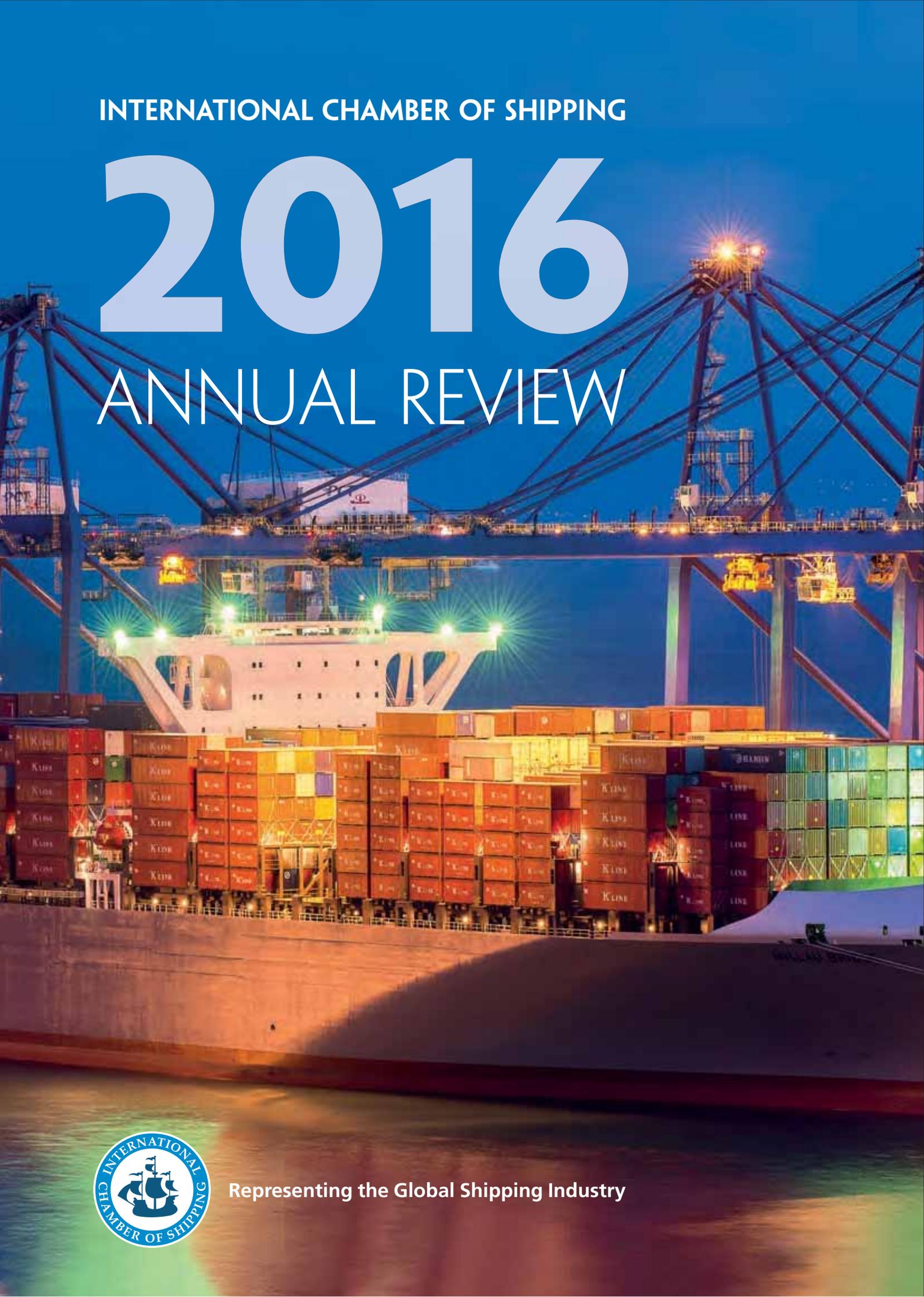


INTERNATIONAL CHAMBER OF SHIPPING

2016

ANNUAL REVIEW



Representing the Global Shipping Industry



We acknowledge with thanks the use of photos from the following associations and their member shipping companies:

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- Chilean Shipowners' Association
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- Danish Shipowners' Association
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- Korea Shipowners' Association
- Maritime Industry Australia Limited
- Norwegian Shipowners' Association
- Royal Association of Netherlands Shipowners
- Russian Chamber of Shipping
- Sail Training International
- Singapore Shipping Association
- Spanish Shipowners' Association
- Swedish Shipowners' Association
- Swiss Shipowners' Association
- Union of Greek Shipowners

INTERNATIONAL CHAMBER OF SHIPPING

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ANNUAL REVIEW

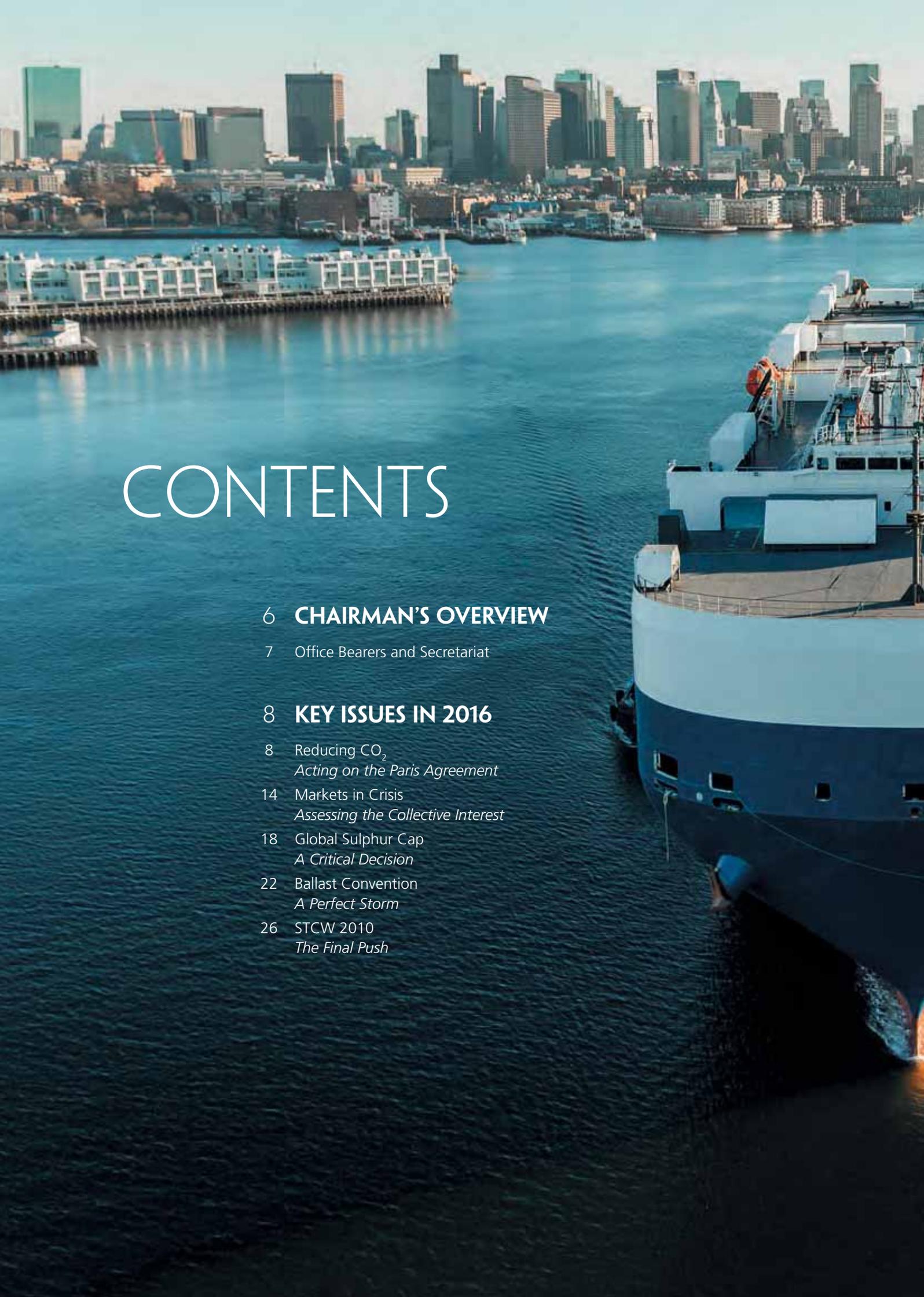


Representing the Global Shipping Industry



The International Chamber of Shipping (ICS) is the principal international trade association for shipowners, concerned with all regulatory, operational and legal issues, as well as employment affairs.

The membership of ICS comprises national shipowners' associations representing all sectors and trades from 37 countries, covering more than 80% of the world merchant fleet.



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CHAIRMAN'S OVERVIEW

ICS Chairman
Mr Masamichi Morooka (Japan)

THE IMO THEME THIS YEAR IS 'SHIPPING : INDISPENSABLE TO THE WORLD'

The difference between an optimist and a pessimist is that the optimist generally has a better time. This is probably why shipowners must always be optimistic.

This Annual Review explores many of the current issues of interest and concern to the world's merchant shipowners, as represented by ICS and its member national associations.

Sadly, after four years in office, I will soon be stepping down as Chairman of ICS. When I was first elected, little did I think that most sectors of the industry would still be waiting in vain for a sustained economic recovery. Nor did I expect that the price of oil would fall by around 70%, or that ships would be involved in the rescue of tens of thousands of migrants seeking to escape crisis in the Middle East and Africa. But there are two continuing trends in 2016 which have not surprised me.

*Mr & Mrs Morooka with Her Highness,
Princess Margriet of the Netherlands*



The first is that preparing for compliance with new environmental regulations still presents a major challenge. In particular, the industry must be ready to address the economic impact of the low sulphur fuel cap (expected to apply globally from 2020, although this is still to be confirmed by IMO). There are also the many uncertainties associated with the implementation of the IMO Ballast Water Convention, which may well enter into force during 2017.

The second is that the authority of IMO continues to be challenged by unilateral rules, principally those emanating from the European Union and the United States. This is making the maintenance of an effective global regulatory framework increasingly complicated. The IMO global regime cannot and must not be taken for granted.

I am pleased that in December 2015, ICS played a part in the United Nations Climate Conference in Paris, and is now taking an active role to consider the shipping industry's next steps to help further reduce the sector's CO₂ emissions. The politics of climate change, whereby developing and developed nations accept different responsibilities, does not sit comfortably with shipping's vital need for uniform IMO rules that apply equally to all ships regardless of flag. But now that IMO has finalised the details of its CO₂ data collection system, I am hopeful that IMO Member States (which are the same nations that were represented in Paris) will be able to make further progress.



My last few months in office have coincided with the appointment of the new IMO Secretary-General, Mr Kitack Lim. I am especially pleased that he appears to be sympathetic to ICS's goal of helping IMO Member States to deliver even better regulation, which will take more account of shipping's economic sustainability as well as continuous improvement of its environmental performance. It is therefore very fitting that the IMO theme this year is 'Shipping: indispensable to the world'.

It has been a pleasure to serve as Chairman of ICS, as well as a great responsibility. I have much enjoyed the discussions amongst the ICS member associations as they have sought to find solutions that are in the interest of the industry as whole. Developing unified positions that are acceptable to the wider industry, as well as the ambitions of governments, is not always easy, particularly when so many ship operators face such truly challenging markets. A commitment to co-operation and common sense is a hallmark of the discussions within ICS, and something which never ceases to impress.

As this Annual Review demonstrates, another thing that never ceases to amaze is the huge range of issues in which ICS is involved. I have therefore greatly appreciated the support of the ICS Board of Directors and the ICS Vice Chairmen, as well as our energetic and dedicated Secretariat, led by Peter Hinchliffe.

I wish my successor well in trying to steer ICS through what looks like being a difficult time for the industry during the immediate years ahead. I am sure that the next ICS Chairman will be able to match my continuing optimism, while helping ICS to serve the best interests of shipowners in the practical and efficient manner we have come to expect.

Masamichi Morooka

ICS VICE CHAIRMEN 2015/16

Left to right

Mr John C Lyras (Greece)

Mrs Karin Orsel (Netherlands)

Mr Gerardo Borromeo (Philippines)

Mr Esben Poulsson (Singapore)



SECRETARIAT

Mr Peter Hinchliffe, Secretary General

Mr Simon Bennett

Director Policy and
External Relations

Mr John Murray

Marine
Director

Ms Linda Howlett

Director Legal Affairs*

Ms Kiran Khosla

Director Legal Affairs*

Mr Alistair Hull

Technical Director

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Technical Director

Mrs Natalie Shaw

Director Employment Affairs

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Mr Stewart Inglis

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Marine Department

Miss Grace Cobley

Administrator
Publications

Mrs Anita Pow

Administrator
Shipping Policy

* position held jointly

REDUCING CO₂ ACTING ON THE PARIS AGREEMENT

ICS IS RESPONDING TO THE NEW MOMENTUM CREATED BY THE UN DEAL ON CLIMATE CHANGE



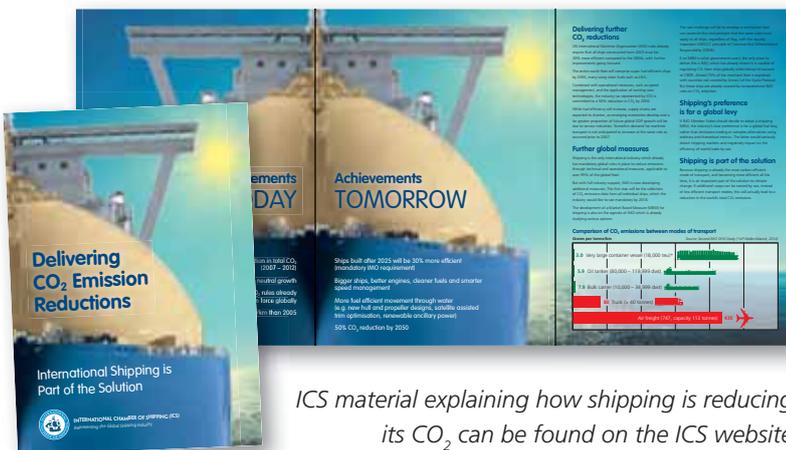
In December 2015, ICS represented the global shipping industry throughout the United Nations Climate Change Conference at which governments adopted the ground breaking Paris Agreement on reducing CO₂ emissions.

Although no explicit reference to shipping was included in the final text, it is clear that the industry will need to respond to this new momentum. The Paris Agreement builds on the existing United Nations Framework Convention on Climate Change (UNFCCC) with an ambitious goal of ensuring that average global temperatures will increase by no more than between 1.5 and 2 degrees centigrade.

A significant feature of the Paris Agreement is that virtually all of the world's nations, including developing countries, have made *Intended Nationally Determined Contributions* (INDCs) setting out commitments to reduce CO₂ emissions which will be updated every 5 years. However, international shipping is not covered by these INDCs, with the reduction of shipping's CO₂ being the responsibility of the industry's global regulator, the International Maritime Organization (IMO).

Shipping is already the most carbon efficient mode of commercial transport and in recent years has cut its CO₂ emissions per tonne of cargo moved one kilometre dramatically. As a result of IMO regulations adopted in 2011, ships built in 2025 will be at least 30% more efficient than those constructed in the 2000s. With the introduction of additional technical and operational measures, ICS is confident that shipping can reduce its CO₂ emissions per tonne-km by at least 50% by 2050 compared to 2007.

However, in view of current projections for future increases in maritime trade, governments expect shipping to deliver even more. Shipping is the only industrial sector already to have global regulations in place to reduce CO₂ which, through the MARPOL Convention, apply to over 95% of the world fleet. But the Paris Agreement has undoubtedly increased



ICS material explaining how shipping is reducing its CO₂ can be found on the ICS website



the pressure on IMO to take additional steps. Failure by IMO Member States to act could result with unilateral action against international shipping.

The European Union is already implementing a regional regulation on the Monitoring Reporting and Verification (MRV) of individual ships' CO₂ emissions. This currently uses different metrics to a global data collection system about to be adopted by IMO. The apparent intention of the European Commission is to develop this into a regional system of mandatory operational efficiency indexing of ships which ICS fears will lead to serious market distortion.



UNFCCC Paris Conference

With encouragement from environmental NGOs (some of which receive funding from the European Commission), the European Parliament is also proposing that international shipping (including non-EU flag ships calling at EU ports) should be incorporated within the EU Emissions Trading Scheme (ETS), presumably with the purpose of increasing pressure on IMO to adopt a global Market Based Measure (MBM).



According to the most recent IMO Green House Study, absolute (i.e. total) CO₂ emissions from the international shipping sector were reduced by more than 10% between 2007 and 2012, despite increased maritime trade. But through no fault of its own, international shipping faces a major challenge. Notwithstanding the slower rate of growth that has been experienced since the 2008 economic crisis, maritime trade and thus the sector's total CO₂ emissions are projected to continue growing.

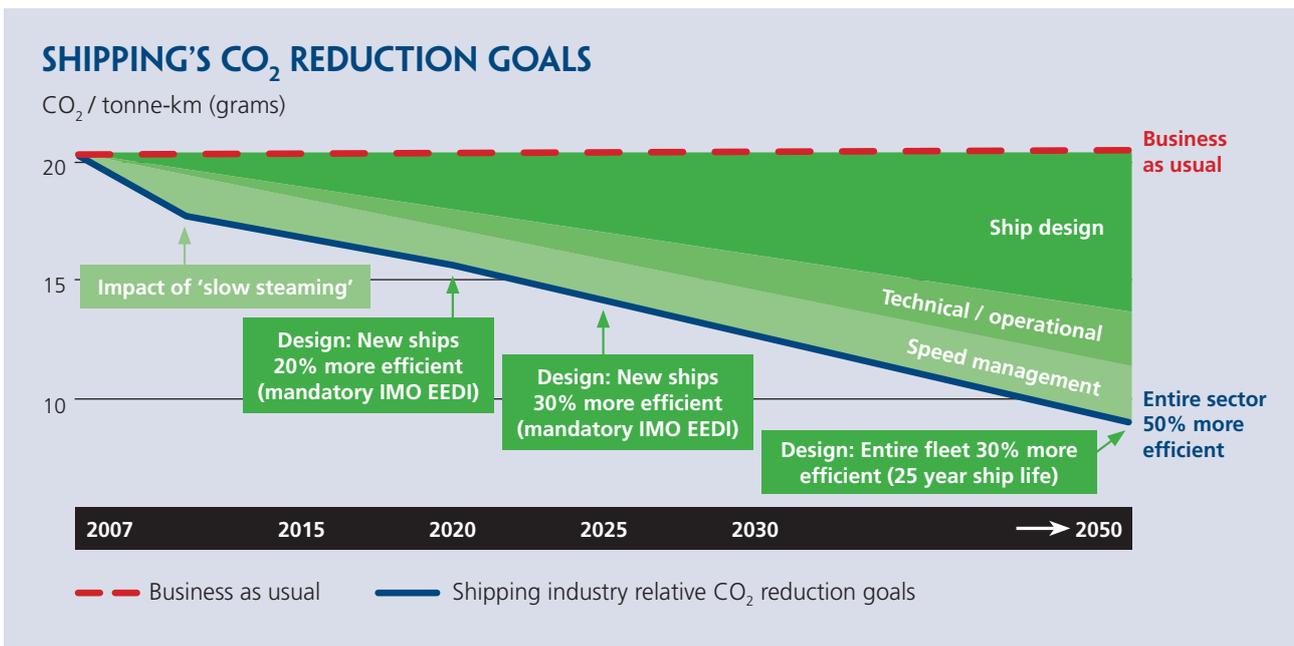


ICS has already responded with two important submissions to the IMO Marine Environment Protection Committee (MEPC) which met in April 2016, and which will meet again in October. >>>



REDUCING CO₂

ACTING ON THE PARIS AGREEMENT



The immediate priority for ICS is to ensure that the new global CO₂ data collection system is adopted and implemented on a mandatory basis as soon as possible. As explained elsewhere in this Annual Review, the IMO MEPC meeting in April made good progress, and the IMO system should be up and running by 2018. This will facilitate the development by IMO of additional CO₂ reduction measures which could possibly include an MBM.

But the political pressure for a shipping MBM is increasing. While reference to a maritime fuel levy was deleted from the final text of the Paris Agreement, in January 2016 the International Monetary Fund (IMF) repeated its call for a carbon tax to be imposed on shipping at a level of about US\$ 95 per tonne of fuel. A similar proposal was made in 2015 by the Organisation for Economic Co-operation and Development (OECD) International Transport Forum.

Meanwhile, in October 2016, the International Civil Aviation Organization (ICAO) is expected to adopt an MBM for aviation that will cap the sector's net CO₂ emissions at 2020 levels through the purchase of offsets. U.S. States such as California, as well as Canadian provinces, are also likely to consider the adoption of local MBMs that could apply to visiting ships.





The application of an MBM to shipping remains controversial within the industry itself, but also among many developing nations at IMO that see this as a tax on trade. Many of those governments and bodies that advocate MBMs seem to be more concerned about the money that could be raised rather than the impact it would have on actually reducing CO₂ from shipping.

ICS has to balance all of these concerns with the danger of MBMs being imposed via unilateral or regional regulation, or through an ill-thought out system being developed at IMO – such as an ETS or operational indexing of individual ships – which could seriously distort global shipping markets while actually decreasing efficiency. In the event that IMO Member States should ever decide to develop an MBM, the position of ICS is that the clear preference of the majority of the industry is for a simple global levy based on fuel consumption.

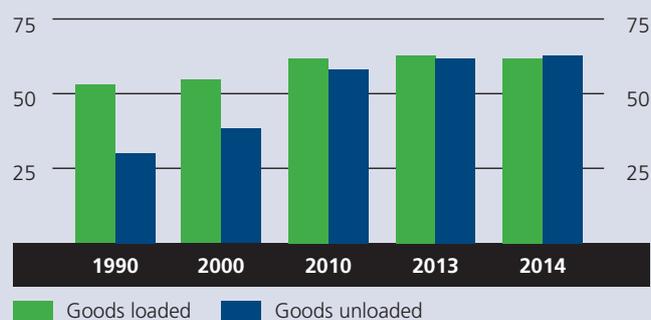
ICS’s member national shipowners’ associations are currently giving detailed consideration to how a fuel levy might work in practice should an MBM eventually be taken forward at IMO, but in a manner that would deliver genuine environmental benefit while also avoiding market distortion. Any levy that might be developed by IMO Member States must also take account of the UNFCCC principle of ‘Differentiation’ whereby developed and developing nations accept different responsibilities for reducing CO₂. Given that shipping is a global industry requiring universal rules to be applied to all ships regardless of flag, the possible development of a levy by IMO would present a major challenge.

Meanwhile, in response to the Paris Agreement, ICS made a radical proposal to the IMO MEPC in April 2016, following a request from the Marshall Islands, in 2015, that IMO should develop CO₂ reduction goals for international shipping.

ICS has proposed that IMO should develop an *Intended IMO Determined Contribution* for CO₂ reduction on behalf of the sector. >>>

DEVELOPING COUNTRIES’ SHARE OF GLOBAL SEABORNE TRADE (BY VOLUME)

% of global goods loaded/unloaded at developing countries’ sea ports



Source: UNCTAD Review of Maritime Transport 2015

REDUCING CO₂

ACTING ON THE PARIS AGREEMENT



This would mirror the commitments or *Intended Nationally Determined Contributions* (INDCs) which governments have made for their national economies as part of the Paris Agreement, but from which international transport is currently excluded.

In its submission to IMO, ICS has also acknowledged that the Paris Agreement requires all sectors of the global economy to identify when they will peak their absolute emissions.

However, the Paris Agreement also recognises that different sectors of the global economy will need to decarbonise at different speeds. In view of shipping's role in carrying world trade, which is vital for the sustainable development of emerging economies and the eradication of global poverty – as well as the industry's likely continuing dependence on the use of fossil fuels – shipping will probably be one of the last major industries that is able to decarbonise. In the absence of some radical new technology or new low carbon fuel, this is unlikely to occur before the second half of the century.

ICS has also made clear to IMO Member States that international shipping should not be expected to accept the same level of CO₂ reduction commitments as developed economies. The 2015 UNCTAD Review of Maritime Transport has confirmed that the majority of maritime trade now serves developing countries. It is vital that IMO Member States take account of this fact as they develop CO₂ reduction commitments on behalf of international shipping and give further thought to any additional measures.

The IMO MEPC is expected to give full consideration to the ICS proposal to develop an *Intended IMO Determined Contribution* at its next meeting in October 2016. ICS members are now developing ideas on what such an IMO commitment on behalf of the international shipping sector might entail.

In the meantime, the shipping industry is committed to doing everything it can to reduce fuel consumption and thus reduce its CO₂ emissions. Despite the recent fall in bunker prices, fuel is still by far a ship operator's largest cost. Further and dramatic CO₂ reduction therefore remains a matter of enlightened self-interest.



SCF

Safety Comes First

GRAND ANITA

GRAND ANITA

MARKETS IN CRISIS

ASSESSING THE COLLECTIVE INTEREST

2016 MAY PROVE TO BE ONE OF THE MOST CHALLENGING FINANCIAL YEARS IN LIVING MEMORY

Prediction, as they say, is very difficult, especially if it is about the future. But 2016 looks set to be a very difficult year for shipping. The principal concern of ICS is to represent the industry with governments on regulatory matters. However, policy makers may not always fully appreciate the very challenging economic conditions in which shipping companies are operating.

Crisis is a word that can easily be overused in the context of shipping markets which have always been highly cyclical and subject to extreme freight rate volatility. But with the exception of oil tankers (benefitting from the dramatic fall in oil prices since the end of 2014, as governments and traders stockpile cheap crude) most shipping sectors are facing the worst trading conditions seen in living memory, even including the deep shipping recession of the 1980s. Whereas a capesize bulk carrier in 2008 might have enjoyed a day rate of US\$ 250,000, an identical ship of the same age in 2016 might be earning as little as US\$ 5,000, in many cases insufficient to cover operating costs or the interest payments on mortgages.

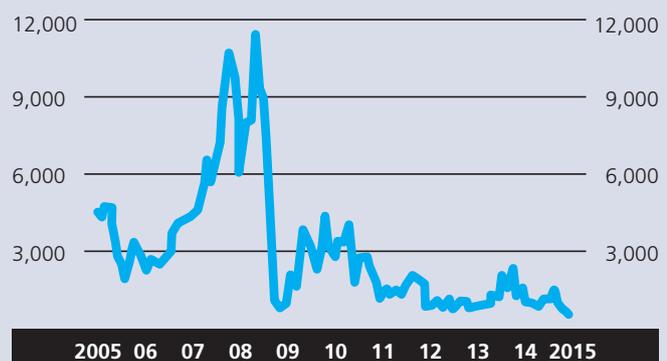
Shipping has never fully recovered from the impact of the 2008 financial crisis. Nevertheless, sluggish growth in OECD economies was partly compensated by the impressive growth in demand for shipping from China and other emerging nations.

But in 2016 the industry is confronted with the double whammy of falling growth in demand for maritime transport



BALTIC DRY INDEX

2005 – 2015

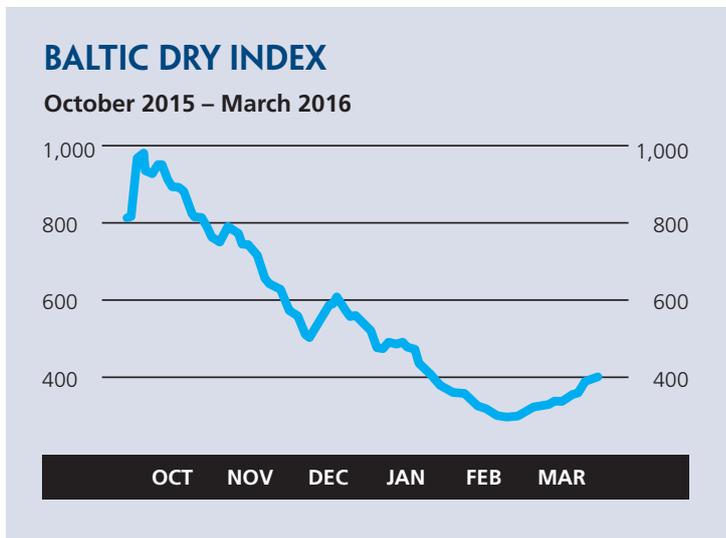




combined with serious over capacity. Put simply, there are just far too many ships – many of them much bigger than ever before – chasing far too few cargoes. The problem is complicated by the understandable reluctance of many lenders to accept the dramatic impact on their balance sheets of uneconomic ships being sent for recycling before their loans have been repaid.

Notwithstanding the serious challenges confronting the industry since the 2008 crisis, and apart from a temporary contraction in 2009, global maritime trade has continued to grow, primarily powered by incredible demand from China. But in recent years there has been a significant fall in the rate of Chinese GDP growth. While this has averaged at around 10% per annum since 1989, projected Chinese growth for 2016 is only about 6.5%.

This is impacting greatly on demand for international shipping. In container trades there was no year on year growth in Chinese port volumes during the first months of 2016, something which is probably unprecedented, while dry bulk trades have been severely affected by the fall in Chinese demand for iron ore and coal. Even intra-Asian trades, which were hardly affected by the events of 2008, are no longer immune from the Chinese slow down, as ships displaced by the delivery of ever larger vessels on intercontinental trades cascade into regional markets. >>>



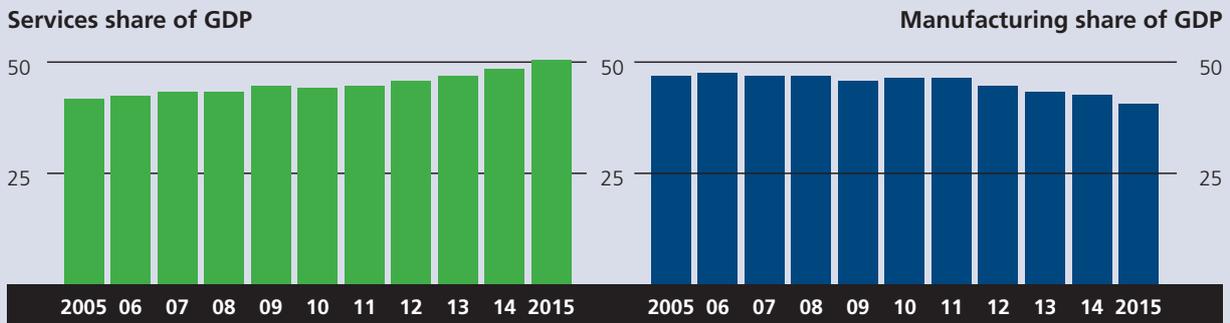
MARKETS IN CRISIS

ASSESSING THE COLLECTIVE INTEREST



SERVICES AS A PROPORTION OF CHINA'S GDP

Service industries in China, which generate less demand for shipping, account for a rising share of the economy



Source: National Bureau of Statistics



2016 looks like being a year of further uncertainty. Although it is possible global demand may recover, there is growing awareness that a major structural change may be taking place within the wider global economy.

In August 2015, the International Monetary Fund (IMF) published a report suggesting that the rapid globalisation that has been experienced since about 1990 may have actually run its course. There has been a slower rate of trade growth since the 2008 crisis compared to the massive growth experienced in the previous 25 years following the end of the Soviet Union and the emergence of China as the world's industrial powerhouse. The suggestion is that this may be long term structural change.

As emerging economies like China increasingly come to resemble OECD economies, a larger proportion of their GDP growth is taken up by services and domestic consumption. For the first time, services now account for the majority of Chinese GDP (although this figure is typically around 75% in most OECD economies). Unlike manufacturing and infrastructure development, this does not generate the same demand for maritime trade. In recent years, the industry has become used to regarding increases in trade as a multiple of global GDP growth. But in the future it is possible that the industry may be speaking in terms of fractions. A structural change in the relationship

between demand for shipping and global economic growth may not be insurmountable so long as the industry can manage capacity. But shipping's recent record in this respect has not been impressive. To restore equilibrium in the market, it is clear that a large number of vessels will need to be recycled before the end of their normal 25 year life.

Early recycling might be good for the collective. But this may not always be in the best interests of many individual shipping companies, especially if their ships are debt free, have been well maintained, and can still be operated efficiently and profitably. Indeed, the position of ICS has always been to oppose the concept of a maximum age for ships since this could act as a disincentive to maintenance of older vessels with implications for safety and pollution prevention.

The current and clear need to recycle a very large number of ships poses something of a dilemma. The shipping industry is an ecosystem, and to make the numbers work, those that order new ships need to be sure that there is a second hand market to which they can sell later on. If ships are routinely scrapped when they are only 15 years old, instead of at around 25 years, this also does little for environmental sustainability. Efforts to co-ordinate early recycling are also likely to face problems with competition regulation, while national state subsidies to encourage recycling risk distorting global markets. State support for ship recycling is also potentially counterproductive if it is conditional on building more unwanted tonnage.



GLOBAL SULPHUR CAP A CRITICAL DECISION

THE ECONOMIC IMPACT OF THE MANDATORY GLOBAL USE OF LOW SULPHUR FUELS WILL BE PROFOUND

In October 2016, the IMO Marine Environment Protection Committee (MEPC) is expected to take a critical decision that will have profound implications for the economics of shipping. This is the decision on whether or not to implement the global cap on the sulphur content of marine fuel on 1 January 2020 or to postpone until 2025 – i.e. the requirement under Annex VI of the MARPOL Convention, adopted in 2009, for all ships trading outside sulphur Emission Control Areas (ECAs) to use fuel with a sulphur content of 0.5% or lower.

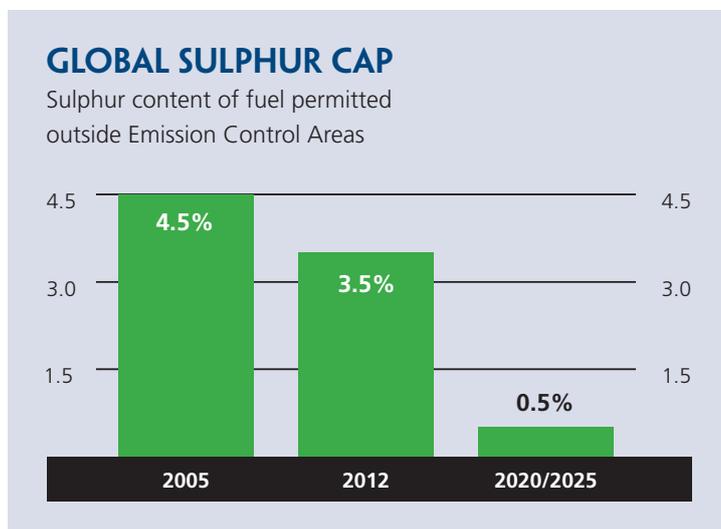
The decision will be highly significant because the cost of compliant low sulphur fuel is likely to be well over 50% more than the cost of residual fuel. Residual fuel is what most ships currently burn outside of the ECAs, which came into force in North America and North West Europe in January 2015, in which fuel with a sulphur content of 0.1% or less must be used. (It is expected that further sulphur ECAs will be established by China before 2020.)

If the global cap is implemented in 2020, and fuel costs stay at the current low levels which have applied since the dramatic fall in oil prices during 2015, a mandatory switch to low sulphur fuel would mean that bunker costs would return to their 2014 peak. But if by 2020, as some predict, oil prices increase to something approaching US\$ 70 a barrel (still well short of the peak in 2014) it has been estimated that the differential

between compliant and residual fuel could spike by as much as US\$ 400 a tonne.

Under the terms of the MARPOL Convention, IMO is obliged to conduct a study into the availability of compliant low sulphur in order to allow Member States to decide whether the global cap should indeed be implemented in 2020. This fuel availability study is now scheduled to be presented to the MEPC in advance of its meeting in October 2016.

In reality the decision taken by IMO is likely to be a political one. Although the cap will apply in the middle of the ocean, where very few people live, it was adopted by IMO Member States in order to reduce risks to human





health and to improve the marine environment (sulphur being a cause of ocean acidification). Even if the supply of compliant fuel is projected to be tight, IMO Member States might nevertheless conclude that it is politically unacceptable to postpone implementation.

The European Union has already agreed that the 0.5% sulphur requirement will apply in 2020 within 200 miles of EU Member States' coasts, regardless of what IMO decides (with EU Member States also having territory in the Atlantic, Pacific and Indian Oceans, around which it is assumed that the EU standard will also apply). In theory, if the IMO global cap was postponed this would create a narrow corridor along the coast of North Africa in which the use of cheaper fuel would still be acceptable, while elsewhere in the Mediterranean it would not, a situation which EU Member States at IMO might find difficult to accept. >>>

GLOBAL SULPHUR CAP

A CRITICAL DECISION



The IMO decision is meant to focus on the availability of compliant fuel, rather than taking account of the purchase price. While it is likely that oil refiners will be unable to supply sufficient quantities of 0.5% fuel produced especially for marine use before 2020, it seems likely that other more expensive fuels, such as 0.1% sulphur distillate, would be available, although this may well have a negative impact on the supply of diesel for shore based industries.

Whatever date is decided by IMO, ship operators and oil refiners will require as much time as possible to prepare for implementation. The oil refining industry will need to take important decisions to ensure that sufficient quantities of compliant fuel will be available. Shipowners will need to take important decisions about whether to invest in alternative compliance mechanisms such as exhaust gas cleaning systems ('scrubbers') or the use of low sulphur fuels such as LNG. The date of implementation of the 0.5% sulphur cap may also affect decisions on whether or not ships will be sent for early recycling.

In view of the economic impact that the implementation date of the 0.5% sulphur cap will have on international shipping, and the decisions that need to be taken by oil refiners and shipping companies worldwide, ICS and Intertanko made a submission to the meeting of the MEPC in April 2016. This requested

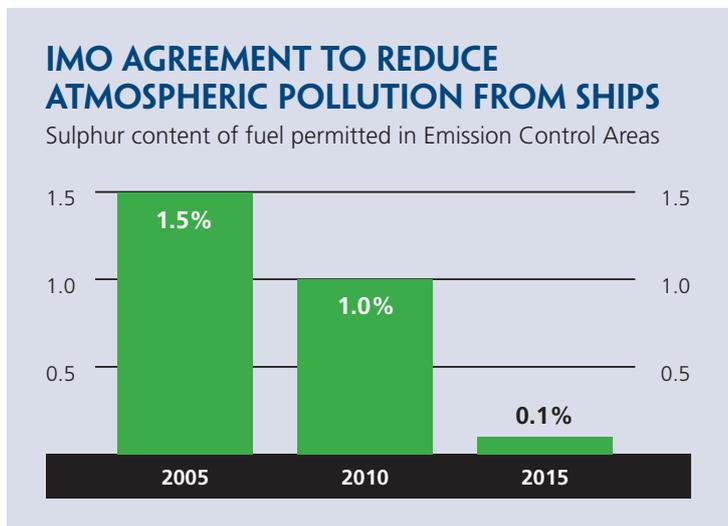




that IMO should take a clear decision about whether or not implementation will take place in 2020, and that this decision should be made in October 2016.

In the event that 2020 is the implementation date for the global cap, it will be vital for IMO Member States to start addressing issues associated with compliance and enforcement in order to ensure fair competition and the maintenance of a level playing field.

Contrary to the fears of some, experience with the initial implementation of the sulphur ECAs since January 2015 suggests that there is little evidence of deliberate non-compliance by ship operators (although occasionally there have been some technical problems associated with the fuel switchover or the specification of fuels provided by some bunker suppliers). But the sound implementation of a worldwide sulphur cap will present a much more complex challenge than the ECA requirements. In view of the potential for serious market distortion it will be vital for IMO to begin addressing this quickly.



BALLAST CONVENTION

A PERFECT STORM

THE IMO BALLAST CONVENTION IS EXPECTED TO ENTER INTO FORCE IN 2017

The IMO Ballast Water Management (BWM) Convention is intended to address the problem of unwanted marine organisms having damaging impacts on local ecosystems through their unwitting transportation in ships' ballast tanks. But the Convention is now proving to be one of the most complex and controversial pieces of technical regulation ever agreed by IMO Member States.

The Convention was adopted under huge political pressure in 2004, especially from the United States, when the technology required for shipowners to comply did not yet exist outside of a laboratory, and the huge costs of installing unproven ballast water treatment systems across the entire world fleet (currently estimated at about US\$ 100 billion) were entirely unknown.

Like the story about the boy who cried wolf, the shipping industry has been told several times that the entry into force of the Ballast Water Convention is 'imminent'. This included a false alarm during the IMO Assembly, in November 2015, when it was prematurely announced that the required 35% of world tonnage threshold had been reached following ratification by Indonesia. But with the ratification of Belgium in March 2016 (bringing the total tonnage covered, at 34.82%, to within a slither of the threshold) it is currently assumed that the Convention will almost certainly cross the line during 2016 and enter into force during 2017.





The Convention's entry into force will present ship operators with a serious challenge because of the expected lack of ship yard capacity needed to retrofit the expensive new treatment equipment (over a five year period) on around 70,000 ships. The situation has been made worse by recent decisions taken by the United States which, ironically, is not a Party to the BWM Convention. The U.S. has unilaterally adopted its own ballast water regulations with which ships trading to the U.S. must comply.

The main reason why governments have been so reluctant to ratify the Convention has been due to a lack of confidence in the IMO type-approval process and whether, among many other technical questions, the treatment equipment approved in line with current IMO Guidelines would actually work to the satisfaction of Port State Control authorities. Most shipowners have understandably been unwilling to invest millions of dollars per ship until there is certainty that the equipment installed will not have to be completely replaced within a matter of years. >>>

BALLAST CONVENTION

A PERFECT STORM



Following a major industry campaign led by ICS, IMO has agreed to a 'road map' in order to address these concerns. This included an MEPC Resolution, adopted in 2014, to serve as a 'gentlemen's agreement' by IMO Member States, outlining various actions that will be taken by governments with respect to the Convention's implementation as soon as it enters into force. Central to this will be the completion of the revision of the G8 type-approval guidelines, scheduled for adoption by IMO in October 2016, plus an agreement that shipowners that have already installed type-approved equipment in accordance with the original IMO Guidelines will not be penalised (although the United States has unhelpfully reserved its position on this part of the package).

The eventual entry into force of the BWM Convention, after so many years of delay, should at least give shipowners some of the certainty needed to make important decisions about whether to refit the new mandatory treatment equipment or, because of the prohibitive cost, send older ships for early recycling. But the entry into force of the new IMO regime will not resolve the extreme difficulties that exist for shipowners trading to the United States. There is still great uncertainty with respect to the more stringent U.S. approval regime for treatment equipment, which started being enforced in January 2014.

Throughout 2016, ICS will be working with IMO Member States in order to impress upon the United States the importance of coming to a pragmatic solution. Otherwise, once the IMO Convention finally enters into force, the shipping industry will be faced with chaos.



PROBLEMS WITH THE U.S. BALLAST WATER REGIME

The United States regulations require all ships that discharge ballast in U.S. waters to use a treatment system approved by the Coast Guard (USCG). However, because no systems have yet been approved, ships already needing to comply with the U.S. regulations have either been granted extensions for fitting the required treatment systems or else permitted to install a USCG accepted Alternate Management System (AMS), in practice a system type-approved in accordance with the original IMO Guidelines.

An AMS will only be accepted for operation for five years, after which time a fully USCG approved system must be installed. But the USCG does not guarantee that an AMS will be subsequently granted full approval. Hence shipowners that may have installed an AMS in good faith, at a cost of between US\$ 1-5 million per ship, might then have to replace the system completely after only five years. This is a particular concern for operators that have installed ultra-violet (UV) systems.

The conflicting IMO and U.S. requirements, when combined with the complete lack of systems fully approved by the USCG, could produce an impossible situation in which some ships might not be able to operate in U.S. waters after the IMO Convention enters into force.

This situation has been compounded by USCG announcing, at the end of 2015, that it will not accept the methodology used by other IMO Member States to approve UV treatment systems when assessing the number of viable organisms in treated ballast water. This is a serious problem given that almost half of the treatment systems that have so far been fitted or ordered by shipowners deploy UV technology. The U.S. continues to maintain its position that it will only accept organisms as being non-viable if they are dead. Organisms that are living, even if unable to reproduce, are considered by the U.S. to be viable.



STCW 2010

THE FINAL PUSH

SEAFARERS NEED TO BE CERTIFICATED IN ACCORDANCE WITH THE REVISED IMO TRAINING REGIME BY 2017

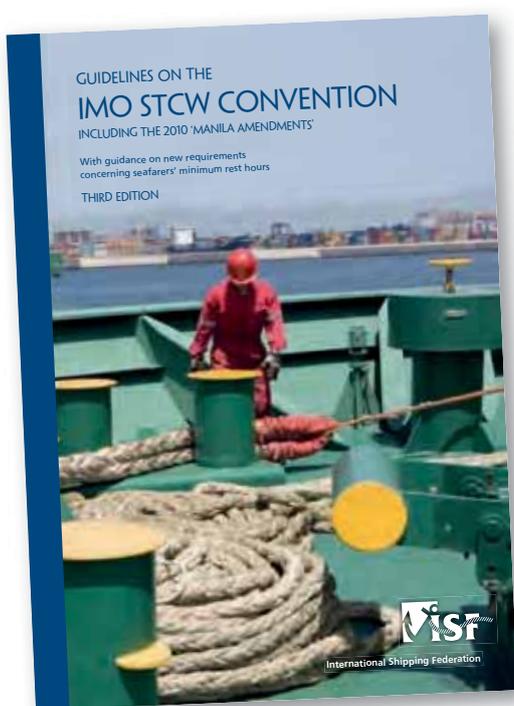
ICS has been closely associated with the global regime for seafarers' competence standards set by the IMO Convention on Standards of Training, Certification and Watchkeeping (STCW), helping to draft the radical amendments which were adopted 20 years ago. The statistics (see opposite) appear to demonstrate that STCW 95 (together with the parallel introduction of the ISM Code) has made a significant contribution to the reduction in the number of maritime casualties.

The transitional period for the 2010 amendments to the Convention (STCW 2010) comes to an end on 1 January 2017. To prevent last minute certification logjams and potential difficulties during Port State Control inspections, ICS is encouraging maritime employers to liaise closely with their maritime administration.

With less than a year to go before the end of this major transition, ICS and its member national associations are urging shipping companies to check that those maritime administrations responsible for issuing their seafarers' STCW certification are fully prepared, and that arrangements have been made to ensure that any necessary updating training can be undertaken by the seafarers they employ.

The 2010 'Manila Amendments' to STCW entered into force in 2012, with different requirements being phased-in at various dates before 1 January 2017. The provisions being phased-in by maritime administrations include new and updated seafarer competences, as well as changes to some seafarer grades and certification requirements. Most maritime administrations have determined that seafarers holding national certificates of competence will need to complete mandatory updating courses in order to be certified beyond 31 December 2016.

In view of the 1 January 2017 implementation date, maritime administrations should, where necessary, have already approved any special updating courses for seafarers, as well as making any necessary arrangements for the issue and revalidation of seafarers' certificates in accordance with the 2010 amendments. In their capacity as flag states, administrations also need to be ready to process a potentially large number of applications for flag state endorsements towards the end of 2016.



ICS (under the banner of ISF) produces guidance on compliance with STCW 2010



In order to ensure that any applications can be processed by certification issuing administrations and flag states well ahead of January 2017, ICS has recommended that ship operators should be taking all necessary steps now to facilitate attendance by their seafarers at relevant training courses. Shipping companies should take early action to ensure seafarers' certificates are renewed or revalidated as may be required before the end of the transition period, and to plan for their seafarers to attend any necessary courses. >>>

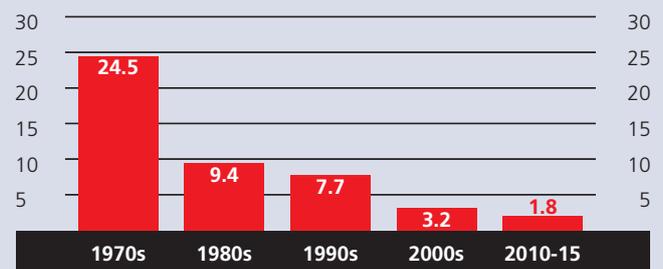
MARITIME CASUALTIES



Source: Lloyd's List Intelligence Casualty Statistics, Analysis: AGCS

REDUCTION IN MAJOR OIL SPILLS

Average number of major oil spills per year (over 700 tonnes)



Source: ITOPF

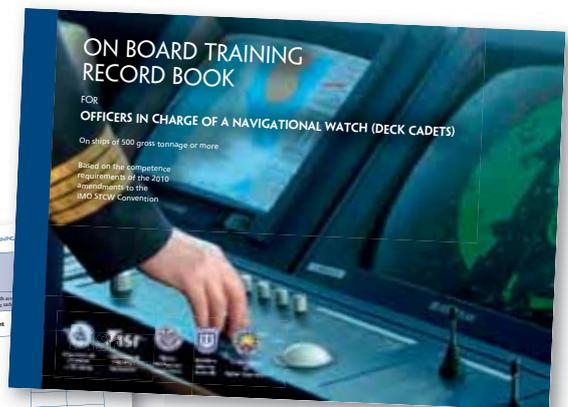
STCW 2010

THE FINAL PUSH



As the industry approaches 2017, employers will be reliant on the availability of courses from training providers and their timely approval by maritime administrations. This should be a simple matter of logistics. However, to avoid non-compliance with the new STCW regime – or disruption to the operation of the world fleet due to a lack of certified seafarers – administrations, manning agencies, training providers and ship operators will all need to work together.

Meanwhile, ICS continues to represent maritime employers on training issues at IMO. As reported separately in this Annual Review, in May 2016, ICS and BIMCO published their latest five year update on the global supply and demand for seafarers.



Ref No.	Training	Criteria for Evaluation
1.1	Competence: Plan and establish a passage and determine position	
1.2	Recognise compass, magnetic and other non-magnetic deviations to magnetic compass and correct	
	Task/Study	Task Completed Supervising Officer/ Instructor/ Participant
1	Perform tach-out duties and report objects to degrees or points	
2	Identify aids to navigation including lightouses, beacons and buoys	
3	Identify star compasslights and stars of first magnitude and learn to use the star and star finder	
4	Practice compass bearings and true and false	
5	Demonstrate a knowledge of the MPA system of buoyage	
1.3	Use accurate position and search for the ship's position by celestial and terrestrial observations	
1	Use azimuth circle to fix ship's position	
2	Use a sextant and demonstrate how to identify and name stars	
3	Practice vertical and horizontal sextant angles	
4	Make noon calculations e.g. distance, average speed, ground water speed, set and drift and ETA	
1.4	State ship's position by dead reckoning	
1	Estimate and make allowance for leeway and tidal currents	
2	Practice tidal calculations	

The Philippines has approved a special Filipino edition of the ICS/ISF On Board Training Record Books for officer and rating trainees seeking to qualify under STCW 2010





THE YEAR IN REVIEW

MIGRANT RESCUE AT SEA

2015 will be remembered as the year in which the humanitarian crisis involving over a million refugees and migrants seeking to enter the European Union began to spiral out of control. Merchant shipping has been at the forefront of the crisis as hundreds of thousands of migrants have attempted the dangerous crossing from North Africa in unseaworthy boats, largely facilitated by criminal gangs. Tragically, as many as 5,000 migrants are so far thought to have perished in the Mediterranean.

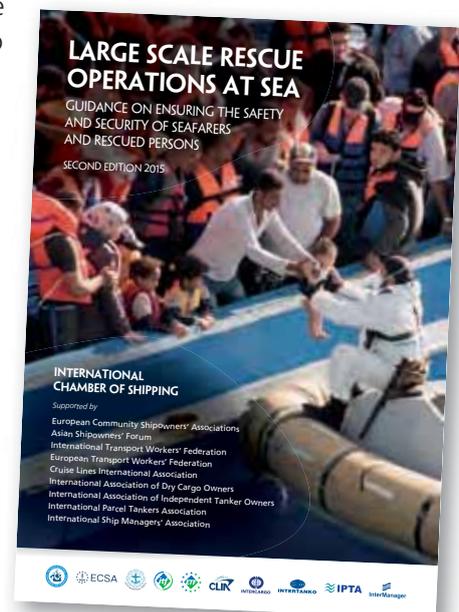
Since the crisis began to escalate in 2014, merchant ships have participated in hundreds of operations and rescued over 50,000 people. Many have been rescued in very difficult, large scale operations involving several hundred people at a time. The merchant seafarers involved are civilians, many of whom have been severely affected by the desperate situations they have had to face.

According to the United Nations High Commissioner for Refugees (UNHCR), initial indications in 2016 were that flows of large numbers of migrants were focused on Eastern Mediterranean routes, especially to Greece via Turkey, rather than from North Africa. The number of rescue operations in which commercial ships have recently been involved has also decreased due to the increase in resources now being provided by EU Member States and the EU border agency, FRONTEX, through its Triton and Poseidon Sea operations. These Search and Rescue (SAR) operations were significantly

expanded following an emergency Summit of EU leaders, in April 2015, in response to the shocking loss of over 800 lives off the coast of Libya when a fishing boat carrying migrants capsized. However, large numbers of merchant ships are still being routinely diverted in order to assist with rescue operations. The jury is still out on whether governments are doing enough.

The situation remains very fluid. The EU decision, in March 2016, to return migrants in Greece to Turkey, means that the North African route has become attractive again. In March 2016, there was already a threefold increase in the numbers setting off from Libya compared to the same period a year before. Until the root causes are resolved (war in the Middle East and instability in many parts of Africa) migrants can be expected to attempt to enter Europe by sea in ever larger numbers.

ICS has been careful to avoid becoming involved in the general political debate about the migrant crisis. That said, while shipping companies will always meet their humanitarian and legal responsibilities to come to the rescue of anyone in distress at sea, the





obligations contained in the IMO SOLAS and SAR Conventions were never intended to address this unprecedented situation. In co-operation with ECSA, ICS has therefore continued to argue that EU Member States must provide adequate SAR resources. Some governments appear to be taking the current level of assistance provided

by shipping companies for granted, with the situation becoming 'institutionalised'.

To their credit, governments such as Italy and Greece have consistently permitted prompt and predictable disembarkation of rescued people from merchant ships. But the crisis now seems to be taking an ever more political direction. There has recently been much tension due to migrants crossing internal European borders, and some have now been closed, with the EU having so far failed to take any meaningful action to curtail the activities of people smugglers in Libya, Turkey and elsewhere. Senior EU politicians have been making statements to the effect that rescued migrants should not be permitted to enter Europe in the first place. The real fear is that shipping, at some point in the near future, might face the prospect of prompt disembarkation of rescued persons

being refused, as attitudes in Europe towards immigration harden.

ICS remains engaged with various agencies at the highest political level. In January 2016, the ICS Secretary General met with the UN Secretary-General's Special Representative on international migrants, while the previous IMO Secretary-General forwarded a letter from ICS to the United Nations Secretary-General, proposing a UN-led humanitarian assistance area in the central Mediterranean to relieve pressure on commercial shipping. At the operational level, ICS continues to liaise with *inter alia* IMO, UNHCR, the International Organization for Migration (IOM), as well as relevant EU agencies and the Italian Coast Guard.

In July 2015, in co-operation with a wide coalition of industry organisations and seafarers' unions, ICS published an updated version of its Guidelines on Large Scale Rescue Operations at Sea, which have been well received among ship operators, as well as UN agencies such as IMO and UNHCR. While addressing the continuing crisis in the Mediterranean, the Guidelines are also applicable to other regions where ships may have to assist with rescuing large numbers of migrants or refugees, including South East Asia.

The fact that these industry Guidelines are necessary does not mean that the continuing reliance on merchant ships to perform a role which is the proper responsibility of governments is either acceptable or sustainable. ICS will continue to pressure governments to do more to meet their obligations for as long as the crisis continues, and will make no apology for doing so.



COLLECTING CO₂ DATA

In October 2016, IMO is expected to adopt a mandatory global system of data collection on CO₂ emissions from international shipping, which was more or less finalised by the IMO Marine Environment Protection Committee (MEPC) at its meeting in April.

ICS, BIMCO and Intercargo made a joint submission to the MEPC in April 2016 suggesting that the system should be adopted as soon as possible so that ships can start submitting the required data via their flag states by 2018. The industry is keen for IMO Member States to demonstrate that they are serious about developing further CO₂ reduction measures following the UNFCCC Paris Agreement, and to pre-empt the real danger of regional measures being implemented by the European Union at variance to the global system which IMO now seems ready to adopt.

In the interest of measuring the progress that shipping is making to reduce its CO₂ emissions, ICS fully supports this IMO initiative, and the latest draft text is an acceptable compromise between those primarily interested in having reliable information about fuel consumption and CO₂ emissions, and those that wish to collect additional information.

ICS support has been given with the understanding that the mechanism should be simple for ships to administer and primarily be based on fuel consumption. ICS (and many IMO Member States) remain strongly opposed to the use of such a mechanism as a means for eventually establishing a mandatory system of operational efficiency indexing for application to individual ships, the ultimate purpose of which would be to penalise ships on the basis of a theoretical and arbitrary operational rating. This is because of the potential inaccuracies of such a metric and thus the significant danger of serious market distortion.

For example, the fuel consumed by two identical ships during two similar voyages will vary considerably due to factors such as currents, ocean conditions and weather.

Similarly, fuel consumed by individual ships, particularly those in tramp sectors, may vary considerably from one year to the next, being dependent on trading patterns and the nature of charters over which the ship operator has little control.

In the interests of maintaining the primacy of IMO, ICS has argued that the question of additional CO₂ reduction measures should be left open until a mandatory CO₂ emissions reporting system has been agreed. It is with this broad understanding that IMO has since pursued its work.

ICS is therefore concerned by the European Union's decision to pre-empt the IMO negotiations by unilaterally adopting a regional Regulation on the Monitoring, Reporting and Verification (MRV) of individual ship emissions in advance of IMO completing its work on data collection. The EU Regulation will also apply to non-EU flag ships trading to Europe, with the apparent intention of subsequently developing this into a mandatory operational efficiency indexing system, i.e. a Market Based Measure by stealth.

The EU Regulation was adopted during 2015, and includes controversial provisions for the submission of data by ships on so called 'transport work' using different metrics to those being discussed at IMO, in addition to data on fuel consumption. Moreover, discussions in which ICS has been participating, within the European Sustainable Shipping Forum, suggest that the verification and certification method being developed will be overly complex and unfit for purpose. EU climate officials seemingly wish to ignore the tried and tested processes for statutory certification used in international shipping, instead proposing an unjustifiably large administrative burden for ship operators.

Of even greater concern is that commercially sensitive information will be published annually by the European Commission, along with ship name and company identifiers. This is with the intention of facilitating comparison

of the supposed operational efficiency of individual ships – which is very likely to be inaccurate and very different to the actual fuel efficiency or CO₂ emitted in real life. In short, the EU Regulation contains many of the elements which many IMO Member States have indicated they wish to reject from the global system.

The EU Regulation will not be fully implemented until 2018 and contains text to the effect that the required data which shipping will have to provide could be amended to reflect the final outcome of any agreement at IMO. In practice, however, there is no guarantee that the EU will be willing to fully realign its rules with the agreed international consensus.

In the event that the EU refuses to align its unilateral regional Regulation with what is finally agreed by IMO, it remains to be seen whether other significant maritime nations will agree to their ships being compelled to send data to the European Commission for publication. This might provoke a hostile response, as occurred when the EU tried to apply a unilateral Emissions Trading Scheme to non-EU aviation.

As the IMO negotiations continue in 2016, it will be vital for EU Member States to consider and explain how the new EU Regulation can be implemented in a way which is compatible with what is about to be agreed by IMO for global application, in the interest of avoiding the unhelpful complication of a separate regional regime.



SHIP RECYCLING – NEW TRANSITIONAL MEASURES

Ship recycling is undoubtedly a ‘green’ industry and employs a large workforce in developing countries, where the majority of recycling facilities are located. Almost nothing is wasted when a ship that has reached the end of its working life is recycled. But while the principles of ship recycling may be sound, the working practices and environmental standards in some recycling yards can still fall short of internationally acceptable standards.

ICS fully accepts the responsibility of the shipping industry to promote the safe and environmentally sustainable disposal of ships throughout the world’s ship recycling yards. ICS is therefore committed to ensuring that governments ratify the IMO Hong Kong Convention on ship recycling as soon as possible.

Six years after its adoption, it is disappointing that the Hong Kong Convention has still only been ratified by a handful of IMO Member States. Governments need to make this a far more urgent priority if they are serious about improving conditions in ship recycling yards on a global basis.

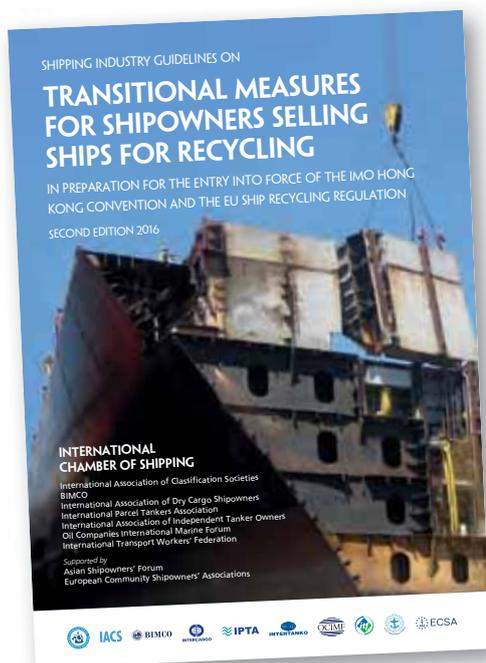
In January 2016, with the support of a wide coalition of international shipping industry organisations, ICS published some

new and expanded Transitional Measures for Shipowners Selling Ships for Recycling. Their purpose is to allow shipowners to adhere to the Hong Kong Convention’s requirements, as far as practicably possible, in advance of the full implementation of a legally binding global regime.

The shipping industry’s Transitional Measures set out detailed advice on the preparation and maintenance of inventories of hazardous materials as required by the IMO Convention, and by a separate new EU Regulation which has already entered into force and which also has implications for non-EU flag ships calling at EU ports. The Guidelines also address measures which shipping companies are strongly recommended to take now when selling end of life ships for recycling.

As well as serving as a sign of good faith by the shipping industry prior to the entry into force of the IMO regime, these Transitional Measures should help companies avoid falling foul of the separate EU ship recycling regime which started to take effect in 2016. An important aspect of the EU Regulation will be the establishment of an EU List of approved ship recycling yards which EU shipowners will be required to use when disposing of redundant ships.

A number of yards in India have made dramatic efforts to improve conditions, several gaining certification from classification societies confirming that they comply with Hong Kong Convention standards. It is important that such efforts are acknowledged by the European Commission as it establishes the first EU List during 2016. While progress is slowly being made to encourage nations such as India towards ratification, there is a danger that the EU Regulation could undermine this process if yards which have demonstrated compliance with the Hong Kong Convention do not end up on the official list of approved yards that can be used by EU shipowners. The European Commission needs to demonstrate that the EU List exists to promote raising standards worldwide, rather than being used





as a means to force ships to be recycled in EU yards, where sufficient recycling capacity does not in any case exist, with little realistic scope for expansion.

With small exceptions regarding the inventories of hazardous materials that must be carried on board ships trading into EU ports, the EU Regulation is meant to be consistent with the requirements of the IMO Convention, and is intended to encourage its ratification by EU Member States.

However, ICS is deeply concerned by additional EU proposals to establish a mandatory ship recycling fund. These propose that all ships calling at EU ports would be required to contribute to an EU fund, with

money only being recovered at the end of the ship's life (many years later when it will probably have a different owner) on condition that it is sent for recycling at a yard that has been approved by the EU.

As well as being unduly complex, such a unilateral measure, especially if applied to non-EU ships, is likely to be seen by the EU's trading partners as an anti-competitive interference with the conduct of international shipping. It is hard to believe that such a draconian measure will be taken forward. But it underlines the compelling need for governments to ratify the Hong Kong Convention as soon as possible so that a mandatory global regime can enter into force.

PREVENTING PIRACY

Piracy and armed robbery continue to be a major threat to shipping, with the ICC International Maritime Bureau recording some 250 incidents during 2015, many of them serious, with many others probably going unrecorded. However, the focus of recent attention has shifted away from the Indian Ocean to West Africa, while the majority of incidents (though mostly lower level) are now being reported in South East Asia.

Most of the incidents in West Africa are occurring off the coast of Nigeria, as well as Benin, Ghana, and Togo. Many have been motivated by theft (including entire oil cargoes) and some have been characterised by disturbingly high levels of violence. Cases of kidnapping for ransom are becoming more common, with at least 20 seafarers taken hostage in West Africa during 2015, and 5 more taken hostage during a single attack in March 2016.

Unlike Somalia, the nations in the Gulf of Guinea region have functioning governments and security forces, although the level of protection so far provided has

been inadequate. But most of the attacks occur within territorial waters. There is therefore little prospect of foreign navies becoming involved, even if the resources were available. However, the Maritime Trade Information Sharing Centre for the Gulf of Guinea, located in Ghana, is now providing a focal point for information on countering maritime crime in the region. Ship operators are also encouraged to take account of industry Guidelines (published jointly by ICS, BIMCO, Intercargo and Intertanko), providing comprehensive advice on avoiding and deterring armed attacks off West Africa.

Half of the incidents reported in South East Asia last year involved ships that were underway, presenting a particular danger to crew and maritime safety. However, the number of small tankers that have been hijacked (in order to steal the cargo) has decreased, with Indonesian and Malaysian authorities reportedly taking action against the criminal gangs involved. However, the challenge of policing the thousands of islands in the region from which the robbers operate is a major challenge.

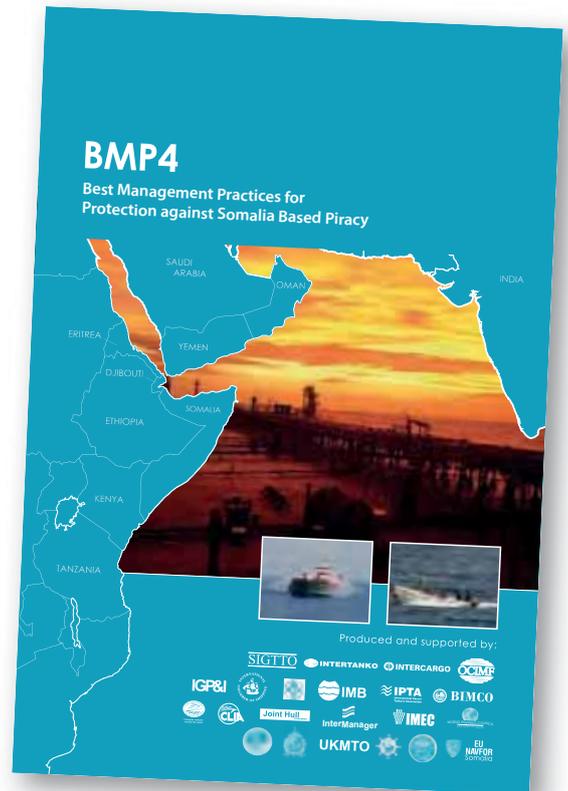




For the second year running, no successful attacks by Somali pirates were reported in 2015, but their activity is still being observed in the Indian Ocean (with a tanker being fired upon in April 2016) possibly encouraged by the resurgence of illegal foreign fishing.

The reduction in Somali attacks has been attributed to the combined success of self-protective measures taken by shipping companies including the industry Best Management Practices ('BMP4'), the continued use of private maritime security companies, and the vital protection provided by military assets in the region. But the future maintenance of current levels of military protection against piracy may become problematic due to competing pressures on navies as a result of the political situation in the Middle East and elsewhere.

From 1 December 2015, the extent of the High Risk Area (HRA) for piracy in the Indian Ocean contained in BMP4 was reduced by about 55%. This followed extensive consultation with governments via the (UN) Contact Group on Piracy off the Coast of Somalia, as well as



military forces including EU NAVFOR and NATO. Under pressure from ICS, the London insurance market Joint War Committee (JWC) has subsequently reduced its listed area in the region for insurance purposes, although some discrepancies remain between its boundaries and the industry defined HRA.

However, the official industry advice is that the risk of attack by Somali pirates continues, and shipping companies should still maintain full compliance with BMP4 and be vigilant in reporting incidents.

Meanwhile, ICS and BIMCO with Intercargo, Intertanko and OCIMF are working on a draft set of global Best Management Practices. The new document is being produced in liaison with the military and regional Information Sharing Centres. The intention is to replace BMP4 and provide generic counter piracy guidance to ship Masters with annexes that address specific regional issues, including reporting and response. Publication of these global BMP is expected during 2016.

SHIP CONSTRUCTION FILES

ICS continues to be closely involved in ship construction issues. In October 2015, in Seoul, the Chairman led the ICS delegation to the latest Tripartite Meeting of shipyard, classification society and shipowner representatives.

A milestone has been reached in the development of the IMO Goal Based Standards (GBS) for bulk carriers and oil tankers which come into effect for ships contracted for construction from July 2016. Meanwhile, after five years of intensive work, 2016 saw the completion of detailed inter-industry guidance on the practical implementation and provision of the Ship Construction File (SCF) as required by the GBS. The purpose of the SCF is to provide information related to the structural design and construction of a ship to those that need it, to help ensure safe operation throughout the vessel's working life.

The ICS Construction & Equipment Sub-Committee has been an active participant in this cross industry work to develop SCF guidance, focusing on the need to ensure that Ship Construction Files are provided to the ship in a manner that will ensure the availability of all relevant information in a form that is optimised for practical operational use.

The SCF was developed by a Tripartite working group comprising shipowner, shipbuilder and classification society representatives. Guidance is provided in the form of an Industry Standard setting out general principles on the need for transparent provision of the required information while taking account of the legitimate concerns of shipyards about the protection of technically and commercially sensitive information.

This guidance is intended to facilitate agreement between the owner and shipyard on procedures for compliance being reached for each ship. It is anticipated that the arrangements for specific ships will reflect the overall framework provided by an individual company's safety management systems.

The objective of the SCF guidance is to promote common understanding of the issues involved. This should facilitate agreement on procedures for achieving compliance with the IMO requirements on individual projects, while ensuring that such guidance cannot be incorrectly interpreted as providing an alternative to full compliance with relevant IMO requirements.

An important feature of the SCF guidance is agreement on the development of so called archive centres that will securely hold a full copy of the SCF so that all technical information required for the structural safety of the ship will remain available throughout its life to future owners, classification societies and relevant national authorities.

In addition to the information that is readily available on board the ship, the archive centre will hold secure copies of more sensitive information, such as the master lines plan and additional detailed information from the shipyard on design calculations that are not needed for general operational use but can be accessed, as appropriate, if needed for a specific purpose.

It is anticipated that the current interim version of this industry guidance will be further clarified and refined over the next two years as experience is gained in its application.





ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEMS

ICS supports the carriage and use of Electronic Chart Display and Information Systems (ECDIS) for safe navigation. However, it is apparent that further work is needed before ECDIS is fully accepted as an effective alternative to paper charts. For many companies and their bridge teams, totally paperless navigation is still some way off and continues to be problematic.

The phase-in schedule for the mandatory IMO ECDIS carriage requirement will come to an end in July 2018. But, while the theoretical benefits over paper alternatives for passage planning and monitoring are difficult to challenge, for the moment the reality may be different. In 2015, ICS hosted an ECDIS Forum in order to collate views about the system from users, manufacturers and training organisations. This confirmed that the experience of companies and watchkeepers varies widely, and that the reception which ECDIS has so far received has not always been resoundingly positive.

A particular challenge cited by many users is the complexity and usability of ECDIS. Efforts are underway at IMO to attempt to address this, including consideration of proposals for the development of S-Mode (Standard Mode). However, ICS is cautious about pursuing standardisation of an independent mode only. Bridge Teams should have access to equipment which is designed using human centred design principles, allowing seamless and straightforward use of all available functions. Restricting usability to a particular mode of operation could undermine the potential benefits of innovation and of proprietary functions that enhance safety.

Over-reliance on ECDIS for safe navigation has been highlighted in a number of accident investigations, as well as the new edition of the ICS Bridge Procedures Guide which was published in February 2016. There is still work to be done on ensuring that bridge teams make appropriate use of electronic equipment to maintain their situational awareness. The

safety of the ship is compromised by over-reliance on a single system, no matter how effective that system might be. But when used correctly and in conjunction with all other available information sources, ECDIS can be a powerful tool in support of safe and efficient ship operations.

The number of ECDIS systems available also represents a challenge for bridge teams, particularly with respect to training and familiarisation. The requirements for generic training and familiarisation under the STCW Convention and the ISM Code continue to cause some confusion within the industry, and the use of non-mandatory type-specific training is growing. ICS is therefore monitoring developments in this area in order to ensure that mandatory training remains fit for purpose.

In July 2015, the IMO Maritime Safety Committee consolidated seven ECDIS related circulars into a single compendium, ECDIS Guidance for Good Practice. This includes a section on anomalies that have been identified using the International Hydrographic Organization (IHO) ECDIS/ENC Data Presentation and Performance Check for Ships. Many of these anomalies have been addressed in the new editions of IHO ECDIS standards which were implemented in September 2015. ICS welcomes this work, and continues to encourage monitoring of anomalies by companies and bridge teams, and the updating of ECDIS software in response.

ECDIS still has the potential to enhance the efficiency of passage planning and monitoring. But it is essential that ICS, manufacturers and international organisations work closely together to ensure that ECDIS is able to deliver on its promise. ECDIS is an important step towards increasing automation and the integration of functions on board ship. It is therefore important that the industry, in conjunction with manufacturers, continues to strive to deliver improvements.

E-NAVIGATION

The goal of e-Navigation is to develop a strategic vision for the integration (where appropriate and justified) of existing and future navigational tools, in particular electronic tools, in an all-embracing system that will contribute to enhanced navigational safety. For over 10 years, ICS has participated in the development of the concept since its inception at IMO, but there is growing concern that it has yet to deliver clear benefits for the shipping industry.

In June 2015, the IMO Maritime Safety Committee considered proposals, co-sponsored by ICS, for additional outputs to support e-Navigation, five of which were agreed while another on harmonising maritime service portfolios (MSPs) will be reconsidered in 2016. Priority is being given by IMO to ensuring that performance standards for integrated navigation systems, and guidelines on ship reporting mechanisms, are updated to reflect the opportunities provided by e-Navigation.

ICS is also engaged with the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and its work on MSPs and supporting systems, as well as the International Hydrographic Organization's (IHO) work on its S-100 standard (dealing with geographic standards for hydrographic and maritime use).

Meanwhile, 2015 saw a change in focus for the EU's multi-million euro Monalisa 2.0 project on Sea Traffic Management (STM) and Collaborative Port Decision Making. ICS understands the potential benefits of the STM Validation Project but questions whether shore based co-ordination of international shipping can improve upon the levels of safety and efficiency delivered by professional bridge teams. The outcome of the STM Validation Project is awaited with interest.

ICS is also involved in discussions that started at IMO in 2015 about a 'Maritime Cloud'. However, ICS remains sceptical about the justification for this work. While cloud based computing solutions can certainly assist

shipping companies to enhance the efficiency of their operations and manage the costs of IT infrastructure, the case for a federated, single Maritime Cloud is unconvincing. It has been further undermined by the absence of detailed consideration of alternative technologies within the ongoing IMO Review of the Global Maritime Distress and Safety System (GMDSS).

ICS continues to engage with e-Navigation and related projects because of the potential opportunities to improve the efficiency of ship operations and enhance safety. However, the industry needs to see some tangible outcomes. In this respect ICS will continue to push for e-Navigation to support further automation of pre-arrival reporting to relieve the burden on Masters resulting from ineffective implementation of single windows, notably in Europe. It might not be the whole solution, but e-Navigation should in theory be able to provide mechanisms to help address aspects of this growing area of concern.





CONTAINER WEIGHING

The primary responsibility for the safe transport of containers by sea rests with containership operators. However, there are many other parties in the transport chain concerned with the safe movement of containers including those shippers from whom the cargo originates. A particular concern is the possibility that shippers may sometimes overload containers and declare incorrect cargo weights, which can present a serious risk to the safety of ships and the lives of their crews.

In July 2016, new SOLAS requirements for mandatory container weighing will enter into force following agreement at IMO in 2014. These require shippers to provide a verified gross weight for containers as a condition for their cargo being accepted for loading on board ship. The amendments were adopted by IMO Member States following a long debate lasting several years, initiated at the request of joint submissions made by ICS and the World Shipping Council.

The new SOLAS requirements allow shippers two methods to verify the gross container weight, either by weighing the loaded unit or by calculating the final weight by adding the weight of the packed cargo, dunnage and packing plus the container unit itself. Where a verified gross weight is not provided, SOLAS permits the terminal or the Master of the ship to refuse to load the container.

The jury is still out on whether shippers, freight forwarders,

terminals and maritime administrations will have policies and procedures in place to fulfil the SOLAS requirements by the July implementation date, and statements by some shipper organisations seem to indicate that there are varying levels of preparedness.

In early 2016, the U.S. Coast Guard suggested that it did not have any responsibility to enforce the new requirement, regarding container weighing as a commercial matter rather than a safety issue, a position which contradicts that taken by the United States throughout the development of the SOLAS amendments.

Concerns also remain as to the effect that different nationally accepted tolerances for the accuracy of weighing equipment might have on the verified weights and the implications for stability and safety of ships after loading.

Despite these uncertainties, ICS remains firmly committed to ensuring that containers are only loaded on board ship if their weights have been accurately verified. Throughout 2016, ICS will co-operate with other industry partners, not least the World Shipping Council, to monitor implementation worldwide.



PLACES OF REFUGE FOR SHIPS IN DISTRESS

Following a spate of high profile cases in recent years, where ships in distress have been refused a place of refuge due to concerns about pollution, ICS has been focused on promoting the need for prompt and proper implementation by coastal states of existing international recommendations on the treatment of stricken vessels.

Places of refuge are a sensitive issue for coastal states, and can have political implications for governments given that the risk of pollution cannot be discounted completely. However, failure to offer a suitable safe haven is likely to prevent a successful salvage intervention, allowing a casualty's condition to worsen, potentially leading to a major pollution incident (for example if the vessel breaks up) that might otherwise have been prevented. Such pollution could affect a far wider geographical area than would have been the case had a place of refuge been provided.

IMO Guidelines on Places of Refuge for Ships in Need of Assistance recommend that all coastal states establish a Maritime Assistance Service. There have been suggestions that IMO should develop a specific Convention on the subject but, with ICS support, the IMO Legal Committee has concluded that the existing recommendations are adequate. However, ICS has been campaigning for more rigorous implementation of existing IMO Conventions and guidance, with the IMO liability and compensation Conventions providing coastal states the comfort of financial security for pollution damage when considering whether to grant a place of refuge.

In Europe, the EU Vessel Traffic Monitoring Directive embeds the IMO Guidelines and prevents EU Member States from issuing an outright refusal to ships in distress. Throughout 2015, ICS (along with ECSA and the International Group of P&I Clubs) participated actively in an initiative by EU

Member States, supported by the European Commission and EMSA, to develop Operational Guidelines on Places of Refuge, based on the requirements of the EU Directive and the IMO Guidelines.

The EU Operational Guidelines were officially launched at a European Parliament event in January 2016, at which ICS participated. The purpose is to ensure better co-ordination and exchange of information among the relevant authorities and industry stakeholders involved should a ship require assistance. The Guidelines build on experience from recent cases that have occurred in EU waters, especially the high profile 'MSC Flaminia' incident in 2012. The hope is that decisions on granting a request for a place of refuge will now be reached far more quickly than hitherto.

The EU Guidelines have already played a part in the successful outcome of an incident in February 2016 involving the car carrier 'Modern Express'. While approaching EU waters, the ship experienced a serious stability issue that led to a request for a place of refuge. Following the rescue of 22 crew members by Spanish search and rescue helicopters, attempts to take the ship under tow were initially unsuccessful. However, once a line was secured the ship was taken and admitted to Bilbao where repairs were carried out, without serious injury, loss or pollution.

In May 2016, with the support of ICS, the European Commission submitted the Operational Guidelines to the IMO Maritime Safety Committee as a model approach that might be adopted by other IMO Member States. Encouragingly, the Singapore and Malacca Strait Co-operative Forum is already investigating the development of an instrument for use in the region. This includes preliminary work to identify places of refuge, with the EU Operational Guidelines being considered as a basis for similar guidelines tailored to the specific situation in the Straits.



GLOBAL SUPPLY AND DEMAND FOR SEAFARERS

In May 2016, ICS and BIMCO launched the results of their latest five year Manpower Report on the global supply and demand for seafarers. This was a major project conducted with assistance from DM Consulting and Dalian Maritime University, overseen by a steering committee of industry representatives.

According to the ICS and BIMCO Report, the global supply of seafarers in 2015 was estimated at 1,647,500 of which about 774,000 are officers and 873,500 are ratings. Encouragingly, the worldwide supply of officers is estimated to have increased by

24% since 2010, with the supply of ratings increasing too. Significantly, China is thought to have overtaken the Philippines as the largest single source of seafarers qualified for international trade (although the Philippines is still the largest source of ratings). However, data from international shipping companies suggests that the extent to which these Chinese seafarers are available for service on foreign-owned ships may be limited, with the Philippines and Russia seen as equally important sources of officers, followed closely by Ukraine and India.

GLOBAL SUPPLY AND DEMAND FOR SEAFARERS

CURRENT ESTIMATED SEAFARERS



BASIC FORECAST FOR FUTURE OFFICERS



Source: Manpower Report 2015 estimates



The global demand for seafarers in 2015 is estimated at 1,545,000, with the industry estimated to need approximately 790,500 officers and 754,500 ratings. As a result of the substantial growth in the number of ships in the world fleet since 2010, the estimated demand for officers has increased by around 24% in 2015, although the demand for ratings has increased by only 1%. The figures therefore suggest a current global shortage of about 16,500 officers (2.1%) but a surplus of about 119,000 ratings (15.8%).

The report suggests that the industry has made good progress in the past five years with respect to increasing recruitment and training levels, and reducing officer wastage (i.e. retaining qualified officers and increasing the number of years which they serve at sea).

But using projections for the growth of the world merchant fleet over the next ten years, the ICS and BIMCO Report predicts that, unless training levels increase significantly, the growth in demand for seafarers could generate a serious shortage in the total supply of officers.

Without continuing efforts to promote careers at sea and improve levels of recruitment and retention, it cannot be guaranteed that there will be an abundant supply of qualified and competent seafarers in the future.



ILO MARITIME LABOUR CONVENTION

The International Labour Organization (ILO) Maritime Labour Convention (MLC) is now firmly established as the fourth pillar of globally enforced maritime legislation (alongside the SOLAS, MARPOL and STCW Conventions). Over 70 nations have so far ratified the Convention which entered into force in 2013. This now includes all of the major seafarer supply nations, with China ratifying the Convention in 2015, and its provisions are now being fully enforced through Port State Control.

The purpose of the MLC is to establish a global level playing field of employment standards for seafarers, embracing the ILO concept of 'Decent Work'. Important matters covered include the obligations of employers with respect to contractual arrangements with seafarers, oversight of manning agencies,

health and safety, work hour limits, crew accommodation, catering standards and seafarers' welfare.

Unlike IMO Conventions, the MLC was the product of ILO's unique tripartite process. ICS was the official ILO social partner that negotiated the text on behalf of maritime employers with governments and ICS's counterpart, the International Transport Workers' Federation (ITF), which represented seafarers. ICS therefore has a special interest in ensuring that the MLC is being properly implemented.

The ILO MLC is an organic instrument that can be subject to future change. In February 2016, in Geneva, ICS co-ordinated employers' representatives from over 20 national

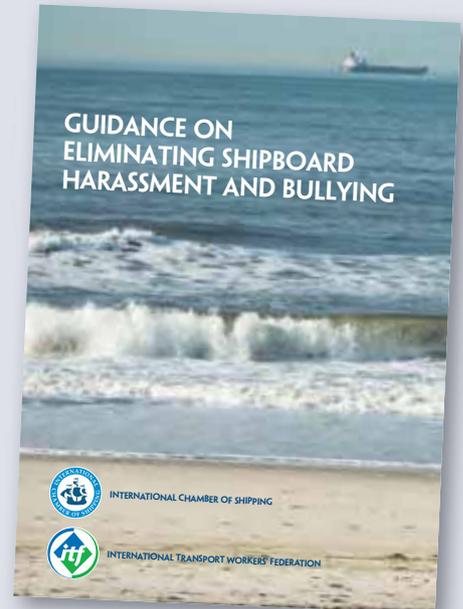




ELIMINATING HARASSMENT AND BULLYING

In January 2016, ICS and ITF joined forces to publish new international Guidance on Eliminating Shipboard Harassment and Bullying. Any form of harassment can have serious implications for the physical and emotional health of seafarers, and can also compromise teamwork with negative consequences for the safety of the ship and its crew. The new ICS/ITF Guidance sets out what shipping companies, seafarers and seafarers’ organisations can do to help prevent harassment from becoming a serious issue. Shipowners are urged to develop policies and plans to eliminate harassment and bullying as a matter of good employment practice.

As well as providing advice on company policies on reporting, complaints and grievance procedures, the Guidance addresses the responsibilities of seafarers and their employers to use these procedures appropriately and for being aware of any harassment or bullying that might occur within the maritime workplace. This includes any instances of cyber-bullying – text messages and social media now being a part of everyday shipboard life.



shipowners’ associations at the second meeting of the Special Tripartite Committee (STC). The STC was established to keep the working of the MLC under continuous review and to consider proposals for further amendments.

The tripartite meeting agreed to an ICS proposal to harmonise provisions related to the renewal of Maritime Labour Certificates with similar certificate renewal provisions contained in other international maritime instruments. The STC also agreed amendments highlighting the importance of health and safety on board ships and proposed that account should be taken of

new voluntary Guidance on Eliminating Shipboard Harassment and Bullying, which was jointly issued by ICS and ITF in January 2016. Following adoption by the next session of the ILO International Labour Conference in June 2016, these amendments are expected to enter into force in late 2018.

Meanwhile, in co-operation with the International Group of P&I Clubs, necessary preparations are being made to allow employers to comply with the amendments to the MLC adopted in 2014 concerning financial security for crew claims in cases of abandonment, before their entry into force in January 2017.



ILO Headquarters, Geneva



ILO MINIMUM WAGE

The shipping industry is unique in that it has a recommended global minimum wage, which is revised periodically by the ILO Joint Maritime Commission (JMC) in Geneva. The JMC comprises employers' representatives co-ordinated by ICS and seafarers' union representatives co-ordinated by ITF.

At the recommendation of a JMC Sub-Committee which met in April 2016, the ILO Minimum Wage for Able Seafarers will remain at US\$ 614 basic per month until at least 2018, having been increased to this amount from US\$ 592 in January 2016 as a result of a previous JMC agreement concluded in 2014.

Although difficult trading conditions continue, the current level of the ILO minimum wage should help to provide some stability for employers. However, ICS and ITF will be returning to Geneva in 2018 to consider possible further adjustments in the future.

ICS is strongly committed to the principle of the ILO Minimum Wage which is now referenced in the ILO Maritime Labour Convention. While it is still only recommendatory, and is not directly relevant to other seafarer grades, it has a strong moral authority. It is particularly important for employers in developing countries and may also be relevant to other collective bargaining negotiations, including those which take place in the International Bargaining Forum.

The ILO Minimum Wage is substantially higher than that paid for comparative work ashore in developing countries. Moreover, the total wage enjoyed by most seafarers is significantly higher once overtime hours (fixed at a minimum of one and a quarter times basic pay) and other mandatory payments, such as leave entitlements, are taken into account. The total wage paid to an Able Seafarer will typically be at least 50% more than the basic. Most ratings from developing countries that serve on internationally trading ships receive significantly higher wages than that recommended by ILO.



SEAFARERS' IDENTITY DOCUMENTS

In February 2016, ICS co-ordinated maritime employers in Geneva at an ILO meeting which sought to overcome the obstacles to the widespread ratification and implementation of ILO Convention 185, the Seafarers' Identity Documents Convention (Revised), which was adopted as part of the response to the terrorist attacks on the United States in 2001.

Before 2001, there was a general recognition by governments that seafarers who had been confined at sea, perhaps for several weeks, should be permitted to come ashore with minimal hindrance. Seafarers were normally permitted to enter the territory of the many countries they visited, for the purpose of taking shore leave or to travel to their vessel, without needing to apply for a personal visa in advance, provided that they held a seafarer's identity document. But in many countries this attitude has come to an end, exacerbated by concerns about illegal immigration.

ILO 185 requires ratifying nations to issue resident seafarers with Seafarers' Identity Documents (SIDs) and to facilitate the entry of

foreign seafarers holding SIDs (conforming to an agreed format) into their territory for the purposes of shore leave, transfer and transit. However, since its adoption in 2003, the ILO Convention has failed to achieve widespread implementation, in large part because the technical standards adopted have been superseded by new technologies.

With support from ICS, the ILO meeting agreed amendments to the technical Annexes of the Convention, establishing that SIDs should conform to the mandatory requirements for other electronic machine-readable travel documents already in use such as ePassports. These amendments are expected to enter into force in 2017.

If ILO 185 can be ratified and implemented more widely this could eventually bring about improvements to the welfare of seafarers while also addressing the legitimate security concerns of governments. But it remains to be seen whether nations such as the United States will ever ratify this important ILO Convention.



REVIEW OF GENERAL AVERAGE

General Average is a method of allocating and spreading the costs of dealing with a maritime casualty among the parties that benefit from the ship and cargo being saved. The York Antwerp Rules of General Average (YAR) set out rules for the distribution of losses and expenses, for example in incidents when cargo is jettisoned in order to save the ship and the remaining cargo. The system ensures that cargo gets to its destination and the voyage is not abandoned, and that the costs are evenly distributed.

The YAR are not compulsory, rather they take effect by incorporation into contracts of carriage. This is important because although the YAR were last revised in 2004, most contracts of carriage still incorporate the 1994 version because the 2004 version is considered unsatisfactory by shipowners.

The Comité Maritime International (CMI), the international association of maritime lawyers, is the custodian of the YAR. CMI is carrying out a general review of the YAR and has requested its International Sub-Committee to draft a new set of rules which 'will meet the requirements of the ship and cargo interests and their respective insurers' with a view to adoption at the CMI Conference in New York in May 2016.

ICS has a longstanding role in representing shipowners' views whenever issues related to General Average are discussed and is therefore representing shipowners' interests

during the current review, co-ordinating its position with other interested shipowner associations through the ICS Maritime Law and Insurance Committees.

After nearly four years' work, the project is now in the concluding stages. The final draft text for a new set of YAR was recently circulated for consideration by the national Maritime Law Associations at the CMI Conference. There has been little appetite for a comprehensive overhaul of the present, well-functioning system. Instead work has been focused on making practical improvements, for example on financial issues (commission, interest, currency of adjustment), and on areas that have been controversial in the past, including the rules concerning salvage, and the wages and maintenance of crew at a place of refuge. Draft guidelines have also been prepared to assist Average Adjusters in interpreting the proposed new Rules and the enhanced discretion that would be accorded to them.

Throughout the discussions, ICS has taken the position that any changes proposed must deliver clear improvement on the present system and not touch on fundamental principles if a new set of Rules is to be supported. The proposed 'YAR 2016' must continue to ensure an equitable balance between the interests of all parties in order to achieve consensus and ultimately be utilised in commercial contracts of carriage.





POLLUTION LIABILITY AND COMPENSATION

There has been a dramatic reduction in the number of oil spills in recent years. But when pollution incidents do sadly occur, international liability and compensation regimes have been agreed to ensure that claimants receive prompt compensation without legal wrangling.

For oil spills from tankers, the international regime established by the IMO Civil Liability (CLC) and Fund Conventions, with costs shared between shipowners and cargo interests, provides a quick and efficient means of compensating those affected. The shipowner's contribution is paid regardless of fault, and on the rare occasions that valid claims exceed the shipowner's liability under CLC, additional money is provided by the International Oil Pollution Compensation Fund (IOPCF) financed by contributions from the oil importers. In this way the shipping and oil industries share in the risk of the vital task of transporting oil to wherever it is needed around the world.

A third tier of compensation was created with the adoption of the Supplementary Fund Protocol in 2003 in order to address concerns

that the CLC/Fund limits might be insufficient to cover all valid claims arising out of a major tanker incident. The Supplementary Fund provides compensation over and above that available under the CLC/Fund regime. It is open to ratification by any State Party to the 1992 Fund Convention and is financed by contributions payable by oil importers.

However, there was a concern that the Supplementary Fund could upset the equitable balance in the sharing of compensation costs between the shipping industry and the oil industry. In response, the shipping industry offered to make additional contributions in certain circumstances and two voluntary but binding industry agreements were adopted. In 2016, these agreements, known as STOPIA and TOPIA, are scheduled for review by the IOPCF and the International Group of P&I Clubs. The aim is to determine the approximate proportions in which the overall costs of pollution damage claims in the past 10 years have been borne by the shipping and oil industries, and whether any measures should be taken to maintain an approximately equal apportionment. >>>

Meanwhile, the discussions concerning the funding of interim payments to claimants in the immediate aftermath of pollution incidents are continuing. The co-operative approach to claims handling, built up over many years between the P&I Clubs and the IOPCF, may have been damaged by the decision of governments to wind up the 1971 Fund at the end of 2014, even though potential claims were still outstanding against the Fund. This decision left the Clubs potentially exposed to claims and undermined the trust on which their relationship with IOPCF was based. In any future incidents where there is a risk of the tanker owner's liability being exceeded, the Clubs may have to think twice before advancing compensation payments to claimants above the CLC limits in case any overpayments are not reimbursed by the Fund. It is therefore hoped that this matter will be resolved soon, in order to ensure the international regime continues to function smoothly in the immediate aftermath of major incidents when advance payments of compensation may be critical for some claimants.

For incidents involving cargoes of hazardous and noxious substances (HNS) a separate

international regime has also been agreed but has still not yet entered into force. The 2010 HNS Protocol is modelled on the CLC/Fund regime and will establish an international compensation regime for HNS damage, the cost of which will be shared between shipowners and cargo receivers. A concerted effort is currently underway, under the auspices of IMO, to bring the Protocol into force. In March 2016, ICS participated in a major workshop hosted by the Government of Canada to promote the implementation and ratification of the HNS regime.

In Europe, ICS is supporting ECSA's efforts to urge EU Member States to ratify the HNS Protocol. Until the IMO regime enters into force, the EU Directive on Environmental Liability for Preventing and Remedying Environmental Damage will apply to HNS incidents in the waters of EU Member States. The Directive itself is currently the subject of an ongoing review in which ICS has stressed the importance of international regulation of liability for environmental damage resulting from shipping incidents, a case which would be greatly strengthened by the entry into force of the HNS Protocol.

COMPETITION ISSUES

Full compliance with competition law is of utmost importance given that even the smallest violations can result in penalties of up to 10% of company turnover, potentially amounting to hundreds of millions of dollars. But the maintenance of a sensible and unambiguous regulatory framework that takes full account of shipping companies' legitimate need to co-operate is also vital.

ICS remains committed to the defence, throughout the world, of appropriate anti-trust exemptions for liner shipping agreements, including Vessel Sharing Agreements (VSAs) and Voluntary Discussion Agreements (VDAs). Such agreements bring economic benefits to all stakeholders, enabling shipping companies to satisfy shippers' (and consumers') demands in terms

of frequency, reliability, efficiency, quality and price.

In co-operation with the Asian Shipowners' Association (ASA), ICS's current focus is on providing input to various competition policy reviews taking place in the Asia Pacific. This involves supporting local efforts to ensure that necessary exemptions for shipping are codified in national competition laws, consistent with Guidelines on maritime competition regulation adopted by the Asia Pacific Economic Co-operation (APEC) forum in 2012.

The longstanding block exemption for liner shipping in Singapore has served as a model for neighbouring countries. The Competition Commission of Singapore (CCS) carried out extensive consultations on the renewal of the block exemption throughout 2015,

culminating in a formal recommendation to extend the exemption to December 2020. ICS – in liaison with the Singapore Shipping Association and ASA – submitted comments to the CCS consultation in June 2015, outlining its full support for the proposed renewal which has since been confirmed by the Government.

In March 2016, the Indian Ministry of Corporate Affairs announced, for the third year running, its decision to renew the exemption for VSAs for a further year. This seems to indicate increased understanding between the Indian competition authorities and the shipping industry. ICS has welcomed this renewal but is also supportive of efforts by local operators to extend the exemption to cover discussion agreements.

ICS has been closely monitoring developments in Hong Kong during the first half of 2016, following the entry into force of the new Competition Ordinance in December 2015. Shortly after its entry into force, the Hong Kong Liner Shipping Association made a formal application to the Competition Commission for a block exemption for liner shipping agreements. In support of these efforts, in March 2016 ICS submitted comments to a public consultation on the HKLSA application, working closely with ASA and the Hong Kong Shipowners' Association.

Japan's block exemption for liner shipping agreements is also currently under review. The Ministry of Land, Infrastructure, Transport and Tourism, which oversees the block exemption,

is due to file a report to the country's competition authority, the Japanese Fair Trade Commission (JFTC), in the first half of 2016. The last time Japan reviewed its competition policies with respect to shipping, in 2011, it maintained its block exemption, noting that the EU's 2008 prohibition of liner conferences had led to an increased volatility of freight rates in trades to Europe and a rise in surcharges. ICS hopes that similar conclusions in support of the status quo will be reached by the current review, and ICS made this known during a consultation meeting with the JFTC in September 2015.

Elsewhere, the Australian Government's 'root and branch' review of its competition laws came to a conclusion in April 2015 when a Review Panel published its final report. Disappointingly, and following in the footsteps of an earlier New Zealand Productivity Commission review, the Panel recommended repeal of liner shipping exemptions and their replacement with an exemption process for consortia alone. As with the New Zealand Commission's recommendations, it remains to be seen whether the report's proposals will be taken forward by the Parliament.

Meanwhile, in February 2016, in response to questionable concerns about so called 'price signalling', the European Commission announced its intention to accept a series of proposed commitments from shipping lines regarding General Rate Increase (GRI) announcements.



BETTER REGULATION

The IMO World Maritime Day theme for 2016 is 'Shipping: indispensable to the world'. Maintenance of the shipping industry's economic sustainability is very important given its vital role in transporting about 90% of world trade, upon which the functioning of the world economy and its further development depends. It is crucial that the regulatory process at IMO reflects this.

At the meeting of the IMO Council in November 2015, in co-operation with the International Association of Classification Societies (IACS), other shipowner associations and a number of governments, ICS made an important submission suggesting a new approach towards the development of future IMO regulations. The paper was well received and will be taken forward as part of the IMO Council's agenda in 2016.

For over 50 years, IMO has contributed greatly to improving the shipping industry's safety record and its environmental performance. IMO's process of regulatory development has served the industry and society very well, providing a comprehensive regulatory framework that can be implemented and enforced worldwide. However, there is growing concern throughout the shipping industry that something might be wrong with the quality and quantity of some recent regulatory changes. All too often the industry has seen proposals by governments being taken forward without any real evidence of a compelling need when assessed against the economic impacts and the actual benefits delivered.

For several years, ICS has argued that far more emphasis should be given, when rule changes are proposed, to full and proper regulatory impact assessments that take greater account



of the economic sustainability of maritime transport. More attention could also be given by IMO Member States to the practicality and timescale allowed for the implementation of new regulations. It is far better for this to happen before new rules are adopted, not several years after adoption when it is far too late.

A case in point was the debate which led to the adoption twelve years ago of the Ballast Water Management Convention, and the subsequent implementation problems that have seriously hampered its entry into force (discussed elsewhere in this Annual Review).

The Ballast Water Convention is an example of a major regulatory change that will have a profound economic impact on the structure of the global shipping industry due to the huge capital costs involved. Whilst the nature of some of these impacts was foreseen at the time of the Convention's adoption, it is fair to say that the economic magnitude was probably not, and it is becoming increasingly clear that there will be unintended consequences.

ICS does not question the good intentions behind proposals that are made by IMO Member States. But in the future ICS believes that consideration of a new approach to regulation should be fully consistent with the United Nations Sustainable Development Goals, which acknowledge that the environmental, social and economic pillars of development are all inextricably linked.

FLAG STATE PERFORMANCE

In January 2016, following the entry into force of amendments to the relevant IMO Conventions, the IMO Member State Audit Scheme became mandatory. This is a significant development that should not go unnoticed,

making a further contribution to improving maritime safety and the prevention of pollution. A balance has to be struck between the commercial advantages of shipowners selecting a particular flag and the need to



discourage the use of any ship register that does not meet its international obligations. While it is shipping companies that have primary responsibility for the safe operation of their ships, it is flag states that must implement and enforce the rules.

ICS is therefore a strong supporter of the IMO Member State Audit Scheme and greatly welcomes the evolution of the current voluntary audits of maritime administrations into a mandatory programme (although it will still be several years before all the world's maritime administrations have passed through the system).

In the interests of transparency, and notwithstanding sensitivities about matters of sovereignty, ICS believes that the results of all IMO audits should eventually be published. In the meantime, ICS has welcomed the development of a new module within the IMO Global Integrated Shipping Information System (GISIS) through which governments have the option to make their reports available to the public. ICS also welcomes the practice of some regional Port State Control (PSC) authorities to request information from flag states as to whether the voluntary IMO audits have been conducted, including this in their criteria for targeting inspections.

In February 2016, and as a complement to the IMO Scheme, ICS published its latest Shipping Industry Flag State Performance Table, which can be downloaded free of charge via the ICS website. The Table assesses the performance of flag states using criteria such as Port State Control records, the ratification of IMO and ILO Conventions, and participation

at IMO meetings. It is intended as a tool to help ship operators engage in discussion with their flag administrations about areas of performance where improvement might still be necessary.

The feedback that ICS receives suggests that the Table is treated very seriously by maritime administrations. In response to comments from governments, ICS has made further adjustments to the Table's presentation, including data relating to the inspection record of flags whose ships have only made a small number of port calls in some of the main PSC regions. In response to questions from maritime administrations, ICS is currently reviewing the way in which the Table displays information about the Recognized Organizations to which most flag states delegate surveys.

One thing that the ICS Table has demonstrated for many years is the lack of substance to arbitrary distinctions that are sometimes made between the performance of open registers and so called traditional flag states. While they might have been relevant 20 years ago, the ICS Table continues to show that such distinctions are no longer helpful. Almost two thirds of the world fleet is now registered with the eight largest open registers (Panama, Liberia, Marshall Islands, Singapore, Bahamas, Malta, Cyprus and Isle of Man) all of which show impressive levels of performance.

In September 2015, ICS made a detailed submission to an inquiry being conducted by the Australian Senate into the use of so called 'flag of convenience' shipping. ICS presented evidence about the sound performance of open registers, including implementation of ILO maritime labour standards, and reiterated that the term 'flag of convenience' is pejorative, having more to do with 20th century industrial relations issues than modern quality shipping. The outcome of the Senate inquiry is expected in July 2016.



MAINTAINING FREE TRADE

It is important that shipping remains vigilant against protectionism that could damage free trade in international shipping markets, and ICS is monitoring potentially negative developments in a number of regions. ICS also liaises closely with the Consultative Shipping Group (CSG), a diplomatic grouping of maritime administrations committed to free trade in shipping which includes Canada, Japan, Korea and Singapore in addition to most European nations. In September 2015, in Paris, ICS organised a seminar for CSG members about current developments in shipping policy, and in September 2016, ICS will participate in the biennial CSG-U.S. dialogue meeting in Washington DC.

In the United States, ICS is following discussions in Congress about promoting U.S. flag shipping for the carriage of U.S. energy exports. While the immediate focus has been on LNG, the concern is that whatever is decided could eventually have longer term implications for the approach the U.S. takes with respect to crude oil exports, which for the first time in 40 years were permitted again at the end of 2015.

Encouragingly, there seems to be growing recognition in Congress that there is no realistic prospect that U.S. ship yards would ever be able to build LNG vessels economically. Instead the current focus is on

finding ways to encourage the employment of U.S. seafarers on foreign flag LNG ships, but in a manner that would be compatible with U.S. maritime commitments at the World Trade Organization (WTO). ICS is now waiting to see the outcome of a strategy document which the U.S. Maritime Administration has been requested to produce by Congress.

There is nevertheless reason to be concerned about the protectionist climate that is a growing feature of the 2016 Presidential elections. The trade union lobby is strong and there is sympathy in Congress to the argument that if the U.S. is going to permit energy exports then it should get something in return.

Russia, meanwhile, is debating possible changes to its so called 'Subsoil Law' whereby the carriage of Russian 'shelf hydrocarbons' – in other words oil and gas – might be restricted to Russian-flagged ships from 2020. It is unclear to what extent these changes might apply to international trades in addition to cabotage. But draft amendments to the law are now the subject of consultation before being put before the Russian Parliament, possibly during 2016. It is understood that the principal motivation is to encourage Russian owned ships back to the Russian flag. However, the review may also be linked to Russia's claims under UNCLOS to the Arctic continental shelf.



Sail training vessel

Interestingly, the Russian authorities have been quoted as saying that they wish to follow the example being set by the U.S, which is presumably a reference to the Jones Act, but also to the more recent U.S. proposals about the carriage of LNG in international trades.

In Africa, ICS remains concerned about the Maritime Transport Charter, adopted by the African Union in 2009, which promotes the concept of regional cabotage. Consistent with the defunct UNCTAD Liner Code of the 1980s, there are also calls for 40% of maritime trade to and from African nations to

be carried on African ships. Or, if African ships are not available (which is often the case in practice), that foreign ships should pay a fee for the privilege of moving cargo that would otherwise have been carried by these non-existent African ships.

South Africa and Tanzania are now understood to be developing such laws, Sierra Leone having tried to do so earlier. Given the growing importance of African trade this is a development that needs to be watched closely.

The European Union is strongly committed to free trade principles for international shipping, and is very active in their promotion at the WTO, and at the parallel 'TiSA' or Trade in Services Agreement negotiations in Geneva. The EU has also removed most cabotage restrictions within EU Member States. However, because of the increasing desire for the EU to act as single nation, there have been calls from seafarers' unions for the EU to establish a 'European Jones Act' whereby trade between two EU Member States, such as France and Germany, would be restricted to ships that are flagged with an EU Member State.

The prospect of this happening in the near future may seem unlikely, not least because, under the terms of the UN Law of the Sea, EU Member States are separate nations and a voyage between them is therefore an international voyage. But the EU is now a party to UNCLOS in its own right. In the same way that the EU behaves like a single nation at WTO – with the European Commission representing all 28 EU States as a block – it is possible that the same thing may happen in the context of UNCLOS (as well as at agencies such as IMO) and this is an official policy aim under the EU Lisbon Treaty of 2007.

In 2016, a specific proposal for an EU Jones Act is being considered by the European Parliament. While it is currently unlikely that the European Commission or individual EU Member States would take forward such a radical proposal, the EU is officially committed to 'ever closer union' which might yet lead to restrictions on the carriage of trade between EU States on ships flagged with non-EU nations.

OCEAN GOVERNANCE

In March 2016, ICS took part in an important side event at the United Nations in New York, during the opening session of a UN Preparatory Committee which is starting work on a new legal instrument under the United Nations Convention on the Law of the Sea (UNCLOS).

The opportunity was taken by ICS to highlight how shipping already enjoys a long established and comprehensive framework of global Conventions and regulations that have been developed by IMO. The UN side event was organised by the World Ocean Council (WOC), an umbrella body for ocean industries of which ICS is a founder member.

The establishment of the new UN Preparatory Committee, under the auspices of the Division for Ocean Affairs and the Law of the Sea, follows the decision of the United Nations General Assembly, in 2015, that UNCLOS should be expanded to include a new legally binding instrument on the conservation of marine life in areas beyond national jurisdiction. This is particularly relevant to shipping because the new UN instrument could include area-based management tools such as Marine Protected Areas on the high seas. ICS is keen to ensure that the interests of shipping will not be unwittingly affected by this new UN work stream.

UNCLOS provides the basic legal framework for protecting the oceans and, under its authority, the shipping industry is regulated by IMO. But the regulation of other ocean activities, especially on the high seas, is not so well developed. The intention behind the proposed new UN instrument is to develop solutions to the vacuum that exists with respect to issues such as preserving global fish stocks from unregulated fishing, and damage to marine ecosystems caused by land based agriculture and industry. This is an objective which ICS supports. Moreover, ICS believes that the well-functioning global regime already developed by IMO for shipping could provide an example worthy of application to other maritime sectors.

The development of a new UN instrument is undoubtedly a legitimate exercise. However, ICS believes that, whatever might be decided in the future with respect to UNCLOS, great care should be taken with regard to the maintenance of freedom of the high seas, the rights of navigation enshrined in Articles 87 and 90, and the current balance that exists between the rights and obligations of flag states, coastal states and port states. In the context of regulating international shipping, the current balance has worked very well, as demonstrated by the reduction in the number of maritime accidents and pollution incidents. It will therefore be important for the UN Committee to take account of any potential overlap or duplication with existing IMO Conventions. ICS will continue to monitor these developments in ocean governance closely, in co-operation with the World Ocean Council and in liaison with IMO.

In 2015, ICS was also invited to speak as a panellist at a United Nations meeting in New York as part of the Informal Consultative Process on the Law of Sea. The opportunity was taken to highlight the extent to which shipping is effectively regulated by IMO in order to deliver the UN's Sustainable Development Goals. In June 2015, in Lisbon, ICS was also represented at the World Ocean Summit, organised by The Economist magazine, which has become an influential platform for the discussion of ocean governance issues.





IMO FACILITATION CONVENTION

In April 2016, IMO adopted some substantial amendments to the IMO Facilitation Convention, following a comprehensive review in which ICS has been involved closely throughout a process lasting several years.

The Convention on Facilitation of International Maritime Traffic (FAL) is perhaps an unusual IMO instrument since it is intended to make life easier for ships' crews by reducing reporting formalities and administrative burdens, rather than adding to them. A major challenge throughout the revision has been to ensure that the Convention's provisions were not unwittingly watered down by Customs and immigration authorities.

In the latter stages of the revision, ICS participated actively in an IMO Correspondence Group re-established to finalise more controversial amendments.

One such issue was a proposal to add visa numbers to the information that port states might request from ships, which would have

undermined the principle that visas should not normally be required for seafarers wishing to take shore leave. In the event, no reference to seafarers' visa numbers was included in the revised FAL Convention.

Another difficult issue that was satisfactorily resolved, following an ICS submission made jointly with WSC and BIMCO, concerned the date by which time governments should establish systems for the electronic exchange of information. The industry submission highlighted the many cost and efficiency benefits of electronic data exchange, both to industry and government, with a view to encouraging adoption of the earliest agreeable implementation date for the mandatory use of electronic systems, in line with the recommendations of the World Customs Organization. It is important that governments focus on the benefits that electronic exchange of information will bring, rather than the initial cost of establishing the necessary infrastructure.



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CYBER SECURITY

Cyber security is yet another new term to have entered the shipowners' lexicon. As technology continues to develop, information technology and operational technology on board ships are increasingly networked together and more frequently connected to the worldwide web. This brings a greater risk of unauthorised access or malicious attacks to ships' systems and networks. Risks may also occur from seafarers having access to the systems on board ship, for example by introducing malware via removable media.

In December 2015, ICS and other industry associations joined BIMCO, co-sponsoring new industry Guidelines for Cyber Security Onboard Ships, and submitting these jointly to the meeting of the IMO Facilitation Committee which met in April 2016. The intention behind the Guidelines is to help shipping companies develop resilient approaches to cyber security on board the ships which they operate.

ICS believes that cyber threats are best addressed by existing Safety Management Systems required under the IMO International Safety Management (ISM) Code rather than, as some governments have suggested, augmenting the International Ship and Port

Facility Security (ISPS) Code regulations. ICS currently sees no value in IMO developing specific regulations to address this issue, which is very fast moving. However, high level IMO guidance addressed to all stakeholders (not just ship operators) might provide a useful supplement to industry best practice.

The publication and dissemination of the industry Guidelines, which can be downloaded free of charge from the ICS website, will hopefully serve to demonstrate to governments that international regulation of maritime cyber security protection measures is unnecessary. The industry Guidelines will remain under review and will be updated as may be needed in the light of developments and experience.

Meanwhile, ICS is continuing to urge shipowners to press for the removal of exclusions for cyber risks from hull and machinery insurance policies. Studies conducted by both the London marine insurance market and the International Group of P&I Clubs consider that the likelihood of a successful 'cyber-attack' against a ship is low. The industry's new cyber security Guidelines should further assist in allaying underwriters' concerns about potential cyber risk exposure.



PANAMA AND SUEZ CANAL EXPANSION

In March, the Panama Canal Authority (PCA) announced that its major canal expansion project was almost complete and that the new locks would be officially inaugurated on 26 June 2016. This is welcome news to ICS, as the project, initially due for completion in 2014, has been subject to serious delays.

The expansion is truly impressive in scale, and when the new locks finally open for business they will allow containerships of up to 14,000 TEU to transit. This is eventually expected to have a significant impact on trade routes, with ports on the U.S. east coast already increasing their maximum draft in order to accommodate the arrival of much larger vessels that could

previously only call on the Pacific coast.

While most commentators do not expect that large numbers of these 'New Panamax' ships will immediately make use of the Canal, it is certain that ships transiting will be much larger than the current maximum capacity of up to 5,000 TEU. This will present new challenges for those operating the Canal, especially when coupled



with the fact that tug boats, rather than the traditional electric tractor mules, will be used to position ships for transit through the new locks. As the opening date approaches, the industry's attention is therefore drawn to ensuring that the safety of ships and their crews (and Panama Canal operators) is paramount from the very first transits.

Over the last two years, ICS has co-ordinated discussion between industry partners and the Panama Canal Administrator, Mr Jorge Quijano, with respect to amendments to the toll structure put in place with the inauguration of the new locks. It is hoped that regular meetings will continue, and the latest of these is scheduled for May 2016 when safety and risk mitigation will be high on the agenda.

Meanwhile the improvement work in the Suez Canal – to deepen the existing Canal in

some places, and create an additional channel running parallel to the existing Canal – took just one year to complete, and the improved Canal was officially opened for business in August 2015. ICS led an industry delegation to meet the Suez Canal Authority, under the leadership of Admiral Mohab Mameesh, just before the new Canal was opened. This will hopefully be a step towards establishing a more meaningful dialogue between ICS and SCA, and the ICS Secretary General made a follow up visit in February 2016.

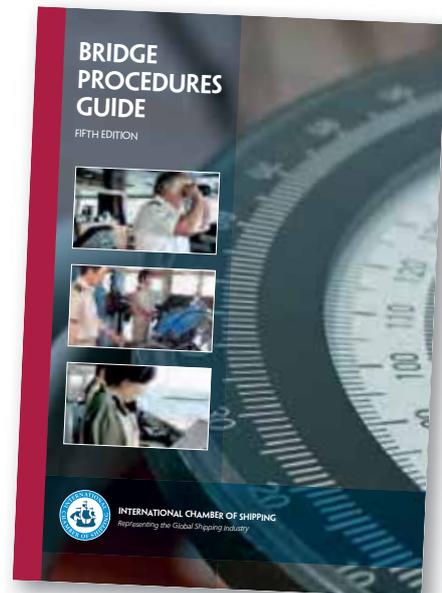
One particular point that ICS has raised during recent discussions is the need for the SCA to commit to a longer notice period before any future toll adjustments, especially noting that the PCA has committed to a one year notice period in order to account for charterparty contracts when tolls for the Panama Canal are restructured.

ICS PUBLICATIONS

In addition to representing the industry, the production of publications on regulatory developments and best practices is an important part of ICS activity. Many ICS publications are used by ships throughout the world fleet, and are often listed as carriage requirements under national legislation.

In February 2016, ICS published a revised 5th edition of the ICS Bridge Procedures Guide. The Guide has been updated to reflect further developments in navigation technology, lessons learnt from recent accident investigations, and the latest approaches to environmental compliance and Bridge Team Management. Within two months of publication, almost 20,000 copies of the new edition had already been sold worldwide.

ICS is also making progress on a new edition of the ICS Tanker Safety Guide (Liquefied Gas), with publication anticipated in 2017, following the recent publication of a new edition of the ICS Tanker Safety Guide (Chemicals). Another project that should be completed in 2016 is a new version of the Personal Training Record Book for qualified seafarers, to complement the ICS/ISF On



Board Training Record Books for trainee officers and ratings that are widely used across the industry.

Following the application of Port State Control of the ILO Maritime Labour Convention, the ISF Guidelines on the Application of the ILO MLC have continued to prove very popular, as has the ISF Watchkeeper seafarers' work hour record software which is produced jointly with IT Energy.



INTERNAL AFFAIRS

In July 2015, ICS was pleased to welcome the Russian Chamber of Shipping as its latest member, with ICS membership currently comprising national shipowners' associations from 37 countries and territories. ICS continues to work closely with its Regional Partners, the Asian Shipowners' Association (ASA), which changed its name from the Asian Shipowners' Forum in May 2016, and the European Community Shipowners' Associations (ECSA).

The 2016 Annual General Meeting will be hosted by the Japanese Shipowners' Association in Tokyo, from 1-3 June. Mr Masamichi Morooka (Japan) will step down as ICS Chairman, having completed a second two year term of office. A successor to Mr Morooka will be elected at the AGM in Tokyo.

For the previous four years, Mr Morooka has been supported by the Board of Directors including the four Vice Chairmen: Mr John C Lyras (Greece), Mrs Karin Orsel (Netherlands), Mr Gerardo Borromeo (Philippines) and Mr Esben Poulsson (Singapore).

During 2015, the ICS Board conducted a strategic review of ICS's functions and objectives. The intention was to ensure that ICS will continue to serve the best interests of the industry and its members in the years ahead, with a continuing principal focus on representation of regulatory issues plus the production of best practice guidance and industry publications. The review was led by ICS Vice Chairman, Esben Poulsson.

The 2015 Annual General Meeting was hosted by the Royal Association of Netherlands Shipowners, in Rotterdam from 9-11 June. The members of ICS were honoured by the presence of Her Highness, Princess Margriet of the Netherlands, patron of the Dutch Merchant Navy, at a gala dinner on board the cruise ship 'Jules Verne'.

In April 2016, Mr Joe Francombe decided to leave ICS to pursue a doctorate at Cambridge University, and has been succeeded by a new Policy Officer, Mr Helio Vicente, who recently worked for IMO. As a consequence of the strategic review, Mr Georgios Charalampidis has been recruited as a Research Officer, with an additional professional staff member to be recruited in the Marine Department during 2016.

The ICS Secretariat, led by the Secretary General, Peter Hinchliffe, continues to be provided by Maritime International Secretariat Services Limited, which is wholly owned by ICS.



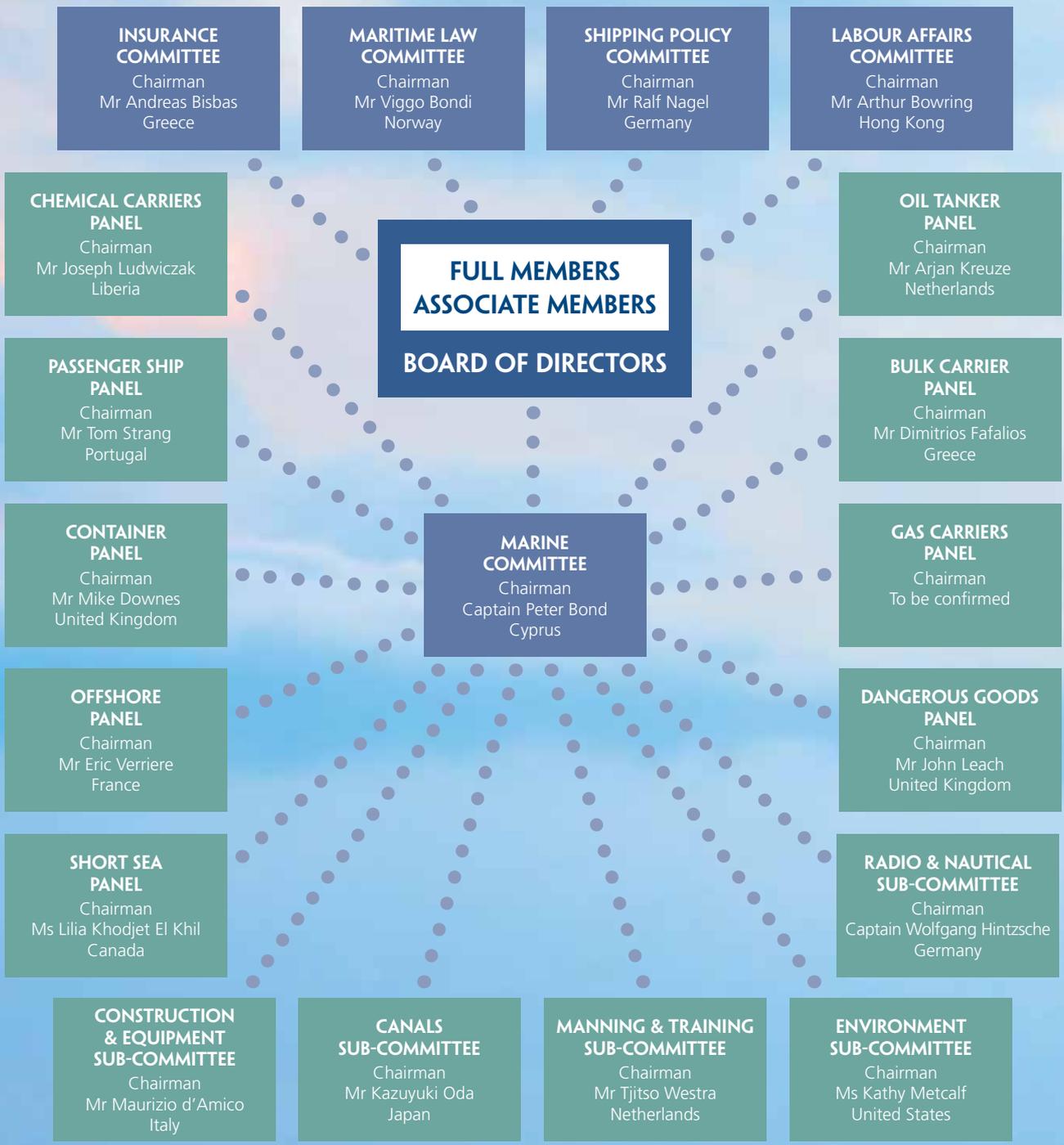
ICS AGM in Rotterdam, 2015

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