbers seen throughout the year. The West Coast congestion did not relocate volumes from West to East much – if at all.

The stable freight rate trend in the first part of 2014 on the Far East to Europe trading lane collapsed when the peak season got underway. Following that, BIMCO anticipated that volatility would again reign for an extended time on that route, as has been the case. Declining volumes prompt carriers to adjust supply quickly in order to stop freight rates from entering a free-fall drop. As we have now passed the annual low point in volumes around the Chinese New Year in February, we enter a window of opportunity that could result in a more steady freight market.

One of the most significant container trade regions, the intra-Asian market is normally riding high on the back of demand growth on the all-important east-west trades and a buoyant local manufacturing market. Recently the cascading of more and larger ships onto secondary routes has resulted in an oversupplied intra-Asian market and thus declining freight rates in a very competitive business. As an example of this, average freight rates from Shanghai to East and West Japan went down by 22% in 2014 as compared to the previous year.



Source: BIMCO, Shanghai Shipping Exchange

The trade from Shanghai to Santos in Brazil is also under pressure from cascading with extreme volatility following along. Average freight rates on that trade dropped 19.9% in 2014 as compared to the earlier year.

The quest to move earnings "back into the black" depends on improved freight rates and fleet utilisation for all individual owners and operators in the market. Earnings on Far East (FE) to US East Coast and FE to Mediterranean were the stars of 2014, improving by 13.3% and 19.1% respectively. The former gained strength throughout the year, with Q4-2014 being outstanding as rates went higher while volumes followed the seasonal trend down.

Supply

The supply side is doing whatever it can to improve the fundamental balance of the container shipping market. During the past three months, the fleet has only grown by ten ships net of ships being removed. During 2015, 31 ships with a combined capacity of 224,139 TEU have been launched. That included the MSC Oscar that currently holds the title as being the world's largest container ship with a nominal capacity of 19,224 TEU. With 79% of the newly introduced capacity being ships with a capacity larger than 8,500 TEU, the trend simply continues as in past years. Fewer but larger ships influence the supply side.

Size is not everything – it is the only thing, but the benefits can only be reaped if the ships can be utilised at a substantial level. The only orders worth mentioning that have been placed so far in 2015 are 11 units of 18,000-TEU ships to be built in Japan, who seem committed to make a comeback on the scene for Ultra-Large Container Ships. A 9,300-TEU ship is the biggest so far built in Japan.

The demolition activity has been low in the first couple of months: 30,864 TEU with an average age of 22, equal to that of the past two years.

Additionally, the order book keeps improving too. It is now down to just 426 units, a number not seen since 2003 – the difference, however, is that this time the order book stands at 3.27 million TEU, 50% bigger than 12 years ago. The total fleet currently stands at 18.4 million TEU.

The current container fleet is biased in many ways. Out of 5,121 ships, 45% ships have a capacity of less than 2,000 TEU. However, those 45%

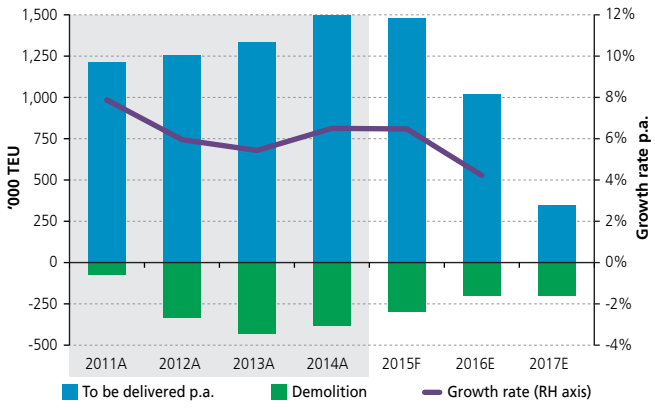
QUICK FACTS

6 March

Total fleet size (change since 1 January)
TEU million: 18,423.10 (+1.1%)

Rate Index (change since 5 December)
CCFI: 1,064.23 (+3%) • SCFI: 960.29 (+4%)

Container Supply Growth



Source: BIMCO estimates on Clarksons raw data

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in number only represent 13% in capacity. The Ultra-Large Container Ships with a capacity of 10,000 TEU or more account only for 5% in numbers but 19% in capacity and 90% of publicity.

BIMCO estimates a total delivery during 2015 just short of 1.5 million TEU and a demolition activity below the bullish level of 2014; the fleet growth rate is on course for 6.5%.

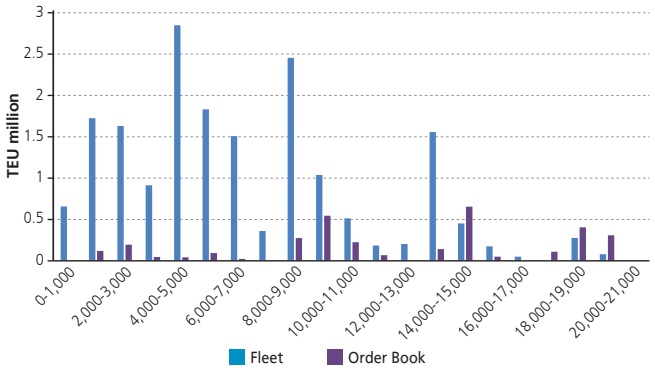
Outlook

Gloves are now off in the fight for future business between the Suez and Panama Canals. Whereas the Panama Canal is offering quantum discounts for the biggest customers, the Suez Canal is aiming at lowering transit times with its ongoing expansion project. Adding icing on top of the cake, the Suez Canal announced in February 2015 a non-hike of transit prices for 2015. A closer look into the active fleet shows that 182 ships are already in the fleet and 103 ships are on order at the larger end of the scale, the over-13,000-TEU ships that the Suez Canal exclusively can cater for once the expansion of the Panama Canal opens up to business.

Even though the contracts in the order book stretch all the way into 2019, 53% of the sub-7,000-TEU ships will be delivered within the coming 12 months. Have we finally reached the point where the fleet is big enough? No, not at all, if you ask individual investors with their minds set on shipping, be it in container ships, tankers or bulkers. Shipping remains a game of "prisoner's dilemma". Everyone knows what is right for the industry, but a lot of investors defect from the optimal industry strategy as they seek to be better off individually than the rest. The game has been played and lost a long time ago, but the conclusion still haunts the industry as a glut of supply is making the sustainable business case difficult.

1 January 2015 marked the start of the stricter sulphur emission regulation in the Emission Control Areas (ECAs). So far, the implementation has been "manageable", as customers may hardly have noticed the change in cost and prices. Fact is that Marine Gas Oil (MGO) today is priced at the same price as High-Sulphur Fuel Oil (HSFO) was half a year ago. Good or bad? That depends. When this changes at some point in time, owners and operators face a serious challenge in passing on the extra cost to their customers in order to protect their margins.

Containership Fleet and Orderbook
by ship size, TEU



Source: BIMCO, Clarksons

BY ELIAS KARAKITSOS

The financialisation of shipping

The annual volatility of spot freight rates (a measure of how much rates vary from month to month in a year) has nearly trebled since 2003 from 21% to 61%.

Even before this structural change, freight rate volatility was higher than that of the S&P 500. Shipping was always a risky business and the new excessive volatility is a major concern for owners, charterers, institutional investors and analysts. What has caused this structural change? Is high volatility a new permanent feature of the market? Or, is it likely that after a while volatility will subside and return to normal levels? Does high volatility make shipping cycles less predictable, undermining investment in the industry at a time when globalisation needs demand more, not less, shipping services? What are the implications of this structural change for analysing shipping and decision making?

Financialisation (a term used to describe the impact of Wall Street on shipping) affects shipping via commodity speculation and the capital markets. It has transformed shipping from a fundamental transport industry to an asset market akin to stocks, bonds and commodities. The transformation is the result of the influx of institutional investors in commodities in the first instance and more recently in shipping itself. Institutional investors set up their own propriety trading desks in commodities in 2003, and their speculation distorted the signals that commodity prices convey to shipping participants. Rising commodity prices, unless caused by supply bottlenecks, signify a healthy market, thereby boosting the belief of charterers and owners in a booming shipping market. Conversely, falling commodity prices signal a weak market and foster gloomy expectations in shipping. As a result, freight rates can be higher or lower than justified by economic fundamentals (the supply-demand balance and bunker costs). There is a premium over the fundamental price when risk appetite increases and institutional investors pour money into commodities in search of high returns. Also, there is a discount when risk aversion rises and institutional investors withdraw money from commodity markets. It is not an accident that shipping thrived during the commodity super-cycle of 2003-11 and has been doing badly since the commodity bubble burst in the spring of 2011.

We can use the K-model to assess the premium/discount in freight rates under the impact of financialisation. It is an empirical model that integrates the dry market with a global macro and financial model and is used for analysing, forecasting and risk management.

See Table 1 below.

After a long period of stability, the prices of the three major bulks (iron ore, coal and grains) embarked on a relentless rally in the period 2003-11 as institutional money poured into all types of commodities (see Figure 1). The commodities bubble imploded in 2008, along with equities, but recovered immediately following a huge policy stimulus in China and the rest of the world. The rebound proved temporary and money flowed out of commodities and emerging countries once the US recovery started showing signs of being sustainable. During the upswing of the commodity bubble in 2003-08 the Baltic Dry Index (BDI) advanced 184% (see Table 1). China's immense appetite for commodities improved economic fundamentals in the dry market by 101% thereby accounting for 55% of the BDI advance. The factors that capture financialisation in the K-model (commodity prices, US interest rates, the dollar and stock prices) contributed 83% to the BDI rally equivalent to 45% share (see Table 1). In the downswing of the commodity cycle in 2011-14 the BDI fell -47%. Economic fundamentals contributed -26%, while financialisation -21% with shares approximately equal in the upswing and the downswing. Therefore, there is a premium in good times and a discount in bad times of around 45%. Economic fundamentals and financialisation are almost equal partners in accounting for freight rate volatility. The emergence of financialisation since 2003 has thus added to the volatility of freight rates. With such a huge discount

Table 1: Freight rate decomposition

	Total BDI change	Caused by economic fundamentals	Premium/discount due to financialisation
2003-08	184%	101%	83%
Share, %	100%	55%	45%
2011-14	-47%	-26%	-21%
Share, %	100%	54%	46%

Elias Karakitsos

since 2011 it is not surprising that freight rates are in the doldrums and sentiment in the dry market is so gloomy.

We can now turn to the question of whether the high freight rate volatility is permanent or transitory. The pervasiveness of institutional investors in commodity trading and capital markets is the result of excessive liquidity. This liquidity has financed a series of bubbles (internet, housing, commodities and shipping). It was created gradually and started with the printing of money in Japan in the 1980s, and it was accentuated with "shadow banking" in the US and other major economies.

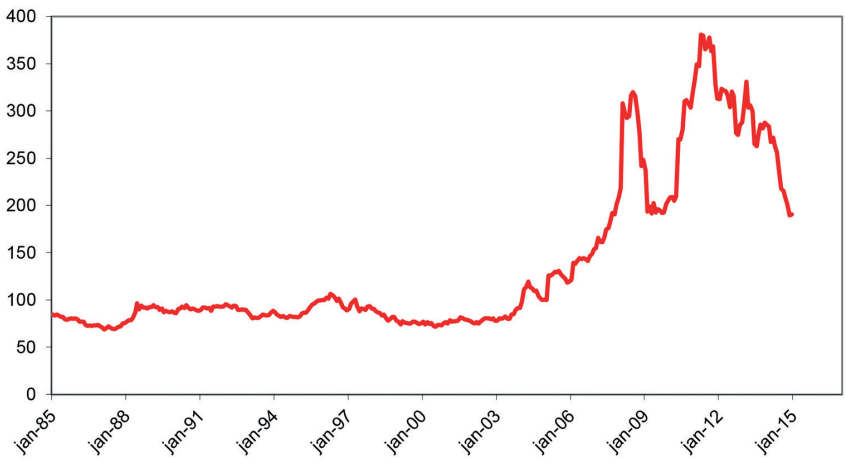
In the US alone, the liabilities of traditional and shadow banking hit a high of 241% of GDP (see Figure 2). Despite some deleveraging in traditional and shadow banking since the financial crisis of 2007-08, total liquidity in the US has remained unchanged at 450% of GDP or $74 trillion (see Figure 3). The injection of liquidity by the Fed (the US Central Bank) through its quantitative easing programmes has kept total liquidity unchanged. With unchanged liquidity, the deleverage in the traditional and shadow banking has been siphoned into hedge funds and private equity funds, which now directly invest in shipping and other areas. Therefore, unless the Fed withdraws this excessive liquidity in the years ahead, the high volatility of freight rates will become a permanent feature of shipping.

We can now turn to the implications of the financialisation of shipping. This requires a new framework for analysing the shipping markets. In the traditional view, freight rate volatility is caused by fluctuations in the cargo supply-demand balance. The spot freight rate is the price that balances available ships with cargo at a particular place and time. The spot rate is "efficient", meaning that it incorporates all available information into its pricing, which occurs under perfectly competitive conditions. The rate is determined by the lowest bid among contending owners – a "Dutch auction". As supply is fixed at any particular point in time, freight rate fluctuations reflect changes in demand. In the traditional view, therefore, the higher volatility in freight rates is the result of higher volatility of demand for cargo. However, this view is not plausible and does not fit the facts. It was valid when shipping was a fundamental transport industry, but not anymore.

With my co-author Lambros Varnavides, I have challenged the traditional view of freight rates in a recently published book, *Maritime Economics: A Macroeconomic Approach* (Palgrave Macmillan, 2014). In this new theory, the freight rate over a particular cargo is the outcome of a bargaining process between charterers and owners that happens at approximately the same time in different places, and information about agreed freight rates is almost instantaneously available to all participants. The agreed freight rates do not balance supply and demand in a particular place at a particular point in time, but rather expectations of overall supply and demand in a particular segment or the entire market. The balance of power in these rate negotiations is driven by rational expectations about the future. Expectations of improving trade conditions will favour the owners, while expectations of worsening trade conditions will favour the charterers.

In this view freight rates are treated as assets, and especially as "risky assets", such as stocks, bonds and commodities. Freight rates and stock prices are determined by the same principles. A risky asset is dif-

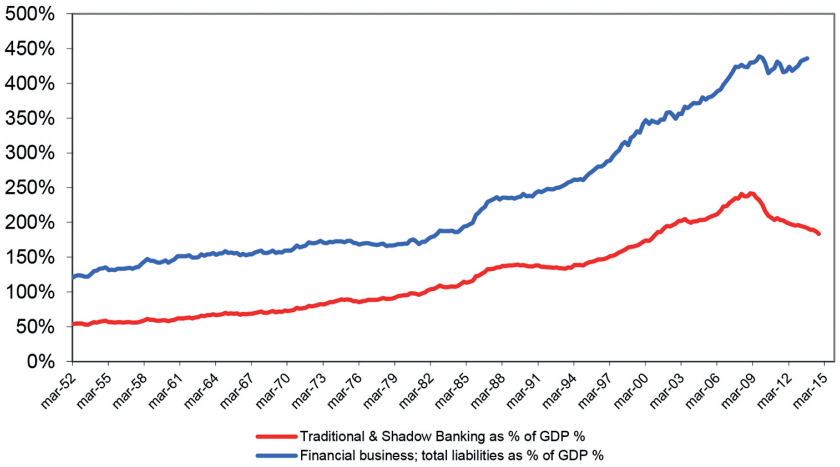
Figure 1: A composite of three major commodity prices
(iron ore, coal and grains) Jan 2005=100



ferent from a risky business. Shipping has always been a risky business. In the past ten years freight rates have become a risky asset. The freight rate dynamics are similar to the pricing dynamics of asset prices. Like stocks, freight rates are priced on future expected returns discounted to their present value to compensate for the time value of money. This implies forming expectations about future economic fundamentals: the demand for cargo, the supply of ships, bunker costs, new building and second-hand prices.

Many drivers of expectations – wars, strikes, weather – are unpredictable and therefore cannot affect rate negotiations until they occur. Nonetheless, future economic conditions are partly predictable from the policy decisions of governments and central banks, such as the US Federal Reserve or the People's Bank of China. Thus, policy and in particular real interest rates should be monitored to deduce the direction in which freight rates are heading. If growth in the world economy falters, dry market participants anticipate a loosening of policy (eg lower interest rates), which would stimulate world trade and hence the demand for shipping services. Freight rates would adjust to the news by tilting the balance of power towards the owners. The impact of the policy change would be felt before the effect on demand is realised. Conversely, a policy decision to raise interest rates by tilting the balance of power towards the charterers would affect freight rates negatively.

Figure 3: US liquidity

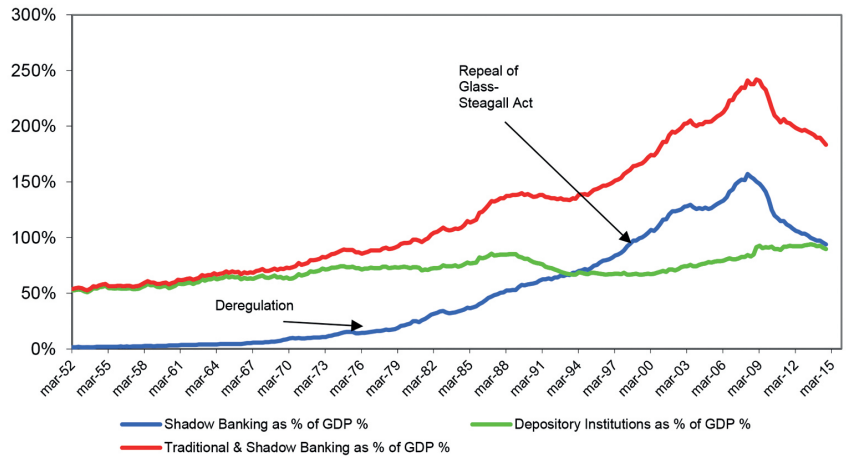


There is no better proof that freight rates have become an asset than the fact that the BDI has become an important leading indicator of future economic activity, like the S&P 500. In 2009, central banks took the rise in BDI (which preceded the S&P 500 by two months) as a sign that their policies had started bearing fruit.

Shipping cycles are caused by business cycles – expectations about the demand for cargo rely exclusively on business cycles and anticipated political developments. The supply of ships, on the other hand, reflects past expectations of demand, approximately two years ago because of the shipyard delivery lag. This lead-lag relationship may sometimes cause a seeming divergence between business and shipping cycles, but it does not distort the basic principle that business cycles cause shipping cycles. Sophisticated models, like the K-model that treats freight rates as asset prices, can help to unravel these complexities and put order into otherwise chaotic patterns.

This makes shipping forecasting and business planning more complicated. For shipping companies to understand their markets, decision makers must take money flows into account, not just demand and supply. In the new era of financialisation of shipping, forming a view of the future is not just about how many new buildings will be delivered and scrapped and how many tonne-miles of cargo will be demanded and extrapolating these trends. It is also about money flows and how policy would respond to business cycles. ■

Figure 2: Liabilities of shadow and traditional US banking



Editor's Note: Elias Karakitsos is Chairman of Global Economic Research and an Associate Member of the Cambridge Centre for Economic and Public Policy, University of Cambridge. He was at Imperial College for 25-years, where he held the Chair in Economics and was Head of Economics for ten years. He has acted as an advisor to UK, US and EU governments, and as an investment advisor to financial institutions and shipping companies. Email: elias.k@globaleconomicresearch.com.

BY MOORE STEPHENS

Operating costs continue to challenge shipping's resources

Compared to many other industries, confidence levels in the international shipping industry have held up reasonably well over the past half-dozen years of global economic downturn. But, as is the case with any industry when operating costs are going up while revenues are declining, shipping is facing some serious challenges in the immediate future which will test the mettle and durability of stakeholders and potential investors alike.

Operating costs fell by an average of 0.3% in 2013, according to OpCost, the Moore Stephens ship operating costs benchmarking study. This is the second successive year-on-year reduction in ship operating costs, although the fall in costs for 2013 is 1.5% below that recorded for 2012. These reductions pale into comparative insignificance compared to the near-16% increase in total operating costs recorded for 2008, but the difference then was that the markets were buoyant on the strength of healthy freight rates. Today, the story is somewhat different. Moreover, operating costs are thought likely to rise by almost 3% in both 2014 and 2015. Against this background, the resourcefulness of the shipping industry is likely to be severely tested over the next 12 months.

OpCost 2014, which recorded movements in ship operating costs for 2013, revealed that crew costs was the only category to show an increase over the year, indicating that shipowners continued to focus on managing costs and conserving cash in 2013.

Total operating costs for the tanker sector were up in 2013, but down in the bulker and container ship sectors. The tanker index was up by 2 points, or 1.1%, while both the bulker index and the container ship index were down by 2 points, or 1.2%, on a year-on-year basis.

There was a 0.2% overall average rise in 2013 crew costs compared to the 2012 figure, which itself was 0.2% down on 2011. This represents a comparatively small rise for an industry which has seen increases of more than 20% in this category at their peak. But the fact that such costs were the only category to show an increase for 2013 is perhaps a reminder that investment in good people is a must.

Tankers overall experienced an increase in crew costs of 1.8% on average, compared to the 2.3% fall recorded in 2012. Within the tanker sector, Handysize product tankers reported an overall increase of 3.3% in crew costs, while for operators of Suezmaxes and product tankers, the increases were 2.5% and 1.9% respectively. The only tanker category to show a fall in crew costs was VLCCs, down by 0.9%.

For bulkers, meanwhile, the overall average fall in crew costs was 0.5%, the same as in the previous year. The operators of Panamax bulkers paid 2.3% less in crew costs than in 2012, but there was a 1.2% increase in this respect for Handysize bulkers, this following a 4.8% reduction for 2012. Expenditure on crew costs remained unchanged over the 12-month period in the container ship sector, although operators of ships of between 100 and 1,000 TEU did record a 1.7% increase in such costs for 2013.

Expenditure on stores was down by 1.9% overall, compared to the fall of 2.1% in 2012. The biggest fall in such costs was the 5.5% recorded by VLCCs. For bulk carriers overall, stores costs fell by an average of 4.1%, while in the tanker and container ship sectors, the overall reductions in costs were 2.1% and 3.4% respectively. The most significant increase in stores expenditure was that recorded by the operators of tankers in the 5,000-10,000-DWT range (6.0%).

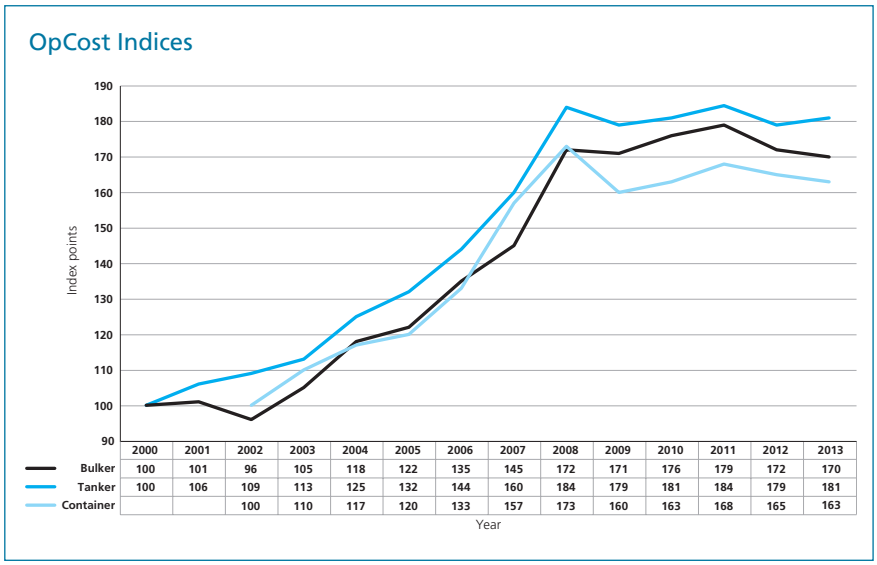
There was an overall fall in repair and maintenance costs of 0.4%, compared to the 1.9% reduction recorded for 2012. The most significant cost reduction here was that recorded for bulkers of between 10,000 and 20,000 DWT (7.2%), while the highest recorded increase was that for 40,000-50,000-DWT chemical tankers (3.6%).

The overall drop in costs of 0.3% recorded in respect of insurance compares to the 6.2% fall recorded for 2012 and was the lowest in this category for a number of years. The operators of all categories of bulkers paid less for their insurance in 2013 than they did in 2012, in the case of Handysize

2014 Future operating costs survey

Cost type (mean)	2014	2015
Crew wages	2.4%	2.6%
Other crew	1.9%	2.1%
Lubricants	1.7%	2.0%
Stores	1.7%	1.9%
Spares	2.1%	2.2%
R&M	2.3%	2.4%
H&M	1.6%	1.8%
P&I	2.0%	2.2%
Management fees	1.2%	1.5%
Drydock	2.1%	2.2%

Source: Moore Stephens



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bulker	100	101	96	105	118	122	135	145	172	171	176	179	172	170
Tanker	100	106	109	113	125	132	144	160	184	179	181	184	179	181
Container			100	110	117	120	133	157	173	160	163	168	165	163

bulkers to the tune of 4.1%. In the tanker category, all but two types of ship – 5,000-10,000 DWT tankers and Handysize product tankers – paid less than in 2012, while operators of 100-1,000-TEU container ships paid 2.7% more in 2013 than in 2012.

Looking further ahead, a near-3% increase in ship operating costs is expected in respect of both 2014 (for which year actual figures are not yet available for analysis) and 2015, according to the findings of the latest Moore Stephens *Future Operating Costs* survey. The survey revealed that ship operating costs are expected to increase by 2.9% in both 2014 and 2015, with crew wages, repairs and maintenance being the cost categories likely to increase most significantly.

Crew wages are expected to increase by 2.4% in 2014 and by 2.6% in 2015, with other crew costs thought likely to go up by 1.9% and 2.1% respectively for the years under review. The cost of repairs and maintenance, meanwhile, is expected to escalate by 2.3% in 2014 and by 2.4% in 2015.

P&I insurance costs are expected to go up by 2.0% in 2014 and by 2.2% in 2015, this compared to the increases of 1.6% and 1.8% respectively predicted in respect of the cost of hull and machinery insurance.

Drydocking costs are expected to rise by 2.1% in 2014 and by 2.2% in 2015, while expenditure on spares is expected to increase by 2.1% and by 2.2% over the same period. Meanwhile, respondents anticipate increases of 1.7% and 2.0% respectively in the cost of lubricants in the two years under review. The cost of stores is expected to increase by 1.7% and 1.9% respectively for 2014 and 2015.

Management fees are deemed likely to produce the lowest level of increases in both 2014 and 2015, at 1.2% and 1.5% respectively.

A number of respondents commented on the impact of increased crew wages and costs. *"Crew costs remain a critical factor,"* said one. *"There will continue to be a high level of demand for trained crew, especially for top-end ships."*

The cost of regulatory and legislative compliance was another recurring topic in responses to the survey. *"Recent legislation in Europe will push costs up dramatically, especially in the UK,"* said one. *"SECAs (Sulphur Emission Control Areas) will have a serious impact on ships' equipment maintenance costs."*

The combination of low freight rates and increased operating costs dominated the thinking of a number of respondents, one of whom noted, *"Owners are hard-pressed to cut costs and lower operating expenses because of poor freight markets. There is a particularly severe impact on running costs for ships bought prior to 2009."*

A number of respondents to the survey felt that a surfeit of tonnage on the market would inevitably have the effect of increasing operating costs, typified by the comment that *"Only those owners and managers who can trim their ship-operating costs will come out ahead."*

Respondents were also asked to identify the three factors that were most likely to influence the level of ship-operating costs over the next 12 months. Overall, 20% of respondents (compared to 21% in the previous year's survey) identified finance costs as the most significant factor, followed closely by competition (19%). Crew supply was in third place, with 18%, followed by demand trends (17%) and labour costs (13%). Finally, the cost of raw materials was cited by 11% of respondents as a factor that would account for an increase in operating costs.

Moore Stephens Shipping Industry Group partner Richard Greiner says, *"Shipping is an expensive business in which to operate, and revenues earned in the freight markets must ultimately be sufficient not only to cover operating costs but also to generate a reasonable return. The industry remains under pressure to manage and reduce operating costs wherever possible, whilst making suitable budgetary provision for achieving forthcoming regulatory compliance, which is likely to be significant."* ▮▮

Editor's Note: This commentary on current shipping matters is supplied by Moore Stephens, the leading accountant and shipping industry adviser. Moore Stephens LLP is a member firm of Moore Stephens International Limited, with 667 offices of independent member firms in 105 countries.

BY SUSAN OATWAY

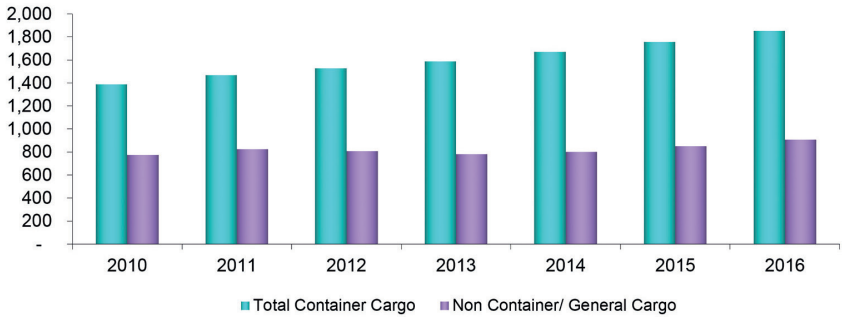
Where is the breakbulk boom?

I am just back from Breakbulk South Africa, where delegates were suffused with optimism for project cargo in the region and African trade in general. Falling oil prices are seen as a short-term irritation, but recovery is inevitable and a boom could be coming. Drewry agrees – although with slightly more caveats.

Demand for the multipurpose vessel (MPV) and heavy-lift (HL) fleet

Drewry estimates that dry cargo volumes grew at around 6% in 2014 and will be 4.8% this year and next. We estimate that general cargo demand rose by 3.6% over 2014 and container cargo by 5.2%. We expect these sectors to see growth of nearer 6% and 5% respectively over the next two years. Meanwhile non-containerised general cargo grew by around 2.7% over 2014 but is expected to see increases in line with the general cargo sector as a whole to 2016. *See Figure 1.*

Figure 1: Suggested development of general cargo market (million tonnes)



But what share of each part of the market is available to the MPV and HL fleet? The share of bulk cargo is principally to do with the minor bulks, that is, everything from agricultural products to steel to timber to aggregates. This share dropped significantly over 2013 as competition from other sectors intensified. However, recovery was seen in 2014 and is expected to continue at an average of about 15% over the forecast period to 2016.

The multipurpose share of general and project breakbulk cargo has continued to fall over the past three years, but as market conditions in competing sectors improve and demand continues to grow, we would expect this to stabilise at about an 18-19% share.

Figure 2: MPV age profile as of 1 January 2015

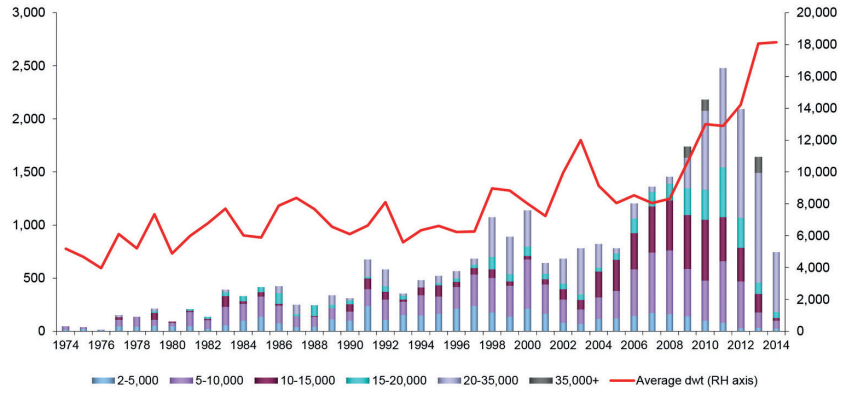
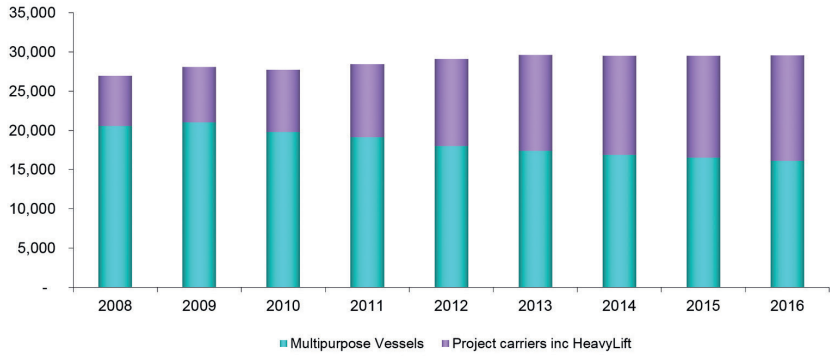


Figure 3: MPV fleet development to 2016 ('000 DWT)



The multipurpose vessel (MPV) and heavy-lift (HL) fleet

The MPV fleet (as defined by Drewry) numbers 3,252 ships, with a total deadweight of 29.5 million tonnes and an average age of 14 years. Over 70% of these ships are below 10,000 DWT but the average deadweight is rising. From 8,000 DWT in 2000, it has steadily risen to 18,150 DWT in 2014. The vast majority of project carriers are in the 10,000-15,000 and 15,000-20,000 DWT sectors, and 850 ships have enhanced lift, with 316 having a lift capacity greater than 250 tonnes.
See Figure 2.

Deliveries have come down from a peak in 2011 and hit a new low in 2014, but they are expected to settle at a historical average of just below 1 million DWT. Demolitions also dropped further in 2014 but are also expected to settle around the 1 million DWT mark. Most of the deliveries are for project carriers whereas most demolitions are for simple MPVs.

Meanwhile, the current orderbook is at just 6% of the operating fleet. This is particularly low, especially when compared with the container and bulk sectors. The most popular sectors are 10,000-15,000 DWT and 20,000-35,000 DWT. The 15,000-20,000 DWT sector currently has no newbuilding activity at all.

Slippage levels fell considerably over 2014 as the orderbook emptied. Just 16% of the 2014 orderbook missed its original dates, compared with nearer 30% in 2013. That figure will remain about the same over the coming year as the orderbook empties after high numbers of deliveries over recent years.

If we take all our assumptions for slippage, newbuilding and demolitions, we arrive at a fleet development as shown in Figure 3. All the fleet growth is in the project carrier sector, while the simple MPV is on the decline. Project carriers have made up 63% of newbuildings since 2009, while the simple MPV continues to age, now averaging 17 years. The project carrier fleet is likely to grow at around 3% a year from 2014-16 as owners replace their simpler ships with high-specification ships that can add value to any contract.
See Figure 3.

The effective fleet – and by that I mean one where an allowance is made for the better productivity of newbuildings versus older ships being demolished – is expected to stagnate over the next few years with an average growth of just 0.1%, with all the growth in the project carrier sector. However, the effective demand for the fleet – that is, taking into account all the competing areas where these ships find cargo – is expected to grow at around 5% per year.

The fly in the ointment is always the competing sectors. Much of this improvement – especially on the demand side – relies on container and bulk rates improving and those ships returning to their more conventional volumes. But if bulk and container rates do not improve quickly and the over-tonnaging outpaces demand, then utilisation could fall again.

We believe that the competition to this sector is the key to determining how rates will move over the next two years. Currently rates are at all-time lows in most sectors, and there is nothing to suggest that MPV owners will be able to move those rates higher any time soon. We doubt that 2015 will show much improvement on 2014, but there is potential for 2016 to be much stronger. ▮▮

Editor's Note: The above article is taken from the latest Drewry Multipurpose Shipping Market Review and Forecast. *A year's subscription is priced at £2,295, which includes the annual market review and forecast report, to be published 16 March 2015, supplemented by three quarterly updates. All enquiries to oatway@drewry.co.uk*

BY GILES NOAKES

Maritime security news first quarter 2015

At the end of the security article in BIMCO Reflections 2015, we summarised by saying that in the wider realm of maritime security, good intelligence, data and close links with security services and other important stakeholders are absolutely essential in a world where so many different threats exist.

Events of the first quarter of 2015 have only confirmed the range and scope of these threats and indeed our efforts to develop intelligence and data. Elsewhere in this copy of the Bulletin you will see an article on the CSO Alliance. This is an organisation we are supporting because in its very concept is the potential for improved information sharing that will allow Chief Security Officers (CSOs) to carry out risk analysis based upon up-to-date intelligence. This is also absolutely essential if we are to represent our concerns on security in the maritime domain – whatever the threat – with conviction and accuracy. In this article I want to highlight some of the areas on which we have given advice and guidance in the first quarter of this year, focusing on the Gulf of Guinea and the worsening situation with illegal immigration/refugees in the Mediterranean.

The Gulf of Guinea

Most are aware of the updated version of the Round Table of international shipping associations' *Guidelines for Owners, Operators and Masters for Protection against Piracy in the Gulf of Guinea Region*. The Guidelines were jointly developed by BIMCO, the International Chamber of Shipping (ICS), INTERTANKO and INTERCARGO.

Piracy and armed robbery in the waters off west Africa has become an established criminal activity of very serious concern to the maritime sector. Incidents have recently occurred as far south as Angola and as far north as Sierra Leone. These attacks have become increasingly violent, often involving firearms, and cases of kidnapping for ransom have also become more common. The global shipping industry acted in concert to update its existing Guidelines to take account of what has become a totally unacceptable security situation. Below are two examples from recent weeks as to why:

> *As reported by BIMCO last weekend, armed pirates boarded and hijacked a fishing ship underway off Togo. The Togo Navy responded and engaged the pirates. Twenty of the crew jumped overboard in an attempt to escape and were rescued by the patrol boat. The remaining seven crew were taken hostage as the pirates fled, heading out to sea. The pirates later left the ship and the crew sailed towards a safe port. One crew member has been reported as killed in the incident.*

> *On Wednesday night, it is reported by IMB that armed pirates attacked a Greek-owned tanker while it was waiting to load off Nigeria, killing its Greek deputy captain and taking hostage three other crew. The attack on the ship* Kalamos, *which had a crew of 23 and was sailing under a Maltese flag, took place at Qua Iboe. Members would want to know BIMCO has also heard that the master activated the ship security alarm and made a distress call which was received on channel 16, requesting medical assistance as a result of injuries sustained from the pirate attack on the ship. Three people are missing, while in fact two crew were injured, one fatally as reported. A* Nigerian Maritime Administration and Safety Agency *(NIMASA) patrol boat was said to have engaged the pirates in a gun battle. The pirates were said to be using two speed boats and are well armed. It is understood that the first officer was shot twice and the ship is making arrangements to evacuate the other injured crew. The injured person is believed to be the ship's chief mate. Three crew members have been abducted from the ship (a second officer and two able seamen).*

Although the nature of the attacks against shipping in west Africa differs from that of Somalia-based piracy, the basic principles of the Best Management Practices, previously developed by the industry to help protect against piracy in the Indian Ocean, are also applicable. The Guidelines should therefore be read in conjunction with BMP4, but seek to tailor this to the specifics of the threat in west Africa. Together, these publications will provide comprehensive advice on avoiding and deterring criminal acts and armed robbery in the region.

The updated Guidelines also take into account new regional maritime security initiatives in west Africa, in particular the Maritime Trade Information Sharing Centre for the Gulf of Guinea (MTISC-GoG), which is now providing a focal point for information on countering piracy and maritime crime in the region. The Guidelines have therefore been released in conjunction with the launch of the new MTISC-GoG website which includes Regional Maritime Security Guidance and MTISC-GoG reporting procedures so as to help ensure a co-ordinated approach among ships operating in the Gulf of Guinea.

The use of Private Maritime Security Companies (PMSCs) in the GoG

The Nigerian government has said that it will not hesitate to detain any ship entering the country's territorial and coastal waters with security escorts on board, whether armed or unarmed. NIMASA gave this warning when the agency detained three ships, *Lilac Victoria*, *UACC Eagle* and *Morgane*, because they sailed into Nigeria with individuals linked to private security firms overseas offering training on the use of weapons. As we reported in February:

Members are advised to note this intention which has been corroborated by other third-party sources. Yesterday afternoon two PMSC guards were arrested and a ship detained although cargo operations have been allowed to continue. It is not yet known if the guards were armed or not. Members are strongly advised if trading in Nigeria to seek assistance from NIMASA or the Nigerian Navy, the only legitimate sources of protection if they wish to acquire such services.

Boat refugees

Events over the last six months have led to a request by BIMCO Maritime Security Committee (BMSC) members to address this issue, and an item entitled Boat Refugees has been placed on the agenda for the next meeting. This is an area of great and growing concern to members. To date there is guidance available in the Security section of the BIMCO website and in the *Shipmaster's Security Manual*. ICS and the United Nations High Commissioner for Refugees (UNHCR) have already carried out work in this area. ICS has called on governments to act and further produced *the Guidance on Large-Scale Rescue Operations at Sea*, which is intended to assist crew members and shipping companies in the eventuality of rescuing "as many as 200 people at a time".

There is a compelling need for governments to ensure disembarkation as soon as possible to a place of safety ashore. The shipping industry is not in a position to solve the root causes of the crisis and recognises that governments face an enormous challenge. BIMCO believes, however, that the coastal authorities in north Africa could do much more to prevent the migrants' crafts from setting out to sea in the first place, especially when traffickers and people smugglers are involved. It also recognised that the European Union and its member states need to assist the authorities in north African countries to meet their responsibilities as governments in order to support search-and-rescue operations as well as those merchant ships, which are often the first on the scene. The IMO Resolution MSC 167 (78) is very specific as to roles and responsibilities – particularly governments'.

The BMSC will discuss how best the secretariat could place greater priority on this subject, including possible political and supranational lobbying, for example addressing an update to the IMO Resolution or insisting at the IMO Maritime Safety Committee that governments fulfil their obligations.

Services to Members

Members are reminded that the Front Office monitors and handles security enquiries and this constitutes an important service to members as do the security department advisories. In January and February alone, there were some important advisories on the situation in Libya and Yemen as well as the illegal transfer of weapons by PMSCs – see article in this bulletin. These resulted in a number of enquiries from members in spite of the general guidance contained within GUARDCON. Members and particularly their CSOs are encouraged to monitor the BIMCO website for security advisories which, in the main, are always highlighted on the "front page" of the website.

BY DAVID RIDER

CSO Alliance – on the road with BIMCO in Asia

The delivery is simple, a global, members-only risk-management platform for all shipping sectors to drive best practice and fight back against organised crime.

The origins of CSO Alliance form the very backbone of the platform's ideology. A senior Chief Security Officer (CSO) with a major shipping company in London was tired of trying to meet his counterparts at industry events, only to be constantly approached by multiple sales teams from private maritime security companies (PMSCs) and other vendors keen to sell their wares. So he began to meet with his CSO colleagues at semi-regular intervals to exchange knowledge, tips and information on the industry, the current security situation and best practices. This helped save them all time and money, better mutually assess the true risks they face and begin the fight back against maritime crime.

From there, the seeds of the CSO Alliance were sown.

CSO Alliance is a highly secure online platform whose membership is open only to maritime company security officers. Recognising that maritime CSOs and their deputies have budgetary constraints, membership costs have been kept to an extremely low £250 per year for a CSO and just £75 for a deputy. We can only achieve this low fee because of the excellent support of both industry and supplier sponsorship of the platform and our CSO events. There are a raft of opportunities; we are keen and can increasingly prove they deliver value for money. The site offers the latest maritime security feeds as well as industry news, opinion from senior members of the shipping community and, most importantly, groups where like-minded CSOs can exchange ideas and information privately, without oversight from third parties, in a secure section of the site.

The opportunity for learning is provided, too, and in the coming months the organisation hopes to partner with leading education providers to supply CSOs with the tools they need to do their jobs even more efficiently. The aim of CSO Alliance has always been to empower CSOs and unite them. The Alliance has met with:

- EU NAVFOR
- NATO
- United Kingdom Marine Trade Operations (UKMTO)
- the Regional Co-operation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP)
- the Information Fusion Centre(IFC)
- BIMCO
- the International Maritime Bureau (IMB)
- the International Group of P&I Clubs and insurance groups

The alliance has also demonstrated the platform to the Combined Maritime Forces (CMF) and representatives of the EU. The aim of the organisation is not to compete with commercial or regional intelligence providers; rather, it is to create a means of communication which allows naval forces, NGOs and others to directly interact with the people they actually need to speak to: shipping CSOs. A new feature is an online conference facility for all members at a fixed time on the platform, on their computers, iPads or smartphones. So this means that we can cut to Giles Noakes at BIMCO for his views on a breaking incident and then cut to the relevant Military Command for their ideas and observations to help CSOs make informed decisions.

Engaging directly with CSOs is an imperative, so CSO Alliance has conducted over nine free workshops for CSOs in the UK, Germany, Belgium, the Netherlands, Qatar, Dubai and Singapore, and in February will be holding workshops in Singapore, Hong Kong and Shanghai. These will be conducted in association with Giles Noakes, Chief Maritime Security Officer for BIMCO and Captain William Nault US Navy, Chief of Staff at CMF headquarters in Bahrain. Invitations have been sent to over 600 regional CSOs as well as charterers and other interested parties. Additionally, in March, CSO Alliance will host workshops in Ghana and Nigeria for regional CSOs involved in shipping and the oil and gas offshore industry, and May sees the workshop tour visit the US.

We continue to attract new members, with over 100 CSOs who are responsible for the security of over 5,000 ships. We have CSO members from the cruise, super yacht, offshore platform and supply craft and fishing fleet sectors, proving that CSO can unite across our industry. Our mission is to help cut through the scaremongering surrounding maritime crime and present the facts. Our relationship with BIMCO has now been formalised, and we are delighted that they see the value in the platform.

Twelve thousand shipping CSOs are responsible for the well-being and safety of over 2,000,000 employees and 120,000 maritime assets worldwide. They spend over USD 12.5 billion per annum on maritime security goods and services. The tools they have for this job are often not up to scratch, and this is particularly true for CSOs in smaller shipping companies, who often lack access to the latest intelligence and risk assessments prior to passage planning. CSO Alliance is able to offer all of these services and, over the next few months, we will be adding a robust passage-planning service to further bolster the tools our members can access. We are constantly evolving and investing with the excellent feedback; for example, a repeated request is to try to align our service with the health, safety, security and environment (HSSE) and designated person ashore (DPA) roles. We are also in negotiations with the port industry for the development of a Port

and Terminal Alliance to deliver on port and facility security officer needs. A successful outcome would be online, members-only communities with aligned thinking and driving synergies between the dedicated employees of the security, safety and port industry.

While Somali piracy is currently being held in check by the best efforts of the shipowners implementing Best Management Practice Version 4 (BMP4), international naval coalitions, regional coastguards and PMSCs, persistent low-level maritime crime, piracy and the constant fight with stowaways still plague both west Africa and South-East Asia. The same is true for South America, where a great many incidents remain unreported. Time stuck in port, paperwork and potential insurance liabilities have all been cited as reasons for the low level of reporting. By offering anonymous reporting on the site, we're able to provide affected CSOs and shipping companies with the chance to spread the word about hot spots and danger areas without any liability or publicity concerns.

The burden on CSOs increases every year. Adherence to the International Ship and Port Facility Security Code (ISPS), rafts of red tape surrounding transits themselves and insurance issues all mean that the average CSO is a very taxed individual indeed. The Ebola outbreak and the Mediterranean refugee crisis are new issues for CSOs to deal with, as flag states, ports and P&I Clubs issue advisories, but the main external threat to shipping is still loss due to maritime crime and, ultimately, hijacking.

Off the coast of east Africa, piracy is now largely suppressed thanks to the combined efforts of the "three pillars" of maritime security: naval forces, armed guards and adherence to BMP4. As Giles Noakes from BIMCO has noted, should any of these three pillars be removed, the picture could change for the worse. The roots of piracy remain on land in Somalia itself and, so far, these have not been tackled.

However, things become considerably more murky for CSOs whose transit routes include west Africa. There, regional laws and territorial waters make the provision of armed security for merchant ships considerably more difficult. The recent announcement by the Nigerian Maritime Administration and Safety Agency (NIMASA) regarding the detention of any ship carrying foreign guards (armed or unarmed) has further muddied the waters for CSOs.

Meanwhile, the kidnapping of estern crews continues in the Gulf of Guinea. This crime is often not reported for a number of reasons - this is sadly not unusual in west Africa. On rare occasions, the incidents are reported and dealt with "behind closed doors" by shipping firms. Again, it illustrates the need for careful passage planning and, more importantly, access to the latest regional intelligence.

As a result, any CSO looking for security in west Africa must exercise due diligence and conduct extremely robust research prior to making any decision. Here is where CSO Alliance comes into its own, by offering beleaguered CSOs the chance to compare notes on the key issues and receive recommendations from their peer group.

The situation in South-East Asia remains fluid, with a small number of criminal gangs actively targeting product tankers, chiefly for marine gas oil, which is keenly sought after by black marketeers. While regional naval forces and organisations such as the Malaysian Maritime Enforcement Agency (MMEA) have scored some notable wins in recent weeks, again at the time of writing, one tanker remains in pirate hands, its whereabouts unknown, and hijack for cargo siphoning remains a major regional problem. Crime at ports in the region, from ship's stores thefts to armed robberies underway in the Malacca and Singapore Straits, remains a significant issue for seafarers, although encouragingly, ReCAAP reported a slight reduction in incidents in January compared with the previous three months.

With low-level crime a constant bugbear for masters, crews and CSOs and the risk of hijacking still present in west Africa and South-East Asia, it seems clear that CSOs will continue to work in a high-pressure environment for some time to come. ❚❚

CSO Alliance at a glance

1. Provide Information – developing teamwork
   - Over 100 CSO members managing the security of over 5,000 merchant ships
   - Workshops to share ideas and information
   - Driving best practice, with access to verified information.

2. Develop Opinion – knowledge sharing
   - Networked to civilian and military maritime crime co-ordination centres Online up-to-date data allowing mutual assessment of risk
   - Cutting-edge tools to rapidly distribute key data, observations and learning.

3. Create Community – long-lasting partnerships
   - CSO members from merchant marine, cruise ship, super yacht, offshore platform and supply craft and fishing sectors
   - Peer review of goods and services to optimise procurement efficiency
   - Innovations shared to actively improve ship security.

4. Build Alliance – begin the fight back against organised crime
   - Innovations shared to actively improve ship security
   - Private and secure online video conference briefings
   - Partnership with credible suppliers who help power the platform.

New: Live, online briefing from BIMCO and relevant military personnel

- Members will be invited to join via email
- You can join the briefing online using your computer, tablet or smartphone
- Questions will be taken during the session – followed by a full discussion after the briefing
- Controlled and secure access for members to watch sessions after they have aired
- Fully encrypted
- High definition video

Editor's Note: David Rider is an intelligence consultant and CSO Alliance content editor. With a background in journalism, he has spent the last six years working in the maritime security and intelligence realm.

For further information on CSO Alliance, please visit: www.csoalliance.com *or email:* info@csoalliance.com

CSO ALLIANCE

SECURITY THROUGH COMMUNITY

The Maritime Security World

- 120,000+ Maritime Assets
- 12,000+ Company Security Officers
- $12.5 Billion Annual Maritime Security Investment
- 2,000,000 Maritime Employees

The Threat

- Maritime crime is well organised, rewarded and constantly evolving
- CSOs have no organised community for exchange of views and professional development
- Information exchanges are inefficient and costly

Your Alliance

A global, members-only risk management platform for all shipping sectors to drive best practice and fight organised crime.

When CSOs meet, they exchange ideas and information, ultimately improving their understanding of the true risks faced by their crews. This leads to the right equipment and services being procured to better defend ships, crews and cargoes.

By December 2014 our online CSO community passed through 100 CSOs managing the security of over 5,000 ships.

We also have CSOs from the offshore platform and supply craft sector. We have Cruise Ship, Super Yacht and Fishing Fleet CSOs, proving the platform delivers on CSO needs across all shipping sectors.

1 PROVIDE INFORMATION

Real time port and cargo crime reports, incident and attacks at sea

Expert observations

Latest maritime news

Geospatial mapping

Interactive database

2 DEVELOP OPINION

CSO Chatter

CSO Groups

Online Conferencing

3 CREATE COMMUNITY

CSO Directory

CSO Events

CSO Suppliers

4 BUILD ALLIANCE

Drive best practice for CSOs

Instant access to verified data

Mutual assessment of risk

Networked with military and civilian crime reporting centres

Proud to be working with BIMCO

csoalliance.com

BY GILES NOAKES

Irregular and illegal use of firearms by private maritime security companies (PMSCs)

BIMCO has recently become aware of alleged illegal practices in the carriage and use of weapons by PMSCs. It has been reported to BIMCO that weapons covered with an originally legitimate "end user" licence are being leased to third parties and indeed in some cases subleased again.

BIMCO has received reports that a small minority of PMSCs may be operating contrary to the provisions of GUARDCON. These companies are leasing or renting out their weapons to other PMSCs. Those leasing or renting from third parties without having in place the required licences and permits issued by state authorities to control the handling and movement of weapons are likely to be in breach of the original end user licences and therefore operating illegally. PMSCs who engage in this practice are potentially in breach of their obligations under Clause 10 (Permits and Licences) of GUARDCON. Those PMSCs leasing or renting out the weapons are potentially in breach of the UK Proceeds of Crime Act and other similar international laws. The motivation of these PMSCs is to undercut their competition in an increasingly competitive market by slashing weapons-related logistics costs.

BIMCO urges owners and operators, particularly those with long-term contracts with PMSCs, to exercise "due diligence" in checking that their chosen security company is operating in accordance with valid permits and licences as specified in Clause 10 of GUARDCON. This means that owners and operators should check carefully the security company named in the weapons' "End-User Certificate" (which lists the serial numbers of the weapons to be used and which owners and operators should insist on seeing). PMSCs are required to provide certificates that match the name of the security company stated in GUARDCON, or any other contract employed for the transit covered.

They should also check that the serial numbers of the weapons to be used in that contract match the ones used by the Privately Contracted Armed Security Personnel (PCASP) embarked. If the name of the PMSC on the certificate does not match, or the weapon serial numbers to be used are not listed on the certificate, then the validity of the licence and the PCASP handling the weapon is suspect. A mismatch of names indicates that the PMSC is not legitimately certified to use the weapons. This is a breach not only of the End-User Certificate but also GUARDCON.

Below is a short check list for further guidance of CSOs and Masters. BIMCO will shortly produce a pamphlet on the subject based on the below:

Firearms – licensing and proprietorship – essential due diligence questions

- Does the PMSC have documentary evidence that firearms are legally:

  1. procured, owned (invoice, annotated with weapon serial numbers)

  2. licensed (Export Licence and End User Certificate?) and

  3. stored, utilised, transported, monitored/tracked (data base), embarked and disembarked?

- Does the PMSC have in place the appropriate UK government (or equivalent national) trading licence, such as the Open General Trade Control Licence (OGTCL) and/or Open Individual Trade Control Licence (OITCL), governing the requirements for the supply, delivery and transfer of controlled goods?

  Note: at least one of these licences is also required where any UK national is employed or contractually engaged in any aspect of the company structure or delivery of services, specifically when using UK personnel for onboard security, regardless of the origin of weapons and controlled goods.

- Can the PMSC provide documentary evidence of the type and number of firearms they own, or where a PMSC routinely leases firearms and controlled goods from a third-party provider, the necessary documentation to show the actual ownership, licensing and disposal of those firearms and controlled goods?

- In the event that there is misuse of firearms from an accidental or negligent discharge, resulting in bodily injury or death, can the PMSC provide documentary evidence of procedures, on board and onshore, that properly address the investigation and reporting of the incident?

China's ship trade performance in 2014

The data from China Customs suggested that China's ship exports fell 14.1% year on year (y/y) to $23.8 billion in 2014, making a record low since the outbreak of the financial crisis in 2008. It was the third consecutive y/y falling for the country's ship exports since 2012 where the vast majority accounted by newbuildings in Chinese shipyards.

As the China Association of the National Shipbuilding Industry (CANSI) predicted, the exports in 2015 would be increasing slightly if ship completion volumes, new orders and order books of Chinese yards in 2014 are included. In 2014, completed newbuildings for exports by Chinese yards fell 7.3% y/y to 33.1 million DWT, with the new orders for exports down 14.3% y/y to 55.5 million DWT. The order books for exports rose 23.7% y/y to 142.8 million DWT at the end of 2014. Bulk carriers, tankers and container ships accounted for 65.1% of the total exports in 2014 with a sum of $15.5 billion. The exports of bulk carriers dropped 33.5% y/y to $8.1 billion, while the exports of floating or semi-submersible drilling rigs and production platforms totalled $2.0 billion, accounting for 8.5% of total ship exports.

For imports, the figure decreased 37.1% y/y to $1.2 billion in 2014. Among the total imports, old ships and other floating structures imported for demolition decreased 62.1% y/y to $290 million, owing to the depressed shipbreaking market in China.

Valemax see glimmers of hope on the horizon

A lengthy quarrel between Vale and Chinese shipowners which was triggered by overcapacity competition in a sluggish market is about to end. Chinese regulators used to turn down any port-calling plan for Valemax on the grounds of safety concern. It was alleged that 400,000-DWT mega-sized very large ore carriers (VLOCs) went beyond China's port operational safety as well as port design standards for receiving.

Interestingly, China released low-profiled guidelines titled "Ship scale provision for 400,000-DWT dry bulk carriers" which spelt out the measurements of the giant bulkers as 362 metres in length, 65.6 metres wide, draught of 30.5 metres, ballast water load of 23 metres and capacity of 403,844 DWT, fitting the measurements of Valemax. Indeed, the said action is widely seen as a preparatory work in order to pave the way for receiving Valemax. Logically, all capable Chinese ports need to obtain approval from the regulatory authorities. So far, Dalian, Qingdao and Lianyungang are most likely to be added to the list.

The turning point occurred when the Chinese and Brazilian political leaders reached a package co-operation, including a compromise on the Valemax issue. Accordingly, Vale concluded a deal with two prominent Chinese shipowners which are fully state-owned, China Ocean Shipping (Group) Company (COSCO) and China Merchants Energy Shipping (CMES). Precisely speaking, Vale will sell four of its Valemax to COSCO and will long term charter them back. In addition, COSCO will order another ten VLOCs for Vale's time chartering, and CMES will also order ten VLOCs for chartering to Vale.

China MSA makes AIS information public

The AIS (Automatic Identification System) Information Service Platform was officially launched by the China Maritime Safety Administration (MSA) in February 2015, meaning real-time AIS data in China's coastal areas and rivers are now traceable. AIS data for around 35,000 ships is available to the public every day, according to China MSA, and ship information can be searched in terms of real-time location and speed. The platform also integrates port information, tides forecast and meteorological information, stated by China MSA, and the highlight of this platform is that land and sea charts overlap. Unfortunately, no English page is available at present.

China also developed the ship-based BeiDou AIS terminal in January 2014, combining China's BeiDou navigation satellite system and AIS, and has applied it on maritime and survey ships. Data from China's Ministry of Transport showed that as of May 2013, China MSA has established the world's largest shore-based AIS network.

Chinese tanker fleet development

The new China very large crude carrier VLCC is a joint venture established in September 2014 between CMES owning 51% and Sinotrans & CSC Group owning 49%. So far, CMES has provided nine operational VLCCs and ten VLCC newbuilding contracts to the joint venture China VLCC, while Sinotrans & CSC will pump in around $543.78 million in cash. China VLCC is based in Hong Kong where the CMES headquarters lie. It intends to control a fleet of at least 40 VLCCs in two years. Recently, China VLCC has lined up time charters for two of its VLCCs with each going to oil majors BP and Shell.

In 2012, the Chinese governments tried to co-ordinate three state-owned oil tanker

companies, COSCO (Da Lian), CMES and China Shipping, to boost collaboration. As a result, three shipping companies reached a preliminary consensus to establish an independent shipowner company of giant proportions. It was once said that a VLCC pool would be set up with a view to ultimately have 70 to 80 newbuilt VLCCs by 2020. It was understood that the VLCC pool was linked to the conception of "National Cargo, National Fleet", or similarly called "cargo reservation". The Chinese government is getting increasingly concerned with their national strategic safety as they apparently believe too many raw materials (for instance crude oil) are carried by foreign fleets. Obviously, such a VLCC strategy will be beneficial in taking greater control of China's oil supply chain, and it may supply Chinese shipyards with work. However, it appears that the Chinese VLCCs are less competitive than their foreign competitors in terms of operational costs and are not supportive of an open international shipping market.

As of yet, it seems that only CMES and Sinotrans & CSC Group have taken a big step towards this ambitious roadmap, while the rest are still in a preparatory stage.

Tougher regulation in place for Chinese steel industry

Slow economic growth in China has hit the growth of demand for a lot of commodities, and sluggish consumption has led to a big rise in steel product inventories. China's steel production grew at its slowest rate in more than three decades in 2014, while consumption fell 3.4%. Chinese steel mills are facing higher costs and the risk of punishment as a result of tougher environmental legislation that came into effect this year. Nearly three-quarters of China's steel enterprises do not meet environmental standards, and they are under heavy pressure to upgrade, according to estimates by the China Iron and Steel Association (CISA). Compliance costs have risen at least around 50% while large Chinese steelmakers saw profit margins of just 0.85% last year, according to some estimates. CISA estimated last year that environmental compliance was costing Chinese steel mills around 55 yuan per tonne, and large state mills paid double.

The steel industry in China, which is the world's biggest, has been a primary target of a campaign to clean up China's air, especially in the country's smoggiest province of Hebei, which surrounds the capital Beijing and is home to hundreds of private mills. These private mills has historically not been working under a heavily environmental regulation. The Chinese environmental protection law was revised last April and a new one came into force on 1 January 2015. As a result, standards are now tougher and punishment is harsher. Apart from that, the Chinese environment ministry also has new powers to shut down non-compliant projects, and is taking steps to ensure pollution from industrial plants is monitored closely. The key challenge will be how to ensure the same level playing field in terms of tougher regulation enforcement.

The new coal story in China

According to the China Coal Industry Association, more than 70% of domestic miners suffered losses in the first 11 months of 2014, with profits down by 44%. The industry has been hit by a demand slowdown as well as a campaign against pollution.

Data released by China's customs office showed that China imported a total of 16.8 million tonnes of coal and lignite in January 2015, almost half the 35.9 million tonnes for January 2014. This January import of all coal types shrank to a six-year low for the traditionally busy month, restocking ahead of Chinese New Year. It is the weakest January performance since 2009, when the country became a net importer of coal, and the number also represents the lowest monthly level seen since May 2011.

The sharp decline is partly a result of the new quality control measures that came into effect on 1 January 2015. Those measures are aimed at regulating coal use in China and limiting trading of low-quality coal, including imported coal. Recently, China's coal firms have agreed to cut contract prices with power plant customers for the first quarter of 2015, but prices are still well above global levels as regulators work to prop up an industry hit by overcapacity and weak demand. China has also tried to support the ailing sector by imposing output controls and restricting low-grade imports. Regulators have repeatedly called on producers to avoid undercutting rivals as industry losses increase, leading to a bigger price gap between domestic and overseas markets. (ZW) ❚❚

Editor's Note: This report has been produced in co-operation with Reuters, IHS and Seatrade.

Asian waters – not so calm

Generally the industry has no shortage of challenges, and as 2015 kicked off, developments in Asia raised concerns in several areas. Incidents of piracy and armed robbery combined with ship collisions and turbulence in the bunker market led to related corrective steps taken, aimed at restoring confidence among users of these waters and services.

Piracy

A significant increase in the number of attacks against ships in Asia has raised concerns. Compared with 2013, 2014 saw a 22% increase of incidents of piracy and armed robbery in Asia. Incidents involving ships at anchor in the South China Sea (SCS) doubled. Seventeen ships underway in the SCS were attacked, with one crew murdered. On the positive side, incidents in Indonesia dropped by 50%, in part as a result of enhanced patrols in port and anchorage areas.

"The global increase in hijackings is due to a rise in attacks against coastal tankers in South-East Asia," said Pottengal Mukundan, director of the International Maritime Bureau (IMB), whose Piracy Reporting Centre has monitored world piracy since 1991. *"Gangs of armed thieves have attacked small tankers in the region for their cargoes, many looking specifically for marine diesel and gas oil to steal and then sell."*

Citing the death of one crew member shot on his bitumen tanker in December, the IMB report highlights the possibility of the hijackings becoming increasingly violent. Most of the 124 attacks in the region were aimed at low-level theft from ships, using guns and long knives.

IMB commends the Indonesian Marine Police's efforts to stem the increase in attacks in identified port hotspots. Outside port limits, pirates are particularly active in the waters around Pulau Bintan and the SCS, where 11 ships were hijacked in 2014. Actions taken by the Malaysian Maritime Enforcement Agency, the Indonesian authorities and other maritime forces of regional coastal states have played a key role in responding to these attacks.

"It is important that these gangs are caught and punished under law, before the attacks become more audacious and violent," said Mr Mukundan.

Also addressing this trend in Asian waters, the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia Information Sharing Centre (ReCAAP ISC) noted that the number of incidents of piracy and armed robbery against ships in Asia had increased to a total of 183 incidents (168 actual and 15 attempted), which was a 22% increase compared to 2013. However, ReCAAP noted that 62% of the 183 incidents reported were petty theft and Category 3 (less significant) incidents which were less severe in nature.

Of concern to ReCAAP was the increase in reports of siphoning of ship fuel/oil incidents in 2014. Of the total 13 Category 1 (very significant) incidents, 12 incidents were siphoning of ship fuel/oil. It was further observed that half of the 41 Category 2 (moderately significant) incidents involved ships at anchor/berth.

Recognising that the bulk of incidents which occurred in the SCS, the Straits of Malacca and Singapore (SOMS), and certain ports and anchorages, were petty theft and Category 3 incidents, the ReCAAP ISC strongly advocates sustained co-ordinated efforts by the littoral states in SOMS and SCS and urged shipowners and masters to enhance vigilance, report all incidents to the nearest coastal states in a timely manner and exercise anti-piracy watch activities while their ships are at ports and anchorages.

Together with INTERTANKO and the S. Rajaratnam School of International Studies, BIMCO is co-sponsoring this year's ReCAAP Piracy Conference on 23 April during Singapore Maritime Week. BIMCO members are welcome to attend to obtain an update on best practices aimed at protecting ships from such activity in the region.

Casualties in the Straits of Malacca and Singapore (SOMS)

After a spate of collisions in the SOMS between December 2013 and February 2014, efforts were made to raise awareness among bridge officers regarding safe navigation in the area. This included enhanced distribution of the Safe Passage pamphlet and related actions.

Despite this, collisions have continued, the most recent at 6am on 2 January 2015. The Libyan-registered oil tanker *Alyarmouk* collided with a Singapore-registered bulk carrier, *Sinar Kapuas*, in Singapore waters about 11 nautical miles north-east of Pedra Branca. *Alyarmouk* reported that one of her cargo tanks sustained damage, resulting in spillage of crude oil.

Four ships equipped with dispersants, oil booms and skimmers were deployed to the site to contain the oil spill. Non-toxic and bio-degradable dispersants were used to break up the oil into smaller globules.

The Maritime and Port Authority of Singapore (MPA Singapore) has linked up with

International Tanker Owners Pollution Federation (ITOPF) for its technical expertise to assess the nature of the spill. Satellite imagery obtained on 4 January did not show any of the spilt oil headed towards Bintan. Aerial surveillance by ITOPF on the same day also did not show any spilt oil in the vicinity of Bintan, corroborating the MPA observations.

Prior to the 2 January incident, on 30 December 2014 at about 6.45am, a barge ran aground at Pedra Branca. The barge, which was carrying two bulk loader cranes, had left Singapore for Kuantan, Malaysia, on 25 December 2014. Preliminary investigations indicate that it had turned back towards Singapore after encountering inclement weather, and subsequently ran aground at Pedra Branca owing to the adverse sea conditions.

Salvage operations by MPA Singapore were initiated in heavy sea conditions. Fortunately there were no reports of oil pollution or injury.

Efforts continue to raise awareness among bridge personnel on board transiting ships. Among these efforts is a project underway aimed at producing a video which covers the content of the Safe Passage pamphlet, featuring views from the bridge that will give bridge personnel an idea of the various traffic scenarios at different points of the transit, and in both eastbound and westbound directions.

Bunkers

Following the bankruptcy of OW Bunker in November, MPA Singapore announced that based on their assessments, minimal disruption to bunker supply in the Port of Singapore is expected. With over 60 bunker suppliers in Singapore, OW Bunker Far East (Singapore) Pte Ltd accounted for less than 3% of the 42.6 million tonnes supplied in Singapore in 2013. MPA Singapore engaged with various stakeholders to ensure that bunkering operations in Singapore continue as smoothly and normally as possible.

In its ongoing effort to protect purchasers of bunkers in Singapore, MPA Singapore also cancelled the bunker supplier and bunker craft operator licences of several companies that have now lost the privilege of supplying bunkers in Singapore as a result of regulatory violations.

MPA Singapore has revoked the bunker supplier and bunker craft operator licences of Hong Fatt Oil Trading Pte Ltd and Tankoil Marine Services Pte Ltd with effect from 9 February 2015. The two companies are no longer allowed to operate as bunker suppliers and bunker craft operators in the Port of Singapore.

As part of MPA Singapore's ongoing regulatory efforts to ensure the safety, reliability and quality of bunker supplies in Singapore, routine checks were conducted last year on Hong Fatt Oil Trading Pte Ltd and Tankoil Marine Services Pte Ltd.

MPA Singapore's separate investigations into the two companies revealed discrepancies and wrongful declarations in the records kept on board their bunker tankers. There were also incidences of transfers of bunkers between bunker tankers that were done without MPA Singapore's approval. MPA Singapore has therefore decided to revoke the companies' bunker supplier and bunker craft operator licences as they had breached the terms and conditions.

With effect from 1 September 2014, Northwest Resources Pte Ltd had its bunker supplier and bunker craft operator licences cancelled owing to breaches of the terms and conditions. This follows the conviction of one of the company's directors for bunkering-related corruption offences. Leong Kok Kheong, a director of Northwest Resources Pte Ltd, was charged with 50 counts of bunkering-related offences under the Prevention of Corruption Act. He was sentenced to a total of 21 weeks' imprisonment and fined a total of SGD 375,000. With the cancellation of both their bunker licences, Northwest Resources Pte Ltd will no longer be allowed to operate as a bunker supplier and bunker craft operator in the Port of Singapore.

MPA Singapore reminds all licensed bunker suppliers and bunker craft operators to adhere strictly to the terms and conditions of their bunker licences. MPA Singapore will take firm action against any licensee who has acted in contravention of their licences, which will include suspending or revoking their bunker licences, as appropriate.

Meanwhile Singapore remained the world's top bunkering port in 2014. The total volume of bunkers sold in the Port of Singapore was 42.4 million tonnes, a slight dip compared to 42.7 million tonnes in 2013.

BIMCO has made MPA Singapore's related guidance available from the BIMCO website, including updated lists of licensed suppliers in Singapore. (TT)

Review of EU Maritime Transport Strategy

In January 2009, the European Commission presented a communication on the strategic goals and recommendations for the EU's maritime transport policy until 2018. That communication defines the main strategic objectives of the European maritime transport policy until 2018 and recommends actions to increase the competitiveness and sustainability of the maritime transport sector.

In an informal meeting of the transport ministers which took place in Greece on 7 May 2014, the Athens Declaration was adopted, setting out the EU's shipping policy priorities for the years to come. The declaration formed the basis for the adoption of Council Conclusions by the Transport Council in June 2014. The council thus invited the commission to present a mid-term review of the EU's maritime transport policy until 2018 and outlook to 2020.

In the context of this review exercise, the commission has launched two studies that should feed into the review process, more precisely a study on short sea shipping and another one on the EU and its position in the global maritime context.

In addition to these two ongoing studies, the commission has launched an online public consultation to seek broad stakeholder input for the review of the EU maritime transport strategy. The consultation follows the outline of the original 2009 strategy paper and runs until 22 April. Finally the commission also sent a questionnaire to directors of EU Member State maritime administrations. The commission is expected to wrap up the exercise by summer in the form of a report or commission staff working paper.

EU monitoring, reporting and verification (MRV) legislation proposal

On 18 November, trialogue negotiators from the European Parliament and Council (EU governments) reached an agreement on the commission proposal for a Regulation on the MRV of CO2 emissions of maritime transport. Next to data on CO2 emissions and distance sailed, the negotiators agreed that the regulation will also oblige ships to report cargo-related information, in order to measure their energy efficiency.

Although the negotiators did take into account a number of the industry's concerns - such as the need for international alignment – the problematic detailed cargo element *was* included, creating concerns regarding data reliability and confidentiality as well as reporting responsibilities and obligations. The entry-into-force date of the EU regulation is 1 July 2015 in preparation for the first monitoring year in 2018.

The industry will now focus on the implementation of MRV and play an active role in the definition and the establishment of appropriate cargo metrics. The commission made it clear that it is planning to consult the industry on all definitions together, possibly through a European Sustainable Shipping Forum kind of stakeholder consultation.

Formal adoption of the agreement by the plenary of the European Parliament is expected in the coming months.

Moreover, the European Commission has made a submission on the basis of the agreement reached in trialogue to the next International Maritime Organization (IMO) Marine Environment Protection Committee (MEPC).

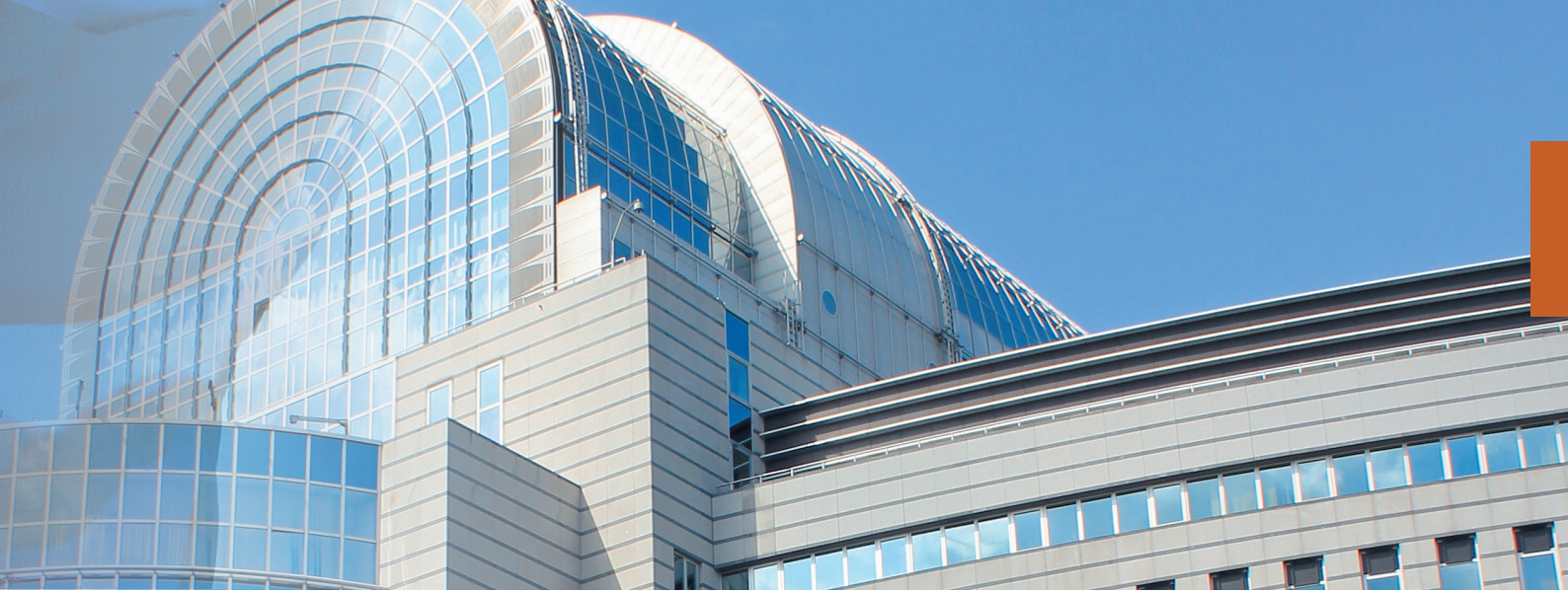
Ship recycling

The shipping industry is committed to the global efforts to improve the conditions applicable to recycling operations and has welcomed the adoption of the 2009 Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (HKC), which sets up a necessary and ambitious global framework for these operations. The entry-into-force criteria reflect the balance between the interests of recycling states and environmental and social concerns.

It is therefore very encouraging that the European Union Ship Recycling Regulation (EU SRR) adopted in 2013 is based on the technical standards of the HKC, which industry supports and which offers a unique opportunity to build up an effective international regime for the safe and environmentally sound recycling of ships.

The European Commission is currently working on the criteria and the requirements related to the inclusion of recycling facilities in the EU list of approved facilities. EU-flagged ships will only be allowed to be dismantled at facilities on the EU's "White List".

To avoid the regulation being circumvented by ships flagging out, the commission (DG Environment) has authorised a study "on the feasibility of a financial instrument to facilitate safe and sound ship recycling" as required by the EU SRR. The 12-month study will assess the feasibility (pros and how to overcome the cons)



of establishing a mechanism (eg financial or alternative incentives for compliance and to avoid reflagging) to incentivise shipowners to recycle their ships in facilities on the EU list.

Migration at sea

According to official EU figures, in 2014, a total of 276,113 illegal migrants crossed the Mediterranean Sea, heading to countries such as Italy, Cyprus and Greece. Astonishingly, but perhaps not surprisingly, these numbers are up by 155% compared to the previous year, when a total of 107,964 migrants undertook the same perilous journey. As recent events clearly demonstrate, these extremely dangerous crossings often result in mass drowning of people fleeing various regions in Europe's vicinity that find themselves in a state of turmoil.

Shipping companies have been thrust to centre stage by often being the first ones arriving at the scene of a maritime accident involving migrants, in order to provide assistance to those in distress. EU shipowners take their obligation to assist any person at sea faced with grave danger very seriously, as is foreseen in the United Nations Convention on the Law of the Sea.

However, it appears that while the situation deteriorates and an increasing number of migrants attempt to cross the Mediterranean Sea, EU Member States have not stepped up their efforts to meet the ensuing increased need for patrolling and search-and-rescue operations. While Italy recently decided to end its year-long Mare Nostrum mission to rescue stricken migrants, Operation Triton, which was launched with the help of the EU's border protection agency Frontex, has a limited mandate and can only focus on border surveillance within 30 miles of the Italian coast.

Although search-and-rescue operations are the responsibility of Member States, political support for the deployment of a full-blown EU operation seems highly unlikely despite the escalating human tragedy.

Some of more than 900 illegal migrants, are shipped to the mainland after being rescued by Italian Navy boat 'Fregata Euro' (background) in the Mediterranean Sea, 12 September 2014. EPA/GIUSEPPE LAMI

Status of seafarers under EU social directives

Following the adoption of the European Council's general approach on the Commission's proposal to repeal the existing derogations for shipping from four EU social directives in December last year, discussions are now taking place in the Employment Committee of the European Parliament. Rapporteur Morin-Chartier (France, European People's Party) issued her draft report at the end of December, largely respecting the joint European Community Shipowners' Association and European Transport Workers' Federation (ECSA/ETF) agreement as reflected in the council's general approach.

The rapporteur's draft report was discussed in the Employment Committee on 22 January. All shadow rapporteurs commended the social partners for having reached a joint agreement, and almost all of them fully supported the draft report. However, some MEPs from smaller groups announced their intention to issue amendments. The rapporteur has, however, advised social partners that she intends to stick to the joint agreement. The next meeting of the committee is scheduled for 26 February, and the additional amendments will be considered on that occasion. (MLU)

BIMCO president visits Washington, D.C.

The BIMCO President John Denholm and Secretary-General Angus Frew visited Washington, D.C. during January 2015. The BIMCO delegation was very well received by the US Coast Guard (USCG), the US Environmental Protection Agency (EPA), the US Department of Justice, the US Department of State, the Cotton Club (European diplomats working on shipping issues in the US) and Congressional staff working on maritime issues.

The visit was a great opportunity to promote BIMCO's viewpoints on a range of key issues including ballast water, implementation of new sulphur limits today and in 2020, the Rotterdam Rules and greenhouse gas (GHG) among many others.

Seafarers access to maritime facilities

The USCG has proposed new rules addressing seafarers' access to maritime facilities. This notice of proposed rulemaking suggests specific regulatory provisions that would provide seafarers and other individuals with access between ships at a Maritime Transportation Security Act (MTSA)-covered facility and the facility gate at no cost to the seafarer or other individual and would require the documentation of a system ensuring this access be included in the facility security plan (FSP) required under MTSA.

Even though BIMCO believes rules have been in place for a long time, problems have still been occurring with seafarers among others being denied access to, for example, shore leave, or the cost has been prohibitive. Referencing a Seamen's Church Institute survey conducted from 2006 to 2014, it is still estimated that approximately 10% of MTSA-controlled facilities either deny access altogether or make it so unreasonable and/or expensive that access is not practically available.

Ensuring seafarers' and other individuals' access to maritime facilities is a key aspect of ensuring a smooth operation in shipping internationally and in the US. This includes allowing access for pilots, authorised personnel and crew doing work on board a ship and including crew changes. In general, this works fine around the world, including the US. However, there have been situations in the US where this has not been completely supported by all facility owners or operators in US ports.

BIMCO believes the suggested rulemaking will help prevent exorbitant fees being demanded and access being either denied or limited. The proposed rulemaking will ensure that the seafarers and other individuals will be able to access the maritime facilities at no cost, which is strongly supported by BIMCO.

However, an element of concern for BIMCO, in this context, is that this rulemaking should not be used by the facilities as an opportunity to generate income from the shipowners beyond reasonable cost. The proposed rules include that, "…providing access in a timely manner, at no cost to the individual, and in accordance with the provisions in 33 Code of Federal Regulations (CFR) Part 105." But BIMCO understands that shipowners may be expected to pay a reasonable fee for these services. In Table 2 (Cost Matrix), item for section 105.237(e) at page 77,889 in the proposed rules, the comment in the cost and benefit column is noted as "cost may be passed onto the vessel". It is important that this proposed rule should not be misused by the imposition of exorbitant fees upon the shipowners. BIMCO has suggested that, in order to prevent this, some wording to stress "reasonable" fees is included.

Some shipowners have paid fees of USD 1,000 per transit from the ship to the gate, which was less than a ten-minute drive. These fees charged by port facilities are well above the facilities' cost for the service and leave the shipowner little choice other than to reject them as unreasonable. This results in a no-access situation and leaves the proposed regulation ineffective, and the current unsatisfactory situation in some ports will continue to prevail.

Another element BIMCO would like to highlight is the speed of implementation. 33 CFR 105.237(a) includes "We propose to require implementation of the system within 1 year after publication of the final rule to provide facility owners and operators time to tailor a system specific to the facility." BIMCO would like to suggest that the implementation of this rule is moved forward, eg within six months. The reason for this point of view is that the requirements in these proposed rules have been in place for more than ten years, which means that they should be well known to existing facilities and should be straightforward to implement.

BIMCO's viewpoints on this issue have been passed on to USCG as part of the public hearing that is currently taking place in the US.

US Coast Guard initiative on cybersecurity and shipping

USCG held a public meeting in mid-January seeking public comments on what elements should form the basis of guidance on maritime cybersecurity standards. As expected, USCG gave a brief overview of the issue and then opened the meeting for public comments. Key points made during the meeting are as follows:

- USCG is in the infancy stage of developing guidance or policy on cybersecurity and whatever is created must be dynamic and flexible.
- USCG has not decided which direction they will take this and are heavily relying on input from industry.
- USCG is leaning toward cybersecurity being wrapped into the existing MTSA

implementation programmes. Currently, USCG's expectation for US flagged ships is cybersecurity attacks should follow the same process as a breach of security under MTSA. USCG expects to be notified and the operator to follow the approved Vessel Security Plan for remedial action. At this time, the applicability of this concept to non-US flagged ships remains to be determined.

- USCG recognised the need to establish a risk assessment and risk management process.
- Technical speakers discussed the broad definition and aspects of cybersecurity along with some very technical information.

BIMCO will together with the Chamber of Shipping of America be engaged in this work. BIMCO is currently working on developing guidance for shipping on this issue to be presented in the International Maritime Organization (IMO).

US penalty policy for violations of ships of the sulphur standard in the US ECA

As part of the preparation for the stricter sulphur limits implemented in the US Emission Control Area (ECA) 1 January 2015, the US EPA has on 15 January 2015 issued its new penalty policy for violations of the sulphur in fuel standard.

Effective immediately, this policy will be applied to all enforcement actions initiated as a result of suspected violations by ships of the fuel oil sulphur levels required in the North American and Caribbean ECAs as adopted under MARPOL Annex VI.

The goal of this policy is to deter potential violators, ensure fair and equitable assessment of penalties and expedite the resolution of claims associated with certain non-compliance events as determined by USCG and EPA during port state control inspections.

The goals of this policy are in full accordance with the industry's position that robust enforcement of the fuel provisions are to be supported to assure the maintenance of a level playing field and prevent the unfair economic benefits which would be accorded shipowners who either negligently or intentionally choose to ignore the low sulphur fuel requirements in the North American and Caribbean ECAs.

Under current US law, EPA may assess a civil penalty of up to USD 25,000 per violation per day for violations which have been referred to EPA by USCG. The total civil penalty assessed for a given event will be calculated "taking into account the nature, circumstances, extent, and gravity of the prohibited acts committed and, with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and other matters as justice may require."

It is significant to note that while this policy was developed primarily to address violations of the fuel oil sulphur standards (Regulation 14.4), the policy specifically notes its applicability to other violations of MARPOL Annex VI, including maintenance and implementation of fuel oil changeover procedures including maintenance of a log recording specified changeover details (Regulation 14.6), maintenance on board of bunker delivery notes (Regulation 18) and retention of representative fuel oil samples (Regulation 18.8.1). Under this policy violations of any of these requirements would be viewed as a separate violation occurring for each day it occurred.

EPA's penalty policy contains two components, consistent with other EPA penalty policies, with the first component of the penalty policy relating to quantitatively determining the economic benefit of non-compliance, while the second component relates to the gravity components of the penalty. In practical application, each component would be calculated by EPA case staff and then certain adjustment factors noted below would be applied to arrive at a final penalty assessment for a given non-compliance event(s).

The first component, the "economic benefit component", serves as a deterrent by calculating and removing the economic benefits of non-compliance. In its simplest form, the economic benefit of non-compliance is the difference between the cost of compliant fuel less the actual cost of the non-compliant fuel used multiplied by the amount (in metric tons) of non-compliant fuel burned while in the ECA.

The second component, the "gravity component", is intended to reflect the seriousness of the violation from EPA's perspective given a particular set of facts associated with the non-compliance event. The first factor to be considered here is the nature of the non-compliance, which includes (1) fuel sulphur violations and/or (2) record-keeping violations, concerning written procedures for fuel changeovers, maintenance of log book reflecting volumes of fuel oil as well as date/time/position of ship at time changeover is completed, maintenance of bunker delivery notes and maintenance of a representative sample of fuel oil.

Once the base gravity component is calculated as per the above, adjustments may be made to this amount based on other factors, including degree of wilfulness or negligence, degree of co-operation in resolving the violation, history of non-compliance by the cited party, litigation risk (case strengths/weaknesses), ability to pay and the existence (or lack thereof) of ongoing supplemental environmental projects.

To sum up it should be noted that with both the economic benefit and gravity calculations and adjustments which may be made given other factors, it is an understatement to suggest that significant penalties could be assessed for violations of the Annex VI ECA requirements. (MLU)

T/C – failure to give redelivery notices

Maestro Bulk Ltd v Cosco Bulk Carrier Co Ltd (The "Great Creation") – QBD (Comm Ct) (Cooke J) [2014] EWHC 3978 (Comm) – 15 December 2014

Charterparty – Notice of redelivery – Charterers redelivering vessel with insufficient notice – Measure of damages

The vessel *Great Creation* was chartered on amended NYPE form dated 16 November 2009 for a period of minimum four and maximum five months, plus 15 days in charterers' option at a daily rate of US$18,500 per day gross (US$18,037.50 net).

Clause 60 of the charter provided:

> *"On redelivery charterers to tender 20/15/10/7 days approximate and 5/3/2/1 days definite notice."*

The earliest date for redelivery under the charter was 29 March 2010 and the latest date 14 May 2010.

In February 2010 the charterers fixed the vessel for a voyage from Casablanca to Pasadena with a cargo of phosrock. They expected the voyage to take about 24 days, leaving the ship "open" on or about 20 March 2010. They therefore hoped to employ the vessel on a further carrying voyage before the latest date for redelivery to the owners. As a result of subsequent delays and other events, the charterers decided, on 13 April 2010, that it was impossible to fix a further laden voyage during the currency of the charter and that they would therefore have to redeliver the vessel in Pasadena.

On 13 April 2010 the charterers therefore served what purported to be an approximate 20-day notice of redelivery. On 14 April the charterers tendered 15/10/7 approximate notices of redelivery and on 16 April they served 3/2/1 definite notices. The charterers tendered redelivery of the vessel to the owners on 19 April 2010.

On 21 April 2010 the owners fixed the vessel to Oldendorff GmbH & Co KG for a time charter trip from New Amsterdam, Guyana with redelivery Mediterranean/Black Sea at a daily rate of US$22,000 per day. If account was taken of the nine-day ballast voyage, the effective rate was US$13,485 per day.

A dispute arose as to the correct approach to damages. The charterers contended that what the owners lost by the failure to give correct redelivery notices was hire payable at the existing charter rate for approximately 20 days beyond the date of notice that was actually given – ie 20 days after 13 April 2010, namely up to 3 May 2010, less any hire actually earned in that period by owners in mitigation of their losses.

The owners' case was that their loss was the loss of the opportunity to enter into a charter at a significantly higher rate than the one they actually negotiated, having been given effectively six days' notice of redelivery instead of the 20 days' approximate notice (equivalent to 18 days) to which they were entitled. The owners' claim was for the earnings on a notional lost voyage that they would have conducted if contractual notices had been given from 31 March onwards in respect of the redelivery which actually occurred on 19 April. The lost voyage was said to run from 19 April 2010 to 17 May 2010, with credit to be given for the pro-rated daily earnings in that period which were actually achieved on a voyage which, with its non-earning ballasting positioning leg, ran from 21 April 2010 to 28 May 2010.

The dispute was referred to arbitration. The arbitrators determined that the margin allowed for an "approximate" notice amounted to two days. They also found that there was no failure by the owners to mitigate their loss, and that the Oldendorff fixture was fixed at below market rates.

The arbitrators concluded that the charterers' submission was misguided. Damages were payable for the difference between notice being properly given and it not being properly given in respect of a redelivery on 19 April and the different rate for fixtures available to owners in those two sets of circumstances. By reference to the Baltic Handysize Index for delivery on 19 April, the relevant rate was US$25,927 per day (US$25,278.83 net of address commission) on the basis of the owners going into the market 20 days before availability on that date and concluding a fixture in the ordinary course of time thereafter. The arbitrators envisaged the notional fixture being made at some point after 31 March but before 19 April. In the event the arbitrators accepted the owners' pro-rated daily figure on the Oldendorff voyage, allowing for the unpaid ballast leg, of US$13,485 per day net, and concluded that the net daily loss, as against the US$25,278.83 figure for the notional voyage, was US$11,793.83. Taking that figure for 26 days from 21 April to

17 May, the end of the notional Pasadena/Europe voyage, the arbitrators arrived at a calculation of 26 days x US$11,793.83 = US$306,639.58.

The charterers appealed.

Held, that the breach lay in redelivery of the vessel on 19 April without giving the notices required by the contract. Had the charterers given 20 days' approximate notice on 13 April that would have resulted in redelivery on about 1 to 3 May. The effect of the charterers' breach was to deprive the owners of the hire which was payable under the current charter for the balance of the notice period after actual redelivery on 19 April up to 1 May – a period of 12 days. If, in reasonable mitigation, the owners entered into a fresh charter so that the vessel was employed during the relevant period, earnings received from that employment would fall to be offset against the hire in order to establish the owners' true net loss.

The arbitrators erred in finding that the loss claimed by the owners was caused by the charterers' breach on 19 April 2010. The loss complained of related to a notional fixture concluded *before* the date of breach. Moreover, liability for a hypothetical lost business opportunity of the type for which the owners contended was too remote. It was "unquantifiable, unpredictable, uncontrollable and disproportionate" at the date of entry into the charter (*The Sylvia* [2010] 2 Lloyd's Rep 81 and *The Achilleas* [2008] 2 Lloyd's Rep 275 considered).

What the parties would have in contemplation at the time of entering into the charter as a consequence of the failure to serve contractual notices on 13 April would be the loss of hire from the date of actual redelivery to the date when the approximate 20-day notice expired and the vessel should have been redelivered in accordance with the service of compliant notices. In the present case that would be the hire from 19 April to 1 May. That was the prima facie measure of loss.

The fact that an owner might act reasonably in accepting a lower "prompt" rate did not, however, mean that the period for which damages were claimed would ordinarily extend beyond the missing period of contractual notice which had to be seen as analogous to the late redelivery position in *The Achilleas*. At the time of concluding the charter, liability for the difference in rates of follow-on fixtures, hypothetical and real, for their duration however long that might be, would not be in the contemplation of the parties. The court therefore had to look for the measure of damages which best reflected the loss by reference to that period and which would have been within the contemplation of the parties at the time of fixing the charter.

The starting point for the calculation which best represented the owners' loss was the hire payable for the period between 19 April and 1 May, the date when a 20-day approximate notice of redelivery could, at the earliest, expire (18 days from 13 April). Credit then fell to be given for the market rate of hire as and when it was achievable.

As the ballast voyage to Guyana occupied the period between 21 April and 30 April prior to delivery into the Oldendorff charter, it could properly be said that there were no earnings received by the owners to set off against their loss of hire in respect of those 11 days. Nor was the full market rate available to owners on 1 May. Giving due weight to the arbitrators' finding that the owners acted reasonably in taking the only fixture that was reasonably on offer on 21 April which involved a ballast passage to Guyana, laycan dates of 28 April to 1 May and actual delivery on 30 April, at a rate which appeared lower than the market, the full market rate would not have been available to the owners on 1 May. In other words, if the owners had waited in order to obtain market rate, as opposed to accepting a "prompt" fixture, 1 May would also have been an idle day.

All in all, on the arbitrators' findings of fact, no injustice would be done in taking 12 days' loss of net charterparty hire as the sum which best represented the owners' loss as a result of the short notice.

Accordingly, the award would be varied to reflect damages for failure to serve contractual notices in the sum of 12 days x US$18,037.50 = US$216,450. That figure replaced the figure of US$306,639.58 which was the figure awarded by the arbitrators.

The appeal would be allowed to that extent.

Charles Priday (Winter Scott) for the charterers; Andrew Baker QC (Holman Fenwick Willan) for the owners.

Editor's Note: The above is a summary of a London judgment which appeared in Lloyd's Maritime Law Newsletter No. 916 of 8 January 2015, and which is reproduced by kind permission of the publishers, Informa Law.

T/C – bottom fouling

Charterparty – Speed and performance – Whether claims precluded by reason of bottom fouling – Whether charterers estopped from bringing claims under second charterparty in direct continuation – Whether owners entitled to claim for hold cleaning on redelivery and for stevedore damage

The vessel was chartered under two charterparties on the NYPE 1946 form dated 24 November and 18 January, the second charterparty being in direct continuation of the first. Under the charterparties, the vessel performed two time-charter trips.

Under the first charterparty the vessel was delivered off Shanghai on 24 November and was ordered to Morowali, Indonesia, to load a cargo of nickel ore. She arrived at Morowali on 6 December, loaded her cargo at the anchorage and eventually sailed on 24 January, having been at the port for 48 days. The temperature of the seawater at Morowali was high and the owners contended that as a result the vessel's hull, propeller and rudder became fouled. The vessel arrived at her discharging port of Lianyungang, China on 2 February.

On 10 January the owners sent a message to the charterers reading:

> *"Because of the prolonged stay at the anchorage for loading, in an area with high sea water temperatures which undoubtedly favouring the hull fouling, Owners according the C/Party clause 128 reserve their rights to conduct an underwater inspection and if its found necessary and under-water cleaning to be carried out at Chrts time and expenses.*
>
> *Owners' intention is to conduct the underwater inspection and hull cleaning if it necessary when and where practical which will, most likely, be at the discharge port but in case same cannot be arranged concurrently with discharging, Owns reserve their rights to conduct same at another convenient port and cost/time to be for charts account.*
>
> *It goes without saying that for the laden voyage from Morowali to disport in China Owners will not be liable for any underperformance caused due to vessel's hull being fouled due to prolonged stay for loading at Morowali roads for loading."*

On 18 January the owners concluded the second charterparty in substantially the same terms as the first.

On completion of discharge of the cargo at Lianyungang the charterers arranged an underwater inspection on 6 February. The results indicated that the vessel had bottom fouling. On receipt of that information the owners wrote to the charterers on 14 February saying:

> *"According to the attached report of underwater inspection arranged by charterers, it appears that ship's hull bottom, propeller and rudder is fouled to the extent of at least 5% ...*
>
> *Charterers are fully aware that the fouling of ship's hull has been caused by prolonged stay at anchorage of Morowali for more of 35 days for which charterers are fully responsible.*
>
> *The fouled ship's hull is the only factor that has affected and contributed to ship's overconsumption and speed underperformance, and for which we repeat one more that charterers are fully responsible.*
>
> *We therefore do not accept any hire deduction due to over consumption and speed alleged underperformance."*

It was not possible for the owners to carry out an underwater inspection at Lianyungang, given the poor visibility of the water there, and in the event no underwater cleaning was carried out at Lianyungang or anywhere else prior to the redelivery of the vessel under the first charter and her simultaneous delivery under the second charter.

For the second voyage the vessel ballasted to Kolaka, Indonesia. There she loaded a cargo of nickel ore, again for discharge at Lianyungang. The vessel sailed from Kolaka on 1 March and arrived at Lianyungang on 11 March. She was redelivered under the second charterparty on 25 March. The second voyage was uneventful, save for some stevedore damage incurred during discharge at Lianyungang.

On redelivery under the second charterparty the vessel proceeded to dry-dock. Whilst the vessel was in dry dock the owners repaired the stevedore damage.

The owners claimed a balance of hire under both charterparties. They also claimed US$4,500 in lieu of hold cleaning on redelivery under each of the two charters, and claimed US$2,800 for the repair of stevedore damage incurred at Lianyungang during discharge of the cargo carried on the second voyage.

The charterers denied the claims on various bases. Under the first charterparty they claimed to be entitled to deduct 16.5 hours for under-performance, equivalent to approximately US$5,492 net of commission. Under the second charterparty they claimed to be entitled to a deduction of US$2,255 for under-performance of 9.84 hours, a deduction of US$9,332.94 for over-consumption of IFO, a deduction of US$700 for over-consumption of MDO, a deduction of US$14,828.10 for over-consumption of IFO on the first voyage, and a deduction of

US$700 for over-consumption of MDO on the first voyage.

Held, that so far as the first charterparty was concerned, the charterers' claim for deduction of hire for 16.5 hours was based on a Voyage Audit report produced by Weathernews Inc on the instructions of the charterers. It found that, on the basis of a speed in good weather – as defined in the charterparty – of 12 kn (including a small adjustment for adverse currents), the vessel had taken 16.5 hours longer on the voyage of 2,570 nm than she would have done had she made her warranted speed of 13 kn. The relevant provisions of the charterparty were clauses 64 and 128. Clause 64 was the vessel's description clause, in which her speed and consumption were set out as follows:

> *"ABT 13.50 KN L/13.75 KN B ON ABT 29.50L/28.50B MT IFO 380 CST, RMG 380 GENS-SEA 2.5MT IFO/PORT 3.0MT IFO IDLE-4.5MT IFO GEAR WORKING*
>
> *THE ABV SPD/CONS IS BSS GOOD WEATHER, NO ADVERSE CURRENT, NO NEGATIVE INFLUENCE OF SWELLS AND NOT EXCEEDING BEAUFORT SCALE FORCE 4 AND DOUGLAS SEA STATE 3*
>
> *… ALL DTLS ABT."*

Clause 128(1) provided:

> *"Owners not to be responsible if the vessel under the currency of this charter party stays at port or anchorage or any other place for more than 28 days and therefore vessel's speed, due to bottom fouling which may have formed to the ship's hull as a direct result of such prolonged stay, is reduced and/or consumption increased. In case of need for underwater cleaning same to be for Charterer's account in terms of time and expenses."*

The vessel had remained at the anchorage at Morowali for the loading of the cargo for a period of some 48 days, well in excess of the 28-day period in clause 128(1). Morowali was situated at a latitude of 1°52'S, in tropical waters, where a prolonged stay was likely to lead to marine growth fouling the vessel's hull. That fouling took place to some extent was confirmed by the underwater inspection that the charterers arranged at Lianyungang on 6 February, although the accuracy of that inspection was subject to question, given the adverse conditions in which it had been conducted. It was further confirmed by photographs of the vessel's hull taken during her dry-docking immediately after her redelivery from the second charterparty, and by a painting report covering the work done during the dry-docking.

Accordingly, the tribunal found that bottom fouling did occur during the protracted stay of the vessel at Morowali and that that fouling affected both her speed and bunker consumption on the laden voyage to Lianyungang. The tribunal was fortified in that conclusion by the fact that, on the ballast leg from Shanghai to Morowali, the vessel performed in accordance with her speed and consumption warranties, indicating that her hull was unaffected by fouling at that time.

Those findings brought into play the terms of clause 128(1) of the charterparty, by virtue of which the owners had no responsibility for the vessel's failure to make her speed and consumption warranties on the laden voyage to Lianyungang. The charterers' underperformance claim in respect of the first voyage accordingly failed.

As to the owners' claim for US$4,500 in lieu of hold cleaning on redelivery, clause 31 of the charter provided:

> *"Hold Cleaning*
>
> *Hold condition on redelivery is to be about same condition as on delivery.*
>
> *Charterers have the option to redeliver the vessel with holds uncleaned, paying USD4,500 lumpsum in lieu of hold cleaning excluding all dunnage, lashing debris removal/disposal."*

There was no evidence that the charterers did clean the holds on redelivery and, given that the vessel was simultaneously delivered under the second charterparty, it was inherently unlikely that they did so. The tribunal noted further that, under the second charterparty, as under the first, wording inserted at line 22 provided:

> *"On Vessel arrival at first loading port, vessel's all cargo holds to be clean swept/washed down by fresh water and dried up so as to receive Charterers' intended cargoes in all respects, free of salt, rust scale and previous cargo residue to the satisfaction of independent surveyor …"*

In those circumstances, the wording of clause 31 was to be applied and the owners' claim for US$4,500 in lieu of hold cleaning succeeded.

So far as the second charterparty was concerned, the charterers' three claims for underperformance and over-consumption were founded on a Voyage Performance Report produced by AWT (Applied Weather Technology, California) on the instructions of the charterers. In reaching their conclusions, AWT had applied the correct principles as set out in *The Didymi* [1988] 2 Lloyd's Rep 108 and *The Gas Enterprise* [1993] 2 Lloyd's Rep 352. The conclusions in the original report were then modified by a Bunker Calculation Worksheet, in which AWT gave allowance for the word "about" in the IFO consumption warranty in the charterparty. That reduced the original figure for over-consumption from 24.77 mt of IFO to 8.106 mt.

The owners had not contested the accuracy of the figures in the AWT Report but nevertheless contended that the deductions were wrongful. They pointed out that the charterers took the vessel under the second charterparty in direct continuation of the first charter and thereby did not allow the vessel's hull to be cleaned after her prolonged stay at Morowali. The owners submitted that the charterers were estopped by their actions from claiming under-performance in respect of the second voyage.

The owners' submission would be rejected. At the time the second fixture was concluded, on 18 January, the owners were aware of the likelihood of hull fouling occurring during the vessel's prolonged stay at Morowali and had, indeed, already written to the charterers in protest (on 10 January). Yet they fixed the vessel under the second charterparty on identical terms to the first, including the same speed and performance warranties, with delivery terms reading: *"IN D/C [direct continuation] UPON DLOSP LAST DISPORT UNDER PRESENT C/P any time day or night"*. In those circumstances, the owners took the risk under the second charterparty that the vessel might not be able to make her speed and performance warranties by reason of the hull fouling that had occurred under the first charterparty.

It might also be the case that, in so fixing, the owners had intended to clean the hull on the ballast voyage back to Indone-

sia. That might have entailed the cost and expense of putting in to a convenient intermediate port, but such would have been recoverable from the charterers pursuant to clause 128(1) and the owners' message of 10 January. In any event, whatever their intention might have been, the owners did not arrange for the hull to be cleaned before the vessel arrived at Kolaka.

There was nothing in the conduct of the charterers in relation to the second charterparty to found an estoppel. They simply agreed the fixture on the terms acceptable to the owners and took delivery of the vessel accordingly. The tribunal suspected that, at the time the second charterparty was fixed, neither party was directing its mind to the effect that hull fouling might have on the performance of the vessel under that charterparty. There was certainly no evidence to indicate that they did.

On that analysis, the owners had to stand by the warranties that they had given and respond in damages for any proven breach of them. In that regard, whilst it was clear that the charterparties contained a warranty regarding the consumption of IFO, there was no clear warranty regarding the consumption of MDO so that the claim for a deduction of US$700 for over-consumption of MDO had to fail.

As regards the deduction of US$2,255 for the under-performance claim on the second voyage, that had been calculated at the charterparty daily hire rate of US$5,500, but did not take account of the 3.75 per cent commission to be deducted from it. Once that correction had been made the amount to be deducted from hire was reduced to US$2,170.44.

The deduction for excess IFO consumption of US$9,332.94 on the second voyage was based on an over-consumption of 13.526 mt, whereas the revised AWT Report gave a figure of 8.106 mt. It was possible that the balance of 5.42 mt related to an over-consumption on the ballast leg from Shanghai to Kolaka, but there was no evidence to that effect. Accordingly that element would be disallowed, and the charterers were entitled to a net deduction of US$5,593.14 (8.106 mt x US$690 per mt).

Although the deduction of US$14,828.10 for over-consumption of IFO on the first voyage and the deduction of US$700 for over-consumption of MDO on the first voyage had been deducted from hire due under the second charterparty, they related to under-performance and over-consumption on the laden voyage under the first charterparty. They therefore failed for the same reasons that the charterers' under-performance claim under the first charterparty failed. In addition, the claim for over-consumption of MDO failed for the same reasons that the claim for over-consumption of MDO on the laden voyage under the second charterparty failed.

The owners' claim for US$4,500 in lieu of hold cleaning on redelivery under the second charterparty succeeded. There was no evidence that the charterers cleaned the holds on redelivery.

As to the owners' claim for US$2,800 for the repair of stevedore damage incurred at Lianyungang during discharge of the cargo carried on the second voyage, clause 33 of the charter provided:

> *"Stevedores to be appointed and paid by Charterers but to work under the supervision of the Master. Should any damage to be caused to the vessel or her fittings by stevedores, Master has to try to let stevedores repair the damage and will try to settle the matters directly with them at the first stage. If the damage is not repaired by stevedore, Master has to try to obtain written acknowledgement of the damage and liability from stevedores and Master to notify Charterer or their agents of such damage within 24 hours after the damage occurred except for hidden damages which to be notified to Charterers as soon as its discovery but always prior to completion of discharging of each voyage. Otherwise, Charterers shall not be held responsible for the damage, Charterers to have the privilege of redelivering the vessel without repairing the stevedores' damages for which Charterers are responsible, incurred during the currency of this Charter as long as the damages do not affect seaworthiness and/or her working capacity …"*

On completion of discharge at Lianyungang the master had written to the charterers, reporting five instances of stevedore damage sustained inside each of the five cargo holds, and enclosing separate damage reports for each hold. According to those reports, the damages had occurred at noon, 24 March, in holds 1 and 4 and at 18.00 that day in each of the remaining holds. The damage consisted of handrails to the Australian ladders and straight ladder platforms that had been detached by the stevedores' discharging equipment. In his email, the master stated:

> *"Stevedores and local agent was advised to have the damages repaired prior departure but no repair was carried out up to this time of reporting. Stevedore foreman and local agent refused to sign/acknowledge the attached reports, copy of said reports was provided earlier to boarding agent …"*

The damage was repaired during the vessel's dry-docking on redelivery from the second charterparty. Invoices from the yard evidenced repair work to the ladders in all five holds in the total amount of US$7,079. In fact, in their final hire statement for the second charterparty the owners had claimed only US$2,800 in respect of stevedore damage and had not revised their claim since.

The tribunal found that the owners' claim for stevedore damage met the requirements of clause 33 of the charterparty and was good for the amount claimed of US$2,800.

Accordingly, the owners' claim under the first charterparty succeeded in full, in the claimed amount of US$10,190.65. The owners' claim under the second charterparty succeeded in part; instead of the claimed amount of US$35,196.21, the owners were entitled to recover US$27,432.63, namely US$35,196.21 less US$7,763.58.

Interest would be awarded at the rate for US dollars currently used by LMAA arbitrators of 4.5 per cent per annum, compounded at three-monthly rests. As between commercial parties, that rate was fair and reasonable.

Costs would follow the event. The owners had succeeded in over 80 per cent of their total claim. That was a sufficient measure of success to entitle the owners to recover their costs in full on a party-to-party basis.

Editor's Note: The above is a summary of a London Arbitration Award (No. 18/14) which appeared in Lloyd's Maritime Law Newsletter No. 910 of 16 October 2014 and which is reproduced by the kind permission of the publishers, Informa Law.

Dusty cargo – loading suspended – laytime

Demurrage – Force majeure – Port authority ordering suspension of loading of bulk bauxite to prevent dust being blown over cars – Loading of bulk bauxite causing unavoidable dust – Whether charterers liable to pay in respect of consequent delay to vessel

The vessel was chartered for a voyage for the carriage of a cargo of sepiolite from *"1-2 load berth chop always afloat Santander"* to a port in the UK.

A dispute arose as to whether the charterers were entitled to rely on the force majeure clause in the charterparty as a defence to the owners' claim for €7,920 demurrage, alternatively damages in the same amount, allegedly incurred at the loading port, Santander.

The charterers ordered the vessel to load bulk bauxite at the sepiolite terminal berth, which was adjacent to a ro-ro berth at which cars were waiting to be loaded. Despite all reasonable preventative measures, the loading of bauxite in bulk inevitably caused dust. Initially, the prevailing west north-west wind blew the dust away from the ro-ro berth and out to sea. However, the wind direction changed to east north-east which resulted in the dust blowing over the ro-ro berth and the cars being loading there. In order to prevent the dust getting on and inside the waiting cars, the port authority ordered the loading of the bauxite cargo to be suspended, resulting in the delay of which the owners complained.

Held, that of the many authorities and textbooks cited to the tribunal, those most particularly relevant were from *Chitty on Contracts*, 31st Edition, at paras 14-143 and 14-152. In para 14-143, as well as saying that the party relying on a force majeure clause must further prove:

> *"(i) that his non-performance was due to circumstances beyond his control; and*
>
> *(ii) that there were no reasonable steps that he could have taken to avoid or mitigate the event or its consequences"*

the paragraph continued:

> *"… It may nevertheless, be argued that the parties to a contract cannot reasonably have intended that one party should be entitled to rely on a force majeure clause which, as the result of facts known to him at the time entering into the contract, he could reasonably foresee would inevitably come into operation and so affect the performance expected of him by the other party. However, it has been held that there is no justification for limiting the ordinary meaning of words in a force majeure clause to events or states of fact not in existence at the date of the contract or to those which are unpredictable at the time it was made."*

In para 14-152 it was said:

> *"If the reference to force majeure is indeed unqualified, eg 'subject to force majeure' or 'force majeure excepted', then it is submitted that, in English law, performance of the relevant obligation must have been prevented by an event of force majeure and not merely hindered or rendered more onerous. However, there does not appear to be any requirement that the circumstances alleged to constitute force majeure should be unforeseeable, although the party seeking to be excused still bears the burden of proving that his non-performance was due to circumstances beyond his control and that there were no reasonable steps that he could have taken to avoid or mitigate the event or its consequences."*

In the present case the charterers agreed and were obliged to nominate the loading berths (*"1-2 load berth chop"*) at Santander. Although the prevailing wind was west north-west, an east north-east wind was possible. It was not unexpected that, for the smooth operation of the port, the port authorities would give priority to a high value and sensitive cargo such as cars, against bulk bauxite. There was an alternative berth at which the bulk cargo could have been loaded, albeit moving to such a berth would have taken time and expense, such as trucking.

The charterers could reasonably foresee that a wind change, although unusual, was not impossible, and would *"inevitably come into operation and so affect the performance expected"* of them, by resulting in the chain of events that occurred in the present case which resulted in the delay for which the owners claimed. The performance by the charterers was not prevented by a force majeure event, but was *"hindered or rendered more onerous"*. The charterers had to accept that and bear the resulting expense, either of demurrage or switching berths.

The judgment of Moore-Bick J in *The Kriti Rex* [1996] 2 Lloyd's Rep 171 was apposite, particularly the following passage (at page 196 col 1):

> *"In general I think it is fair to approach such clauses with the presumption that the expression force majeure is likely to be restricted to supervening events which arise without the fault of either party and for which neither of them has undertaken responsibility."*

The charterers were responsible for the choice of berths and accordingly it could not be said that the force majeure clause applied because there were supervening events for which neither party had undertaken responsibility.

Accordingly, the charterers had failed to bring themselves within the force majeure clause, and therefore the owners' claim for €7,920 succeeded.

Editor's Note: The above is a summary of a London Arbitration Award (No. 3/15) which appeared in Lloyd's Maritime Law Newsletter No. 918 of 3 February 2015 and which is reproduced by the kind permission of the publishers, Informa Law.

Meet BIMCO

DATE	VENUE	EVENT	CONTACT
9-10 Apr. 2015	Shanghai	**Green Shiptech China Congress 2015** - Free pass for BIMCO members	Jonathan Zhang
13-17 Apr. 2015	London	**IMO Legal Committee**	Christian Hoppe: cho.bimco.org
20-24 Apr. 2015	Singapore	**Singapore Maritime Week**	Thomas Timlen: tt@bimco.org
20-24 Apr. 2015	London	**International Oil Pollution Compensation Funds**	Christian Hoppe: cho.bimco.org
22-23 Apr. 2015	Odessa	**International Forum on Seafarers' Education, Training and Crewing (ETC-2015)**	Peter Lundahl Rasmussen
28-29 Apr. 2015	London	**Global Shipping Trends & Trade Patterns** - 20% discount for BIMCO members	Peter Sand: ps@bimco.org
28-30 Apr. 2015	Cyprus	**CIRM Congress**	Aron F. Sørensen: afs.bimco.org
29 Apr.-1 May 2015	New York	**Maritime Law Association of the United States, 2015 Annual Meeting**	Søren Larsen: sl@bimco.org
7-8 May 2015	London	**4th Ballast Water Technology Conference**	Peter Lundahl Rasmussen
11-14 May 2015	Hong Kong	**International Congress of Maritime Arbitrators - ICMA XIX, Hong**	Søren Larsen: sl@bimco.org
11-15 May 2015	London	**IMO's Marine Environment Protection Committee (MEPC 68)**	Aron F. Sørensen: afs.bimco.org
21-22 May 2015	Rotterdam	**BIMCO Days at MEL, Rotterdam**	Peter Grube, Henning Nielsen
1-3 Jun. 2015	Edinburgh	**BIMCO AGM**	Karin Petersen: kp@bimco.org
6-7 Jul. 2015	London	**Korean Register Advisory Committee (KREC 7)**	Aron F. Sørensen: afs.bimco.org
6-10 Jul. 2015	New York	**CGPCS (Contact Group on Piracy off the Coast of Somalia) Plenary**	Giles Noakes: gno@bimco.org
21 Jul. 2015	London	**Manpower Report Steering Committee 2nd meeting**	Aron F. Sørensen: afs.bimco.org
7-11 Sep. 2015	London	**London International Shipping Week**	Gemma Wilkie: gw@bimco.org
8-9 Sep. 2015	London	**Ship Efficiency: The Event 2015**	Lars Robert Pedersen: lrp@bimco.org
22 Sep. 2015	Copenhagen	**BIMCO Maritime Security Committee Meeting**	Giles Noakes: gno@bimco.org
23 Sep. 2015	Copenhagen	**BIMCO Marine Committee meeting**	Aron F. Sørensen: afs.bimco.org
19-23 Oct. 2015	London	**International Oil Pollution Compensation Funds**	Christian Hoppe: cho.bimco.org
26-29 Oct. 2015	St.Petersburg	**ISO TC8 The 34th Plenary Meeting**	Aron F. Sørensen: afs.bimco.org
10-12 Nov. 2015	Hamburg	**6th Gasfuelled ships Conference 2015 - 50% discount for BIMCO's ship owner members - details.**	Lars Robert Pedersen: lrp@bimco.org
11 Nov. 2015-25 Feb. 2016	eLearning	**eLearning Course: Tanker Laytime and Demurrage**	Mette Juul Madsen: mem@bimco.org
17-19 Nov. 2015	Hamburg	**BIMCO Annual Conference**	Michael Lund: mlu@bimco.org

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28 May - 29 Sep. 2015	***MODULE 3***	Time Chartering
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The BIMCO House, March 2015

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