

Annual Review **2018**



International
Chamber of Shipping

Shaping the Future of Shipping

The International Chamber of Shipping (ICS) is the principal global 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.

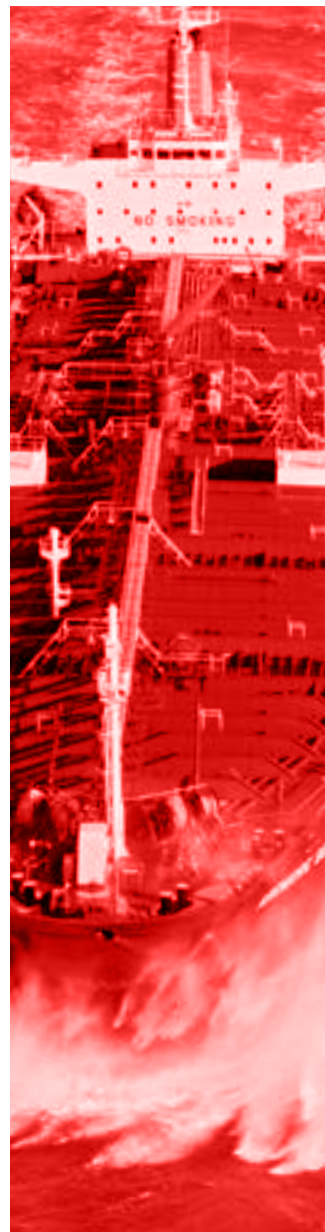
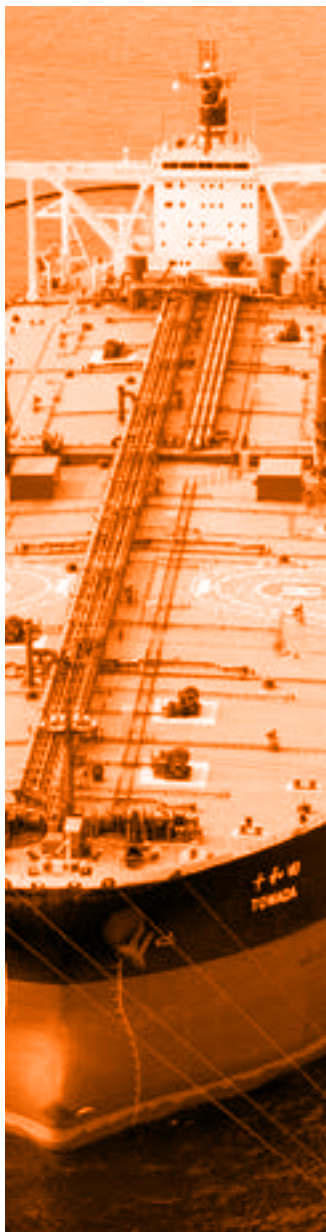
We acknowledge with thanks the use of photos from the following associations and their member shipping companies:

Bahamas Shipowners' Association
Cyprus Shipping Chamber
Danish Shipping
Armateurs de France
German Shipowners' Association
Union of Greek Shipowners
Hong Kong Shipowners Association
Irish Chamber of Shipping
Italian Shipowners' Association
Japanese Shipowners' Association
Royal Association of Netherlands Shipowners
Norwegian Shipowners' Association
Filipino Shipowners' Association
Russian Chamber of Shipping
Turkish Chamber of Shipping



Annual Review

2018



International
Chamber of Shipping

Shaping the Future of Shipping

Contents



International
Chamber of Shipping

Shaping the Future of Shipping

6 Chairman's Review

7 Office Bearers and Secretariat

8 Key Issues in 2018

8 Reducing CO₂ : A 'Paris Agreement for Shipping'

14 The Global Sulphur Cap is Coming

18 Implementing the IMO Ballast Water Convention

22 The Shipping Downturn Ten Years On

26 The Future of IMO

30 Shaping the Future of Shipping – A New ICS Brand

32 The Year in Review

33 Emissions Trading and Market Based Measures

34 Operational Efficiency Indexing

36 Developing Zero CO₂ Fuels

38 Shipbuilding Issues

39 Perfecting Garbage Management

40 The Migrant Rescue Crisis

42 Piracy and Security

42 New STCW Training Regime

44 Navigational Safety

46 Lifesaving Appliances

47 ILO and the Maritime Labour Convention

48 Review of ILO Minimum Wage

48 Pollution Liability Regime Under Threat

50 Convention Ratification Campaign

51 UN Sustainable Development Goals

52 UNCLOS Implementing Agreement

53 Flag State Performance

54 In Defence of Open Registers

56 Shipping Policy

58 Fighting Corruption

59 Publications

59 United for Wildlife

60 Internal Affairs

61 *ICS Board of Directors 2017 – 2018*

62 *ICS Committee Structure*

63 *ICS Membership*





Chairman's Review

Esben Poulsson (Singapore), ICS Chairman

My second year in office has been fascinating and busy. ICS has been closely engaged, on behalf of international ship operators, with a number of critical developments that may have profound implications for the future of the industry.

In April this year, the UN International Maritime Organization (IMO) adopted a high level strategy for the further reduction of shipping's greenhouse gas emissions. I was very encouraged by the willingness of governments, on all sides of the debate, to co-operate and move to a centre position. This is the epitome of how IMO works.

The result is a truly ground breaking agreement – 'a Paris Agreement for shipping' – that sets a very high level of ambition for the future reduction of CO₂ emissions. I am confident this will give the industry the clear signal it needs to get on with the job of developing zero CO₂ fuels, so that the entire sector will be in a position to decarbonise completely, consistent with the 1.5 degree climate change goal.

The agreed IMO objective of cutting the sector's total greenhouse gas by at least 50% by 2050, as part of a continuing pathway of further reduction, is very ambitious indeed, especially when account is taken of current projections for trade growth as the world's population and levels of prosperity continue to increase.

While some governments would have preferred to see the adoption of even more aggressive targets, it should be remembered that a 50% total cut by 2050 can realistically only be achieved with the development and widespread use, by a large proportion of the fleet, of zero CO₂ fuels. If this goal is successfully met, the wholesale switch by the industry to zero CO₂ fuels should therefore follow very swiftly afterwards.

We now expect discussions at IMO to begin in earnest on the development of additional CO₂ reduction measures, including those to be implemented before 2023. ICS will continue to participate constructively.

The other major milestone during the past 12 months was the entry into force of the IMO Ballast Water Management Convention.

The installation of compliant treatment systems that will actually be fit for purpose is still one of the biggest operational headaches facing ship operators today. But as a result of recent IMO agreements on revised implementation dates and the adoption of more stringent type-approval standards – which ICS helped to broker with governments – shipowners should now have far greater certainty and confidence as they collectively prepare to invest billions of dollars to ensure full compliance.

Also looming close to the horizon is the implementation in 2020 of the 0.5% global sulphur cap for marine fuel, which is expected to see bunker prices increase significantly.

While ICS fully supports the objectives of the IMO cap, the overnight introduction of this regulatory game-changer will have enormous implications for the economics of shipping. It will therefore be vital to get the implementation right.



Esben Poulsson launching the new ICS brand at the 2017 ICS Conference

International Chamber of Shipping

Shaping the Future of Shipping



As well as concerns as to whether sufficient quantities of compliant low sulphur fuels will be available in every port, there are a number of complex practical issues which IMO needs to urgently resolve within the next 18 months if the unfair treatment of ships is to be avoided.

At the same time, it is vital that ship operators start making the necessary preparations to be ready for this major change. This also means that oil refiners will need to ensure that compliant fuels are actually available for ships to purchase well in advance of January 2020. Time is fast running out. In co-operation with other industry associations, ICS will therefore be engaged in a major campaign on these issues throughout 2018.

Because the current regulatory agenda is so dominated by environmental issues, it is easy to lose sight of the many other important topics in which ICS is involved. The tragic loss of the tanker 'Sanchi' and 32 lives in January 2018, in waters between China and Japan, underlines that safety must always remain the highest priority of governments and industry.

As well as navigational safety issues at IMO, and the continuing migrant crisis in the Mediterranean (a further 3,000 lives lost in 2017), ICS is involved in a wide range of legal and policy issues, as well as employment affairs, at bodies such as the UN in New York, the ILO in Geneva and the OECD in Paris. This Annual Review explores just a sample of the many issues in which ICS is currently engaged.

2018 will also be a significant year for ICS itself. In August, Peter Hinchliffe will step down following eight years of dedicated service as Secretary General, having first joined ICS back in 2001. Peter has made a tremendous contribution to the role and reputation of ICS as the representative voice of shipowners, and we all wish him well. He will be succeeded in August by Guy Platten, who is currently CEO of the UK Chamber of Shipping and will bring valuable new perspectives to our important work.

I am confident that with the continuing support of our Board and member national shipowners' associations, as well as our committed and professional Secretariat, ICS will continue to work effectively to meet the many challenges ahead.

Esben Poulsen

ICS Vice Chairmen 2017/18

Left to right

Mr John Adams (Bahamas)
Mr Emanuele Grimaldi (Italy)
Mr Mark Martecchini (Liberia)
Mrs Karin Orsel (Netherlands)



Secretariat

Mr Peter Hinchliffe, Secretary General
Mr Guy Platten, Secretary General (from August 2018)
Mr Simon Bennett, Deputy Secretary General

Mr John Murray Marine Director	Mr Jonathan Spremulli Marine Director (from July 2018)
Ms Linda Howlett Director Legal Affairs	Ms Kiran Khosla Director Legal Affairs
Mr Chris Oliver Director Regulatory Affairs	Mrs Natalie Shaw Director Employment Affairs
Mr John Bradshaw Technical Director	Mr John Stawpert Manager
Mr Stewart Inglis Senior Adviser	Mr Sunil Krishnakumar Senior Adviser
Miss Emily Rowley Senior Adviser	Mr Matthew Williams Senior Adviser
Mr Helio Vicente Policy Officer	Mr Georgios Charalampidis Research Officer

Mrs Susan Gray
Director Finance and Administration

Mrs Shantel Ryan Publications Manager	Mrs Julie Rogers Personal Assistant to Secretary General
Mrs Catherine Howlett Administrator Publications	Miss Jade Smith Administrator Marine Department
Miss Grace Cobley Administrator Publications	Mrs Anita Pow Administrator Shipping Policy

Reducing CO₂ A 'Paris Agreement for Shipping'

In April 2018, the UN IMO adopted a groundbreaking strategy setting very high levels of ambition to phase out CO₂ emissions across the sector, including a 50% total cut by 2050.

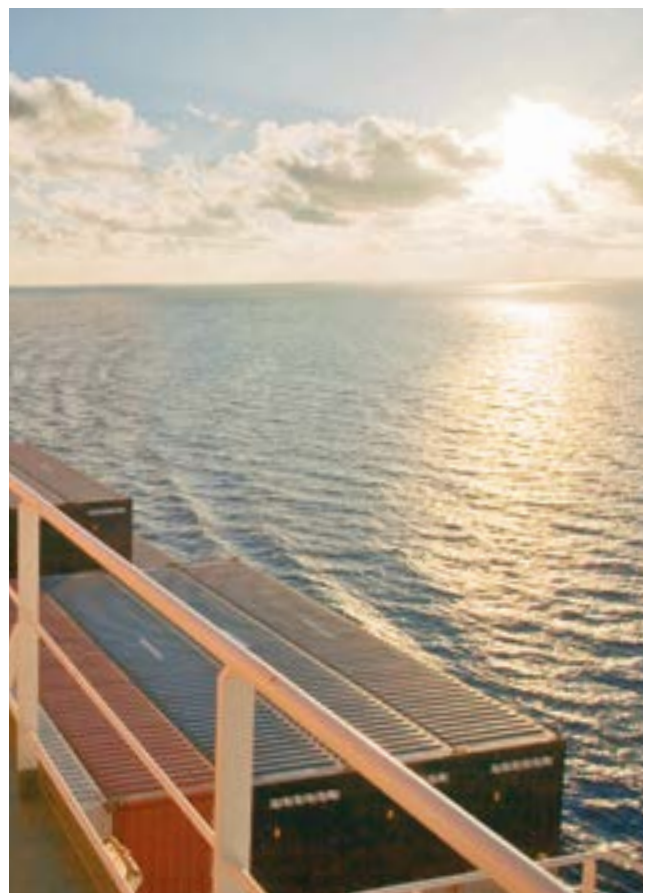
ICS is confident that new technology will eventually deliver, whether using fuel cells or batteries powered by renewable energy, new fuels such as hydrogen, or some other solution not yet anticipated. These exciting possibilities are explored elsewhere in this Annual Review.

Meanwhile, the shipping industry and its global regulator, IMO, have a good story to tell with respect to reducing CO₂ emissions and the mitigation of dangerous climate change.

Most importantly, in April 2018, the IMO Marine Environment Protection Committee (MEPC) adopted a comprehensive initial strategy for the further reduction of the international shipping sector's total CO₂ emissions, as a response to the Paris Agreement on climate change. In view of the complex politics involved, agreement by IMO upon such an ambitious strategy is a truly significant achievement. But the huge challenge that lies ahead will be for industry to successfully deliver.

According to the International Council on Clean Transportation (ICCT), the total CO₂ emissions from international shipping were about 8% lower in 2015 than in 2008, despite a 30% increase in maritime trade. Delivered with a combination of technical and operational measures – including improved speed management and the introduction of innovative technologies – this is an impressive level of total emissions reduction, especially as shipping has no control over the ever increasing demand for its services. ▶

Moreover, as a result of amendments to Annex VI of the MARPOL Convention, adopted by IMO in 2011 – the first such global agreement to apply to an entire industrial sector – new ships delivered from 2025 must be at least 30% more CO₂ efficient than ships constructed before 2013.





Initial IMO Strategy on Reduction of GHG Emissions from Ships



Adopted on 13 April 2018 (key extracts)

Vision

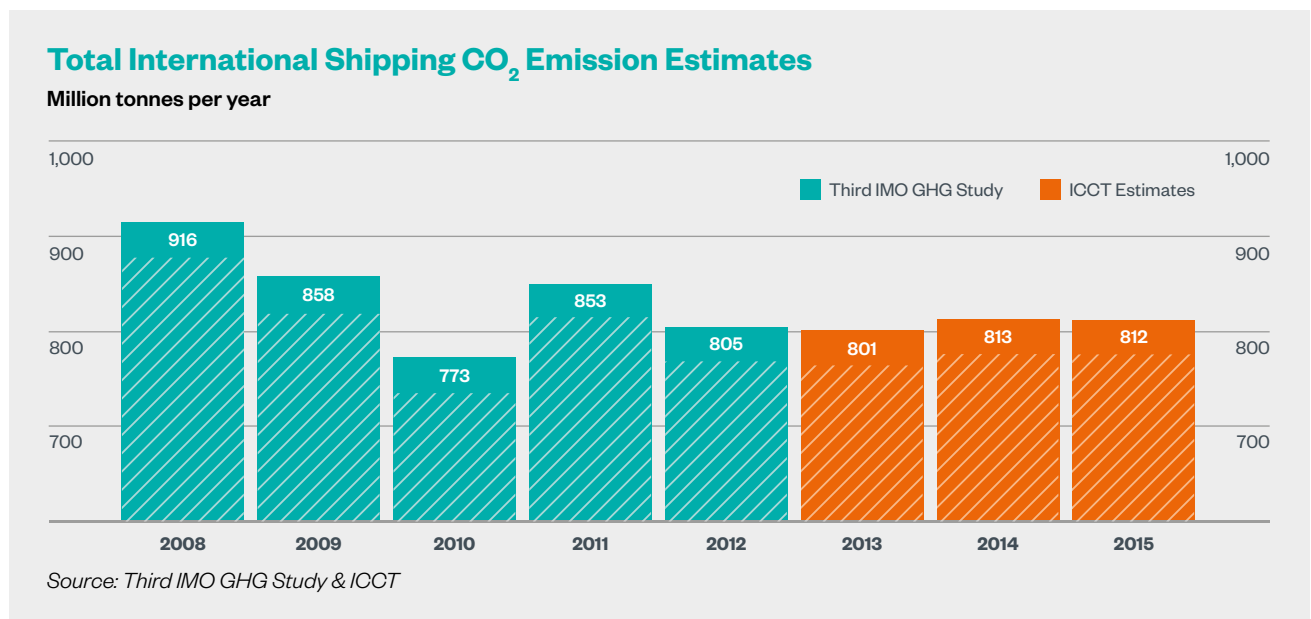
IMO remains committed to reducing GHG emissions from international shipping and, as a matter of urgency, aims to phase them out as soon as possible in this century.

Levels of Ambition

- 1. Carbon intensity of the ship to decline through implementation of further phases of the energy efficiency design index (EEDI) for new ships**
To review with the aim to strengthen the energy efficiency design requirements for ships with the percentage improvement for each phase to be determined for each ship type, as appropriate;
- 2. Carbon intensity of international shipping to decline**
To reduce CO₂ emissions per transport work, as an average across international shipping, by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared to 2008; and
- 3. GHG emissions from international shipping to peak and decline**
To peak GHG emissions from international shipping as soon as possible and to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008 whilst pursuing efforts towards phasing them out as called for in the Vision as a point on a pathway of CO₂ emissions reduction consistent with the Paris Agreement temperature goals.

(The strategy also includes a list of candidate measures for further CO₂ reduction that will be considered by IMO, including measures that could be implemented before 2023.)

➤ Reducing CO₂ A 'Paris Agreement for Shipping'



➤ ICS recognises that society demands even more. Shipping, by far, is already the most CO₂ efficient form of commercial transport. But the sheer scale and size of the industry means that annual emissions from international shipping currently account for about 2% of the world's total.

There is a mistaken perception among some climate policy makers that shipping has somehow 'escaped' being covered by the obligations of the Paris Agreement. While it is true that international shipping (and aviation) is not covered by the non-binding CO₂ reduction commitments that governments have made with respect to their national economies, the United Nations Framework Convention on Climate Change (UNFCCC) has determined that responsibility for addressing the sector's emissions clearly rests with IMO – the only body that can do this effectively because international shipping emissions cannot be covered under national quotas.

IMO is required to make progress reports to the annual UNFCCC Climate Change Conference, as it did at the latest Conference (COP 23) held in Bonn in November 2017, which ICS also attended. ICS participated at several side events in order to communicate the industry's ambitions for serious CO₂ reduction. The next UNFCCC Conference, in Poland in December 2018, will be particularly important as governments and IMO will be required to make full reports on progress made since the Paris Agreement was adopted in 2015.

The vision of the IMO strategy agreed in April 2018 – which is based on a proposal originally made by the industry – is to phase out CO₂ emissions from shipping as soon as the development of new fuels and propulsion systems can make this technically possible.

To reiterate, zero emissions is something which ICS believes is achievable, but only provided that governments acknowledge the enormity of this challenge and take active steps to help facilitate the development of new propulsion technologies and the massive investment in bunkering infrastructure that will be required if zero CO₂ fuels are eventually to be made available on a worldwide basis.

In the meantime, regardless of enormous projected increases in maritime trade – due to population growth and economic development – IMO has set a very ambitious goal of cutting the sector's total emissions by at least 50% by 2050 compared to 2008. In addition, for as long as shipping remains dependent on fossil fuels, IMO has now set a goal of improving the sector's efficiency by at least 40% by 2030 and by 70% by 2050.





Prior to the critical IMO meeting in April 2018, ICS – in cooperation with other industry associations – played a central part in persuading governments to develop this ambitious response to the Paris Agreement. This was initiated by an important submission which the industry made to IMO in early 2016, just a few weeks after the Paris Agreement was adopted. This was followed by various detailed industry submissions to IMO during 2017.

IMO Member States have now agreed on very high levels of ambition for the further reduction of the sector's total CO₂ emissions, which clearly set out a direction of travel towards zero CO₂ emissions. Indeed, these CO₂ reduction objectives are actually far more ambitious than the pace of reduction that will be delivered by the commitments that governments have so far made with respect to the world economy as a whole. According to UNFCCC, the world's total CO₂ emissions will continue to increase at least until the 2030s whereas the shipping industry's CO₂ is already on a trajectory of serious reduction, IMO having now agreed with the industry's suggestion that the baseline year for measuring shipping's emissions is 2008, when CO₂ emissions were at their highest.

Most importantly, IMO has also agreed a comprehensive list of potential candidate measures for achieving these real CO₂ reduction objectives, in the short, medium and longer term. Detailed consideration of these measures will begin during 2018, with a further dedicated meeting on CO₂ reduction planned before the end of this year.

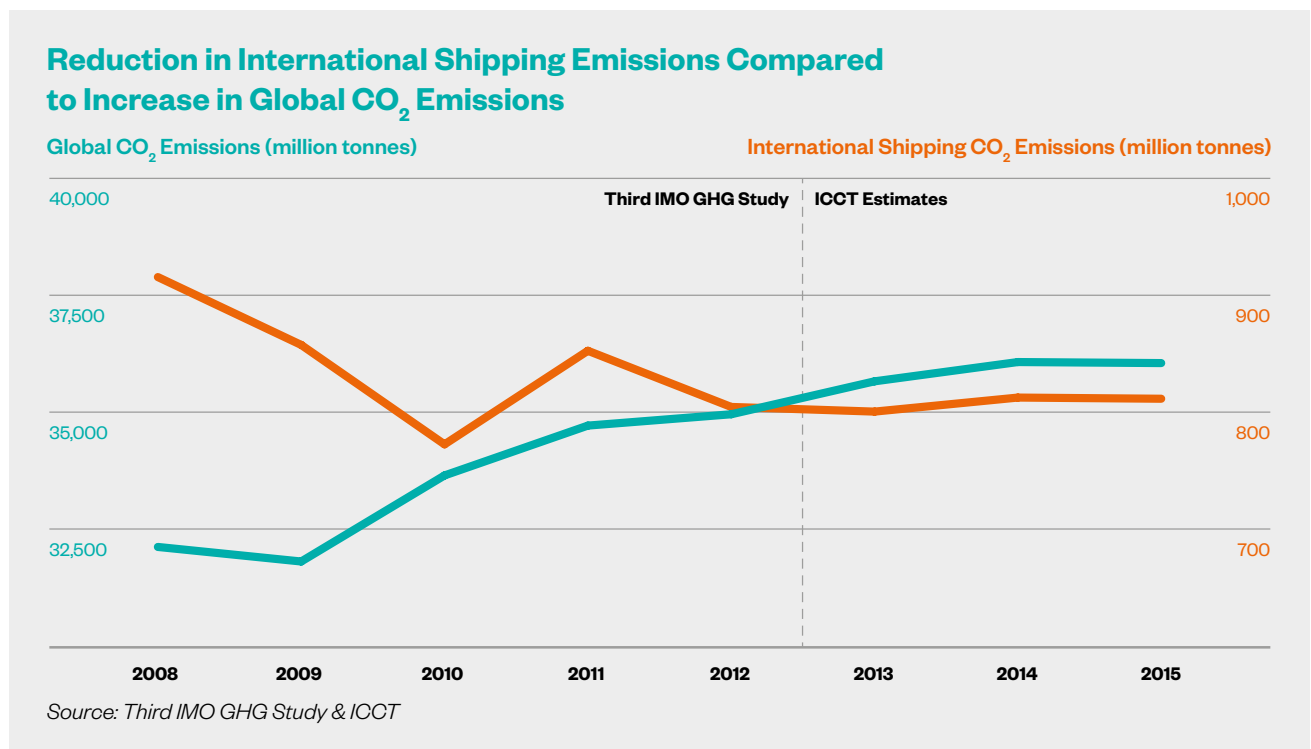
The list of candidate measures contains a number of proposals by governments for potential new regulations, some of which may prove controversial. These include mandatory speed restrictions, operational indexing of individual ships and, less controversially, consideration of further improvements to the existing Energy Efficiency Design Index (EEDI) that might apply to new vessels delivered after 'Phase 3' has been implemented in 2025. ICS member national associations will begin developing detailed input on all these proposals during the course of 2018.

Most controversial among the possible candidate measures is further consideration of applying some kind of Market Based Measure (MBM) to international shipping. ➤



UN Climate Conference (COP 23), Bonn, November 2017

► Reducing CO₂ A 'Paris Agreement for Shipping'



► The position of ICS is that it remains deeply sceptical of MBMs as a means of further incentivising CO₂ reduction. Fuel is already by far the largest cost for shipowners (far greater than the capital costs of owning a ship) and this is expected to increase dramatically as a result of the global IMO sulphur cap which will take effect in 2020. Shipowners already have all the incentive they need to explore every possible means of reducing their CO₂ emissions through technical and operational measures alone, as demonstrated by the impressive fuel efficiency improvements achieved since 2008.

However, in the event that IMO decides to develop an MBM, the clear preference of the global industry would be for a bunker fuel levy payable to some kind of IMO climate fund, with some of the funds deployed to support research into new low carbon technologies or to support the rollout of the expensive new bunkering infrastructure that will be required to supply zero CO₂ fuels, particularly in the ports of developing nations.

If IMO decides that an MBM is politically necessary, ICS believes that a fuel levy would be the mechanism least likely

to cause serious market distortion, as opposed to some kind of emissions trading system (ETS), something to which the industry is completely opposed. As discussed elsewhere in this Annual Review, ICS has therefore welcomed the decision by the European Union, in November 2017, not to incorporate international shipping into the existing EU ETS.

Despite continuing doubts about the desirability of an MBM, the member national associations of ICS are political realists and have therefore been involved in intensive discussions for the past two years about how a fuel levy system might conceivably work in practice, so that ICS will be in a position to come forward with detailed ideas, for discussion with IMO Member States, should this turn out to be necessary.

The adoption by IMO in April 2018 of an ambitious initial CO₂ reduction strategy is a major achievement, as it had to take account of the legitimate concerns of emerging economies, such as China, India and Brazil, about the potential impacts on maritime trade and their economic development, consistent with the UN's Sustainable Development Goals.



ICS recognises that the IMO strategy, as agreed so far, also involved significant compromise on the part of many EU Member States, as well as by many other nations, including some Small Island Developing States (SIDS) whose very existence is threatened by climate change.

It should be remembered, however, that this is only an initial IMO strategy, which will be further developed by IMO Member States before being fully finalised in 2023. It is possible that the current levels of ambition agreed by IMO will be revisited in the near future, taking account of the results of the next IMO Green House Gas Study, which is scheduled to be conducted in 2019, using information from the new IMO CO₂ Data Collection System and the fuel consumption data that will soon be provided by individual ships to IMO on a mandatory basis.

Nevertheless, it is very important that the high levels of ambition that have already been established by the initial IMO strategy will be viewed by climate policy makers as a substantial step, sufficient to discourage unhelpful unilateral action, not only by the EU, but also by nations such as Canada, and individual U.S. States such as California and New York.

Unilateral or regional responses on this issue would lead to disastrous consequences for the global maritime regulatory regime which is vital for underpinning the provision of efficient maritime services. But most importantly, tackling CO₂ from shipping is a global problem. The dramatic move toward zero CO₂ emissions from internationally trading ships can only be achieved successfully through measures that are adopted by IMO for global application.



The Global Sulphur Cap is Coming

One of the most immediate and pressing challenges facing ship operators is the impact of the global cap on the sulphur content of marine fuel, which will come into full effect on 1 January 2020.

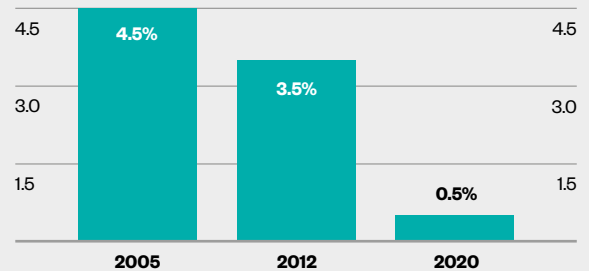
In April 2018, the IMO MEPC re-confirmed that this major regulatory change will definitely go ahead in 2020 as scheduled, despite continuing questions in some informed quarters as to whether sufficient quantities of compliant fuel will be available in every port worldwide.

The 2020 global sulphur cap is the requirement under amendments to Annex VI of the IMO MARPOL Convention, agreed in 2008, for all ships trading outside of sulphur Emission Control Areas (ECAs) to use fuel with a sulphur content not exceeding 0.5%. This is a reduction from the current permitted maximum of 3.5%.

This improvement in fuel quality will bring about huge benefits to human health in coastal areas not already protected by ECAs, where the majority of the world's population lives, as well as reducing shipping's impacts (albeit relatively small) on acidification of the ocean. This new IMO regime is fully supported by the global industry as represented by ICS. But the economic impacts of the resultant additional fuels costs are likely to be significant.

Global Sulphur Cap

Sulphur content of fuel permitted outside Emission Control Areas



The cost of low sulphur fuels is typically about 50% more than the cost of residual fuel, most commonly used by ships today when operating outside of ECAs that apply in North America and North West Europe, in which fuel with a sulphur content of 0.1% or less must be used. In response to the greatly increased demand for low sulphur fuels that will now arise in 2020, the cost of bunkers compared to the current price of residual fuels is likely to increase considerably.

Even if the cost of oil stays at the lower levels which have applied since the significant fall in prices in 2015, this mandatory switch to low sulphur fuel in 2020 could mean that bunker costs for the majority of ship operators could return to their 2014 peak. If, in 2020, oil prices remain at around US \$70 a barrel, it has been estimated that the





differential between compliant low sulphur and the current cost of residual fuels could spike by as much as US \$400 a tonne.

Following the implementation of the 0.1% sulphur requirements within ECAs in 2015, there was little evidence of deliberate non-compliance, and the few non-conformities identified were due largely to technical problems during the fuel switchover. However, implementation of the global cap – including ensuring uniform compliance in trades away from major shipping lanes – is likely to prove far more complicated, especially if compliant fuels are in short supply and there is indeed a significant price spike in 2020.

ICS has no reason to think that there will be anything other than full compliance by the vast majority of shipping companies. But in view of the huge sums of money involved, this has generated speculation about the potential for non-compliance and the possibility of unfair competition and market distortion.

In November 2017, in conjunction with other industry associations, ICS therefore made an important submission to IMO which proposed a ban on the carriage of non-compliant fuels when the global cap is implemented in January 2020. The intention is to help ensure that the IMO sulphur cap will indeed be successfully implemented worldwide, providing governments with a valuable additional tool to verify full compliance.

In theory, in the margins of the industry, a ship registered with a flag state that is not a party to MARPOL Annex VI and which trades to a port located in another non-party, could potentially have evaded compliance. But with the carriage ban proposed by the industry, any such ship can now be inspected for compliance as soon as it enters the majority of Port States which are signatories to the global cap. These Port States can then apply the IMO principle of 'no more favourable treatment', whereby compliance can still be checked even if the flag state has not yet ratified Annex VI. Data about any non-compliance will then be published by regional PSC authorities, exposing the vessel to further targeted inspections and reducing the ship's ability to secure future charters.

This industry submission, which was also supported by a wide cross section of environmental NGOs, was considered by the IMO MEPC in April 2018. Encouragingly, the industry proposal was accepted in principle by IMO Member States, with a new amendment to MARPOL scheduled to be adopted for entry into force by March 2020.

As previously requested by the industry, IMO continues to consider other preparatory and transitional issues that need to be urgently addressed before January 2020. These include the use of Fuel Oil Non Availability Reports (FONAR) and the development of standards for the new 0.5% fuels that might be used to comply with the sulphur cap. Disappointingly, however, it seems that the International Organization for Standardization (ISO) is not expected to complete the development of these important standards until sometime after 2020. ➤

➤ The Global Sulphur Cap is Coming

➤ Although it is impossible to predict with certainty what will happen in 2020, there seems to be growing consensus within the bunker industry that sufficient quantities of compliant fuels will probably be available, although they are likely to be expensive. While the industry is committed to full and immediate implementation, there could possibly be an initial period of 'teething problems' when compliant fuel might not always be available in every port until it can be shipped in from elsewhere.

This is more likely to be a problem for ships in tramp trades which call at many more port destinations which are not always known in advance. But if 0.5% sulphur fuel is not available in every port worldwide, ships will still be required to use other compliant fuels such as 0.1% distillate.

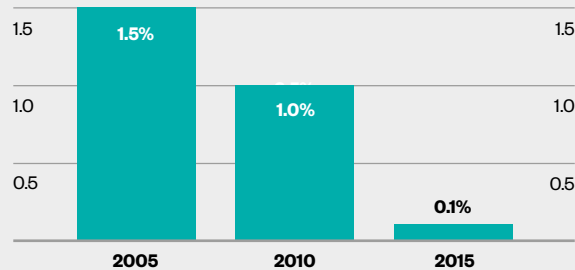
It is currently understood that perhaps about half of the low sulphur fuels that will be available in 2020 may have a sulphur content of 0.5% – many being blends of distillate and residual fuels – with the remainder being 0.1% fuels as currently used in Emission Control Areas. Although opinions differ, it is possible that the price differential between 0.5% and 0.1% fuel could in fact be relatively small.

Concerns have also been raised about fuels, including blends, which will be compliant with the 0.5% sulphur limit but which may differ in their composition from supplier to supplier and port to port, potentially leading to compatibility and mechanical problems. If the price differential with 0.5% fuels is indeed small, it has been suggested that some ship operators may initially elect to purchase 0.1% distillates even when slightly cheaper alternatives are available, especially



IMO Agreement to Reduce Atmospheric Pollution from Ships

Sulphur content of fuel permitted inside Emission Control Areas



if much of their trade takes place within ECAs and they wish to avoid fuel switchover problems. But this will not become fully clear until after 2020 when the true cost of compliant fuel is known.

Another factor in 2020 will be the take up of alternative compliance options which are permitted by MARPOL. However, except for blue chip operators, finance from banks for retrofitting existing ships is still in short supply. Even though 2020 is less than two years away, this may still be seen as involving too much risk for many lenders.

Although the use of LNG and exhaust gas cleaning systems ('scrubbers') is predicted to increase, especially after 2020, for the immediate future this will almost certainly only involve a small percentage of the fleet, with the vast majority of ships expected to comply in 2020 using fuel oil with a sulphur content of 0.5% or less.

Now that the 2020 date is fast approaching, ship operators, oil refiners and bunker suppliers must urgently prepare for implementation. The oil refining industry in particular will need to take important decisions to ensure that sufficient quantities of compliant fuel will indeed be produced well in advance of 1 January 2020. But governments need to monitor this carefully, since it may be in the refiners' commercial interest to keep the supply of compliant fuel as tight as possible. It is important to remember that the IMO decision in 2016 to proceed in 2020 focused entirely on the likely availability of compliant fuel and took no account of the possible purchase price.



2020 Global Sulphur Cap

Implementation issues being addressed by IMO at the request of the shipping industry

- 1** Preparatory and transitional issues that may arise with the shift from the 3.5% sulphur limit to the new 0.5% limit
- 2** Impact on fuel and machinery systems resulting from the use of fuel oils with a 0.5% sulphur limit
- 3** Verification issues and control mechanisms and actions that are necessary to ensure compliance and consistent implementation
- 4** Development of a standard format (a standardised system) for reporting fuel oil non-availability that may be used to provide evidence if a ship is unable to obtain complaint fuel oil
- 5** Development of guidance to assist Member States and stakeholders in assessing the sulphur content of fuel oil delivered for use on board ship, based on the means available for verification that fuels supplied to ships meet the specified sulphur limit as stated on the bunker delivery note
- 6** Requesting ISO to consider the framework of ISO 8217 to maintain consistency between the relevant ISO standards on marine fuels and the implementation of the sulphur cap
- 7** Any consequential regulatory amendments and/or guidelines necessary to address emerging issues



Implementing the IMO Ballast Water Convention

On 8 September 2017, 13 years after its original adoption, the IMO Ballast Water Management (BWM) Convention finally entered into force worldwide.

The purpose of this Convention is to address the serious problem of invasive marine organisms which if inadvertently transported in ships' ballast water tanks can have damaging impacts on local ecosystems.

ICS has always fully supported the intention of the BWM Convention. Following its entry into force, the industry is at last able to focus fully on implementation and making this a success. It is now in everyone's interest to ensure that the new IMO regime will deliver genuine environmental benefit, commensurate with the great collective cost of installing the required new treatment systems across the entire world fleet, which is estimated to be around US \$100 billion.

While the enhanced environmental protection that will be achieved by the Convention is rightly seen by governments as of the utmost importance, the implementation of the new regime will also have profound economic impacts on the structure of the industry.

Apart from the economic cost (US \$1-5 million per ship), meeting the Convention's requirements still presents ship operators with a serious challenge because of the expected lack of shipyard and manufacturing capacity needed to retrofit the new treatment systems on around 40,000 vessels over a five year period.

These decisions are all the more difficult if the ships are approaching the end of their typical 25 year life. Many shipowners will now need to make important decisions about whether to retrofit the expensive new equipment or, because of the potentially prohibitive cost, send older ships for early recycling instead. The huge importance of this issue is why ICS, for the past decade, has had to dedicate such a significant proportion of its resources towards helping to make the Convention fit for purpose in discussion with governments.

Ballast water treatment has proved to be one of the most complex and controversial pieces of technical regulation ever adopted by IMO. The BWM Convention was adopted under huge political pressure back in 2004, when the technology required for ships to treat millions of gallons of ballast water simply did not exist outside of a laboratory. As a consequence, the enormous challenges of installing completely unproven systems were dramatically underestimated, first by the manufacturers and then by IMO Member States.

The smooth rollout of the Convention should be greatly assisted by an important decision, in July 2017, by the IMO Marine Environment Protection Committee (MEPC). This





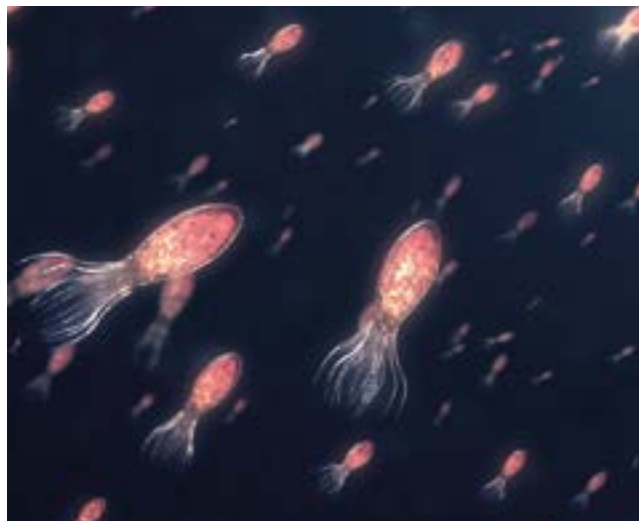
adjusted the Convention's implementation dates so that existing ships (i.e. ships constructed before 8 September 2017) will not be required to install treatment systems until the date of their first International Oil Pollution Prevention (IOPP) renewal survey on or after 8 September 2019. This significant IMO decision was the culmination of many months of persuasion and liaison by ICS with supportive governments, and was probably the best compromise that could realistically be achieved, compatible with providing ship operators with as much certainty as possible.

This IMO decision on implementation dates is a victory for common sense. It should provide necessary time for shipping companies to identify and invest in far more robust technology to the benefit of the environment, as they will now be able to select equipment for existing ships that has been type-approved in accordance with the more stringent standards that IMO adopted in 2016. The industry should therefore have greater confidence that the systems which ships are required to install will indeed be fit for purpose in most operating conditions, which was not the case with several of those systems approved using the original IMO guidelines.

A critical issue, which delayed entry into force, was that the type-approval guidelines initially adopted by IMO for the new treatment systems were insufficiently robust to ensure that shipowners could have any confidence in the very expensive equipment which they would be required to install. Until these complex problems could be satisfactorily resolved, most major flag states were correctly reluctant to ratify the Convention.

In order to help bring the Convention into force – as the alternative would have been a patchwork of unilateral regulation, as demonstrated by the different regime that has already been adopted by the United States – ICS, in co-operation with other industry associations, therefore had to play a central role in helping IMO to develop complex solutions to a huge array of technical and administrative problems.

In 2016, following a major industry campaign led by ICS over several years, the IMO MEPC finally adopted revised and more robust type-approval standards. These have now been included in a new mandatory Code for Approval of Ballast Water Management Systems which was adopted in April 2018. >



► Implementing the IMO Ballast Water Convention



► IMO has recommended that Administrations apply these revised standards as soon as possible. However, they will not become mandatory for new system approvals until 28 October 2018, and only systems being installed after October 2020 will be required to have been approved in accordance with the new IMO Code. Shipping companies have therefore been strongly advised by ICS to put pressure on manufacturers by only considering treatment systems for installation that have been certified in accordance with the revised IMO type-approval standards.

There are many other significant changes to the IMO ballast water regime which ICS has had to persuade governments to agree in recent years, in order to make the Convention ready for ratification. In addition to overcoming resistance from equipment manufacturers to making the IMO type-approval guidelines fit for purpose, these have included: the removal of the original fixed implementation dates; the removal of a requirement to install equipment by the ship's next intermediate survey (if this came sooner than the next renewal survey); and – most important – measures to ensure that 'early movers' would not be penalised by Port State Control.

The industry has also had to persuade IMO to adopt fairer Port State Control guidelines relating to the timing of sampling during inspections, and guidance to coastal states on what should be expected of ships operating in areas where ballast water exchange cannot be conducted in accordance with the Convention (as required since September 2017 until treatment systems can be fitted).

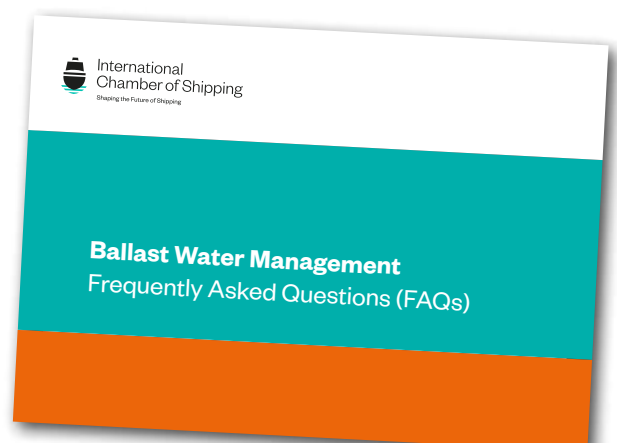
Some of these issues are still not yet fully resolved, with Canada and the United States, in particular, continuing to question what has now been agreed by IMO.

In August 2017, ICS developed some comprehensive advice and information for shipping companies in the form of answers to 'Frequently Asked Questions'. These are available via the ICS website and are being updated regularly.

In 2017, IMO adopted amendments to the Harmonized System of Survey and Certification (HSSC) guidelines, including an additional initial survey item related to the issuance of the International Ballast Water Management Certificate (IBWMC). The additional survey item requires verification by the Administration that a biological efficacy test of each ship's ballast system has been carried out following installation, and that documented evidence is provided to show compliance of the treated ballast water discharged from the system through sampling and analysis. During 2018, IMO will develop additional guidance relating to the test at the time of commissioning.

Every BWM system will now have to be shown to be biologically effective prior to issuance of the IBWMC. This should give owners the opportunity to verify that biological efficacy has been tested and complied with at the time of the system's installation, and to take appropriate action if necessary.

The situation continues to be further complicated by the United States which is not a Party to the BWM Convention and is unlikely to ever become one. The U.S. has unilaterally adopted its own ballast water regulations, with which ships trading to the U.S. must already comply.





In April 2018, there were six U.S. Coast Guard (USCG) approved systems for owners to select from (with seven more pending approval), compared to around 60 systems currently approved under the IMO regime. This is an improvement on the situation at the end of 2016 when no systems had been fully approved for use by ships trading to the United States, although its regime started being enforced during 2014. But obtaining extensions to the date when ships are required to install and use a USCG approved system is becoming more complex, with owners now being required to apply to the USCG on a ship by ship basis, including the provision of information on actions taken to obtain an appropriate system and plans in place for future compliance.

The BWM Convention, as originally drafted, was clearly not fit for purpose. All of those changes achieved by ICS in negotiation with IMO Member States (in conjunction with other industry associations) were necessary, justified and reasonable, in order to ensure that entry into force would not be further delayed.

But now that the Convention has entered into force it is most important that shipping companies do not anticipate any further relaxation to the IMO implementation schedule.

Throughout 2018, ICS will continue to seek solutions to further difficulties that arise, as well as the ongoing problems created by the different regime that will continue to apply in the United States.



The Shipping Downturn Ten Years On

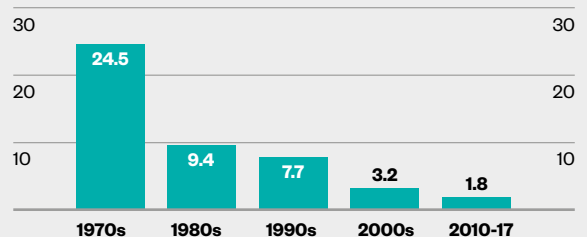
The primary function of ICS is to represent the global industry with its regulators, who may not always fully appreciate the very difficult economic circumstances in which many shipping companies continue to operate.



This lack of understanding among governments may in part be due to there being no evidence of any negative impact on safety or environmental performance which, despite the intense pressure to reduce operating costs, has continued to further improve.

Reduction in Major Oil Spills

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



Source: ITOPF

Economic prospects in 2018 certainly seem brighter compared to 2016, which for many ship operators was perhaps one of the most challenging of recent years. Ten years after the beginning of the major shipping downturn which followed the 2008 financial crisis, there is a growing perception in many shipping sectors that the worst might finally be over. Shipping companies have worked hard to ensure their survival by delivering impressive efficiency improvements, dramatically slashing fuel consumption and using the latest information technology to further improve the quality of their service.



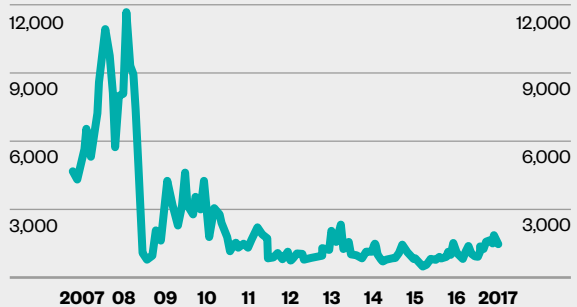
There has also been considerable consolidation through mergers, particularly in the liner sector. There were around 20 major containership operators in 2016, and this number will reduce to about twelve during 2018, with further mergers anticipated. While there is still far less market concentration in other trades, there have also been mergers in the tanker and dry bulk sectors.

The fortunes of shipping are inextricably linked to the global economy which, despite increasing political uncertainty, appears to be enjoying one of the best years seen during the past decade. GDP growth seems to be increasing in most major economies, with consumer confidence and the strength of purchasing managers' indices (including for the EU) being welcome signals. The outlook for 2018 therefore appears to be positive for the main segments of the industry – dry bulk, tankers and containerships – with the important caveat that shipowners must avoid their tendency towards over ordering new tonnage.

What has been positive for dry bulk and containership trades, in particular, is that freight rate improvements have been largely demand driven. But while the tanker segment has also benefitted from high demand, rate improvements continue to be held back by an excessive supply of tonnage.

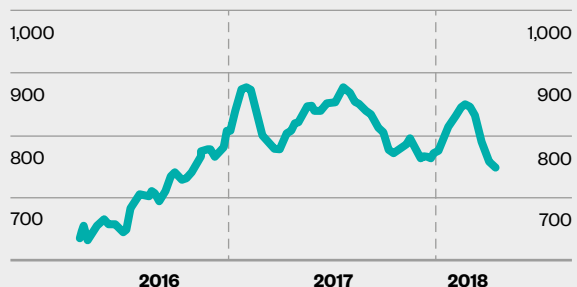
Given the industry's difficulties, it is easy to overlook that demand for maritime transport has actually increased by around 30% since 2008, with the annual volume of cargo carried by sea now exceeding 10 billion tonnes. The problem is that the industry has continued to struggle with serious overcapacity. ▶

Baltic Dry Index



Source: The Baltic Exchange

China Containerised Freight Index



Source: Shanghai Shipping Exchange

➤ The Shipping Downturn Ten Years On

➤ The reasons for this chronic overcapacity are complex. Much tonnage was ordered when freight rates hit their peak before 2008. But the problem has been complicated by the understandable reluctance of many lenders to accept the dramatic impact on their balance sheets of uneconomic ships being sent for early recycling before their loans have been fully repaid.

The current and clear need to recycle a vast number of ships poses something of a dilemma. The shipping industry is an ecosystem, and to make the economics 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 will also do little for environmental sustainability.

National state subsidies to encourage ship recycling might have superficial attractions but they risk distorting global markets, and can be counterproductive if they are conditional on the recipients ordering more tonnage at national yards – which is the situation that prevails in major shipbuilding nations, such as China and Korea. The reluctance of governments in Asia, where the vast majority of ships are built, to address overcapacity in the shipbuilding sector remains a serious issue.

In many trades there is still surplus capacity. But while showing restraint might clearly serve the collective best interest of the industry, this may not always be the case for individual operators who will often see investment opportunities which rationally appear to justify ordering new vessels.

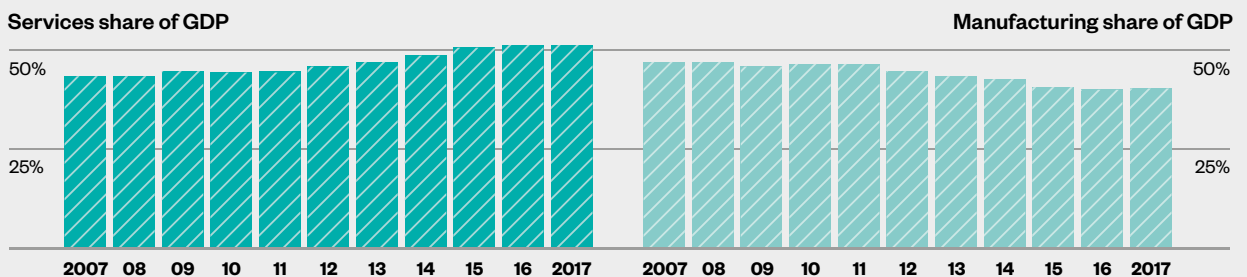
As well as the temptation to over order as demand begins to improve, decisions about when to recycle older ships are fundamental to the equation. The good news is that a number of important regulatory uncertainties which have complicated decisions about when best to dispose of older ships are finally being resolved. This includes the entry into force of the IMO Ballast Water Management Convention in September 2017 and the clarity at last provided by IMO with regard to its implementation dates. And while the precise cost of compliance with the IMO sulphur regulations is still unknown, the situation should become clearer after January 2020 now that IMO has confirmed that the implementation date of the global sulphur cap is irrevocable.

Although shipping has not yet fully recovered from the impact of the 2008 financial crisis, sluggish growth in many OECD economies was partly compensated by the impressive growth in demand for shipping from China and other emerging nations.

However, while GDP growth in China during 2017, at almost 7%, was a slight improvement on 2016, this is still significantly below the average growth of around 10% per annum recorded since 1989. Moreover, as the Chinese economy continues to mature, an increasing proportion of this GDP growth is actually due to the expansion of service industries, rather than manufacturing or infrastructure development which does not generate the same demand for shipping.

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

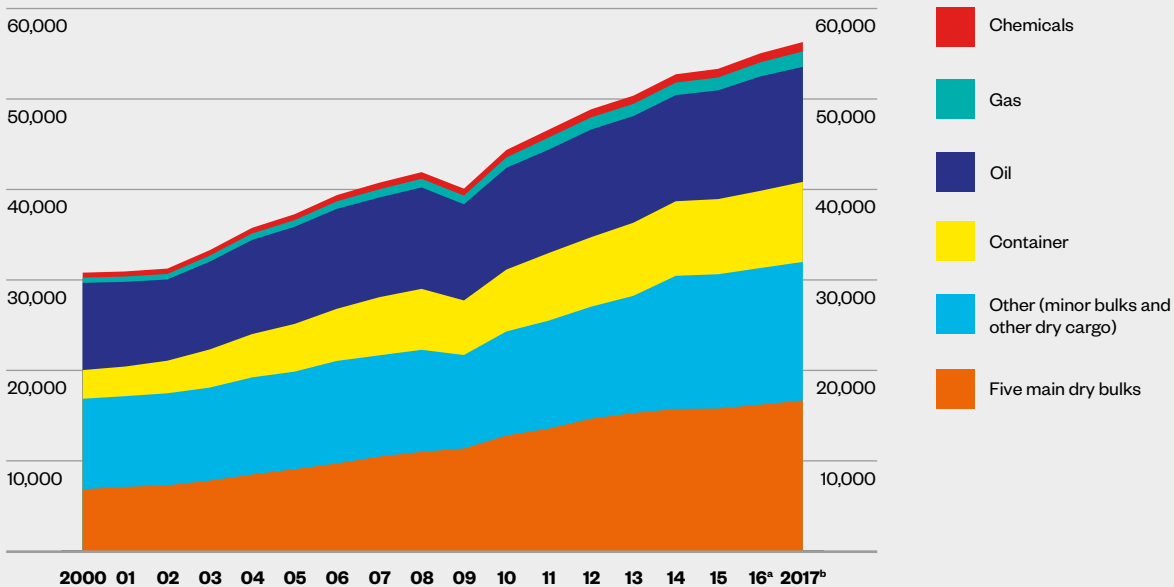


Source: National Bureau of Statistics



World Seaborne Trade

Billions of ton-miles



Source: UNCTAD based on data from Clarksons Research

^a Estimated ^b Projected figures

Prior to 2008, the industry had become accustomed to increases in maritime trade being a significant multiple of global GDP growth. But this ratio between demand growth and GDP is now much smaller – especially when tanker trade growth due to changing patterns in the movement of energy cargoes is excluded (due to the impact of the U.S. shale revolution and the dramatic fall in oil prices since 2014).

Opinion is still divided on whether the rapid globalisation that has been experienced since about 1990 may have run its course, and whether the slower rate of trade growth seen since the 2008 crisis represents some kind of permanent structural change. It is unclear to what extent China's 'Belt and Road' initiative – vaunted to include Chinese investment in about 70 nations approaching US \$4 trillion – will actually create significant additional demand for shipping services. It is also uncertain whether the massive infrastructure development promised by President Trump in the United States will ever materialise.

Fresh uncertainty was added in March 2018 with the announcement by President Trump of his intention to impose tariffs on steel and aluminium imports and – in response to immediate threats by the EU and China to apply retaliatory measures – his suggestion that these might be extended to automobile imports too. Whether this war of words between the U.S. and its major trading partners will develop into a genuine trade war, which could have damaging impacts on shipping markets, remains to be seen.

Leaving aside the possibility of a trade war, 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. Most importantly, shipping companies must show restraint with respect to ordering large numbers of new ships, in order to prevent stifling any new recovery just at the moment when it may be about to begin.

The Future of IMO

In March 2018, the UN International Maritime Organization (IMO) marked the 70th anniversary of its foundation at a special event at its London headquarters attended by Her Majesty Queen Elizabeth II.

ICS, as the first non-governmental organisation to be granted IMO consultative status in 1961, was proud to attend this celebration, and counts itself among IMO's greatest supporters. But as a good friend committed to IMO's future, it is appropriate for the industry to identify concerns before they evolve into more serious issues that could potentially diminish IMO's continuing role as a successful global regulator.

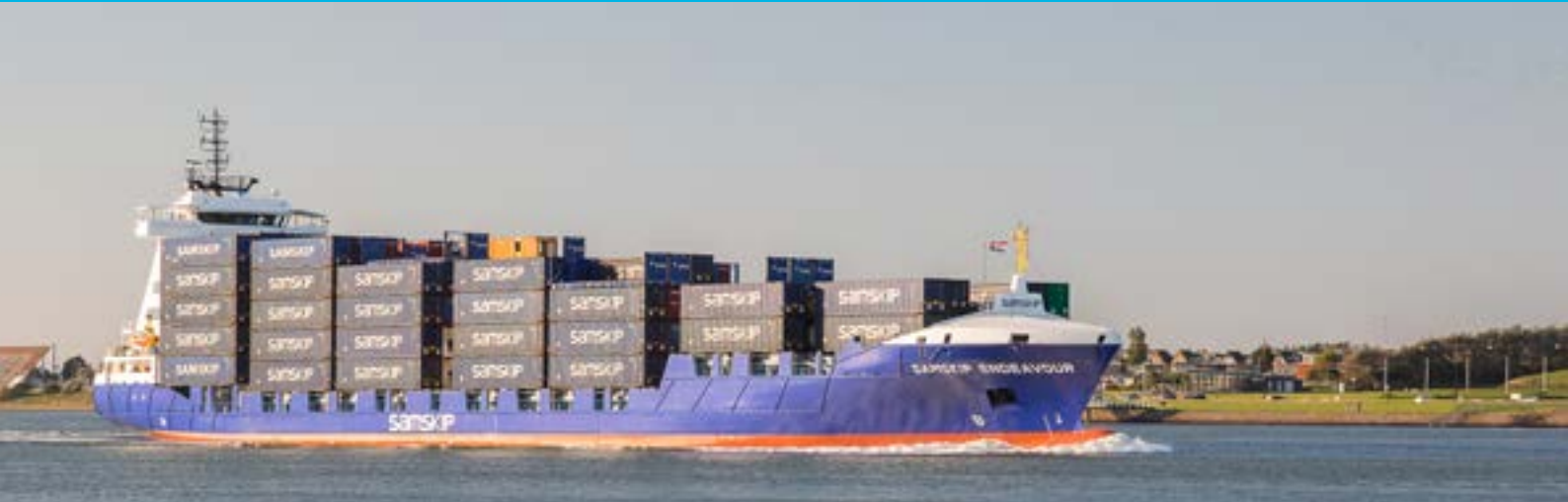
IMO is actually one of the smallest of the various United Nations agencies, but in many ways it provides a model of what can be achieved by governments when they decide to take international co-operation seriously. IMO is also a model of regulatory efficiency having developed a wide range of international Conventions governing every aspect of maritime safety and environmental protection, adopting rules and standards that are genuinely implemented globally across the entire industry, through a combination of flag state enforcement and a sophisticated system of Port State Control.

The two principal IMO instruments – the Safety of Life at Sea Convention (SOLAS) and the International Convention for the Prevention of Pollution from Ships (MARPOL) – have been ratified by just about every maritime nation, and now apply to virtually the entire world fleet of internationally trading ships.

The great success of IMO has been its ability to develop complex global regulations for international shipping through a process of consensus, with decisions largely taken on the basis of their technical merits, regardless of the serious political differences that inevitably exist among its 172 Member States.



HM Queen Elizabeth II and IMO Secretary-General, Kitack Lim, March 2018



The mantra of ICS is that shipping is an inherently global industry requiring global rules. The alternative would be chaos, commercial inefficiency and market distortion. The maintenance of the comprehensive global maritime regulatory framework, which is provided so successfully by IMO, therefore remains one of the shipping industry's top priorities.

If a ship is trading from Brisbane to Buenos Aires, the same rules governing navigational safety, seafarers' training standards – or the legal liabilities that will apply should something go wrong – need to be the same at both ends of the voyage. The greatest threat to the authority of IMO has always been the possibility of unilateral or regional regulation, the worst offenders historically being the United States and, more recently, the European Union.

Shipping operates in the ocean, a harsh environment that will always present a high degree of physical risk, as any seafarer confronted with rough weather will attest. Despite every best effort, maritime accidents, including those which may result in pollution, will regrettably sometimes continue to occur.

Unfortunately, when serious incidents happen while transporting about 90% of global trade, there can be a tendency for local politicians, who may lack any knowledge of IMO, to resort to 'knee jerk' reactions. The most dramatic

examples of such political pressure, demanding unilateral responses which greatly threatened the IMO regulatory framework, occurred after the 'Exxon Valdez' disaster in Alaska in 1989 and following the 'Erica' and 'Prestige' oil spills off the coast of North West Europe in 1999 and 2002 – although the authority of IMO managed to survive these severe pressures intact.

In considerable part due to the success of IMO regulations, the number of serious oil spills has reduced dramatically over the past 25 years, despite a massive increase in maritime trade (see page 22). But there is also a danger of unilateral action by governments with respect to other regulatory challenges.

This is particularly the case with efforts to reduce shipping's CO₂ emissions, as discussed elsewhere in this Annual Review. For example, the European Parliament continues to press for regional action, claiming unfairly that IMO is somehow not moving quickly enough, when the reality is that the international shipping sector is already decarbonising far faster than the rest of the world economy – despite the fact that the majority of its vital activity serves emerging economies, which also now control about half of the world merchant fleet.

Over the past 20 years or so, ICS has also observed an inexorable 'politicisation' of IMO debates. To some extent this has been due to the intrusion of the politics of climate change and the increasing focus of IMO, in recent years, on environmental issues. >

► The Future of IMO



► Many of the government delegates attending IMO meetings are now drawn from environment ministries rather than being transport officials with specialist technical knowledge of shipping. This is also perhaps a reflection of the evolving makeup of IMO, with many so called 'traditional' maritime nations (principally OECD countries) no longer having large numbers of officials with extensive experience of seafaring or technical issues. On the positive side, however, non-OECD nations are at last starting to fill the vacuum, as they send articulate representatives with strong shipping expertise and who are confident contributors to IMO debates.

Another positive feature of IMO is that, unlike at many other UN agencies, governments generally avoid joining up together as regional blocs, such as the 'Group of 77' developing nations which often present joint positions

at bodies such as the United Nations in New York. This more flexible approach at IMO allows specialist experts within individual government delegations to contribute meaningfully to policy discussions, while keeping an open mind about what might ultimately be in the best collective interest towards finding a solution to the particular issue which IMO is seeking to address.

ICS has noted that the Member States of the European Union (which currently control 28 seats at IMO) increasingly speak behind single positions, co-ordinated by the European Commission in Brussels. The danger in the future is that non-EU nations might similarly decide to emulate this approach and co-ordinate themselves into political blocs, which would have a very detrimental impact on the quality of IMO decision making.



If future IMO decisions on controversial topics are only pushed through because EU nations have acted as a bloc, there is a danger that other Member States may no longer feel the same sense of ownership of these decisions, reducing their commitment to the ratification and implementation of any new regulations that may be adopted.

IMO has contributed greatly to improving the shipping industry's safety record and its environmental performance. However, there is also 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.

ICS does not question the good intentions behind proposals that are made by IMO Member States. But ICS believes that consideration of future 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.

As a result of a significant submission on the theme of 'better regulation' made by ICS and the International Association of Classification Societies, this issue is now being addressed by the IMO Council. It is very much hoped that positive results from these important deliberations will emerge during 2018.



IMO in session in London

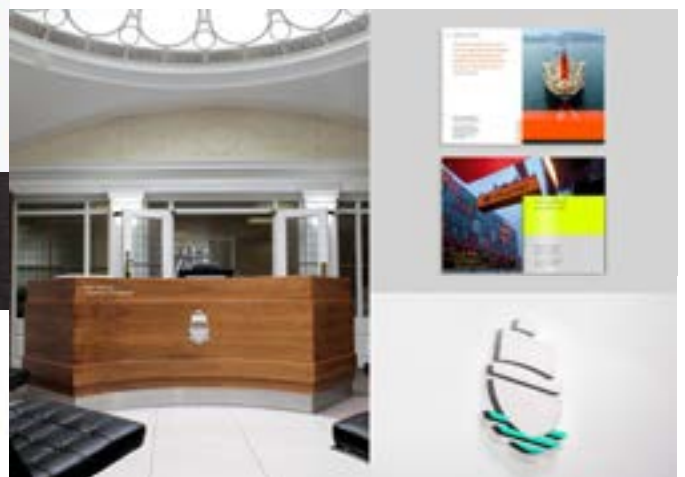
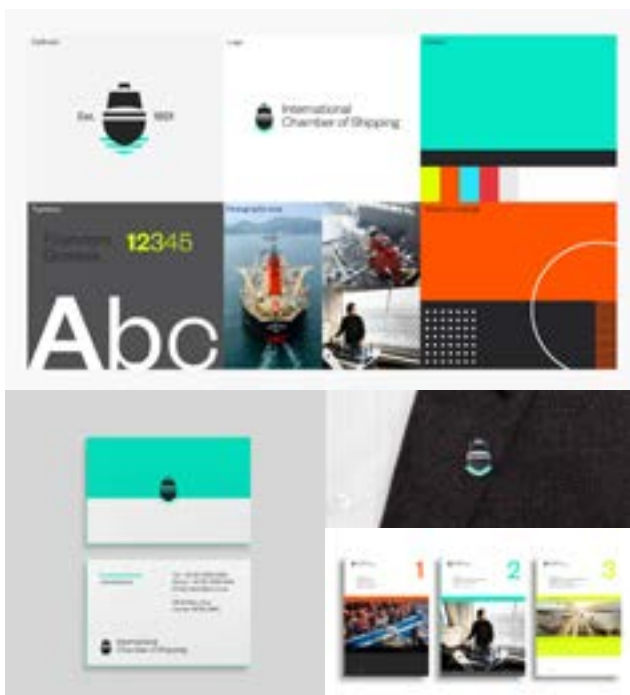
Shaping the Future of Shipping – A New ICS Brand

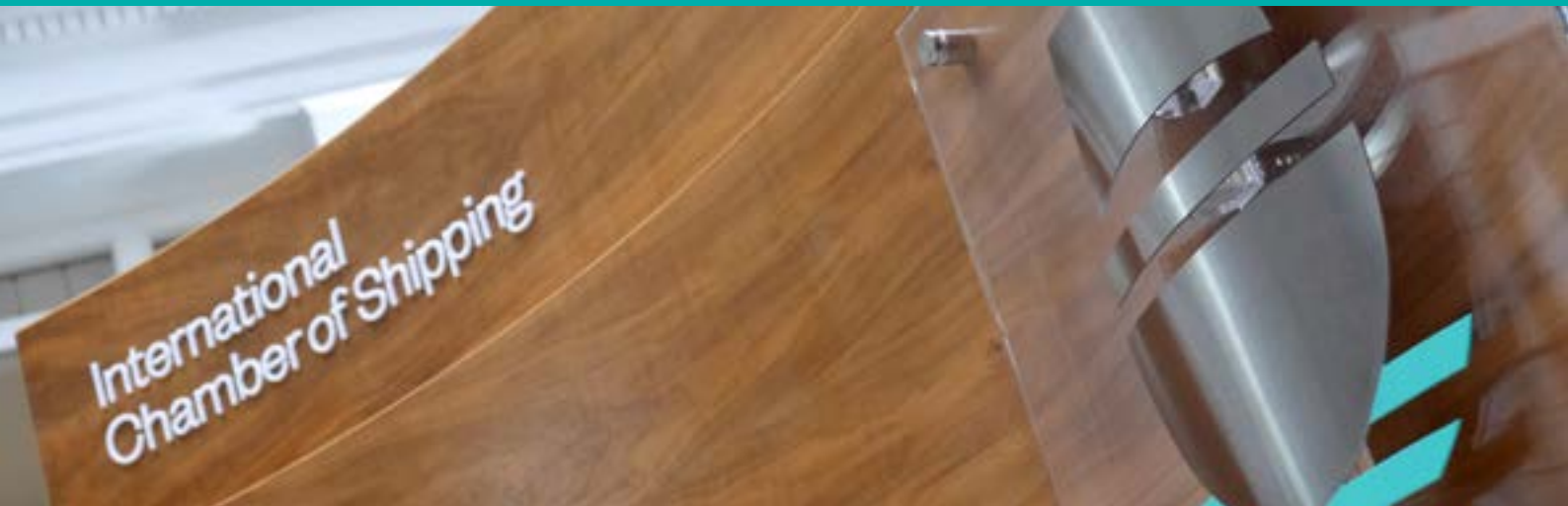
As ICS approaches its centenary year in 2021, it will continue to strive, in co-operation with its member national associations, to shape the future of shipping.

Over the next few decades, new technologies and environmental challenges will completely transform shipping – a vital industry that moves the essentials of life and around 90% of global trade. Together with its member national shipowners' associations, representing over 80% of the world merchant fleet, ICS is working to help shape a vision for the future in which shipping will become ever more efficient and environmentally sustainable.

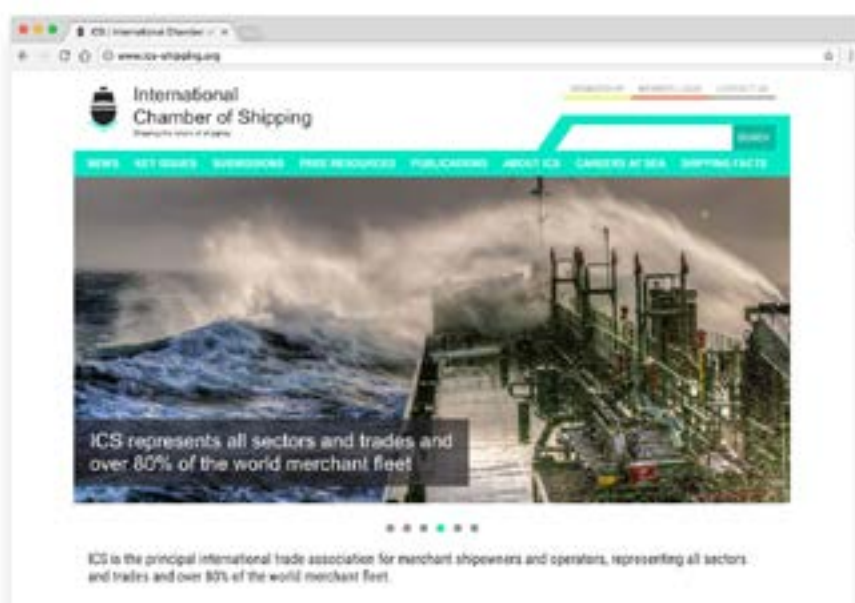
In September 2017, at the ICS International Shipping Conference in London, ICS Chairman, Esben Poulsson, launched an exciting new brand identity to better serve ICS's important role as the global industry's principal trade association.

The new ICS logo and brand have been developed with the assistance of the renowned international consultancy, Brand Union (now part of Superunion). Based on an update to the historic ICS logo, the fully refreshed brand pays homage to the iconic silhouette of a sailing ship that has been part of the ICS identity for nearly 100 years. Taking this heritage as a starting point, the symbol has been redrawn to be more contemporary in style, combining the hull of a modern cargo vessel with the sails of a traditional merchant ship.





The refreshed logo speaks of the larger shipping community with which ICS works on behalf of shipowners worldwide. The orientation has been rotated from profile to portrait making it stronger, prouder and more contemporary. The new brand identify also seeks to reflect ICS's role with a refreshed and vibrant colour palette, appropriate for a modern global trade association that represents one of the world's most dynamic industries.



As the voice of the global shipping industry, ICS will continue to influence all maritime policy developments which affect the interests of shipowners. ICS will do what it has always done best – representing the global industry with governments and maritime policy makers so that they fully understand the implications of their decisions.

To promote the new brand identity, ICS has produced a short film which can be viewed on the ICS website.

The Year in Review



International Chamber of Shipping

Shaping the Future of Shipping

Emissions Trading and Market Based Measures

In November 2017, the European Union decided that international shipping will not be incorporated into the EU Emissions Trading System (ETS) as part of the wider overhaul it is undertaking of its existing ETS for CO₂ emissions. This important decision – which followed intensive negotiations throughout 2017 between EU Member States, the European Parliament and the European Commission – is a very welcome development.

In conjunction with the European Community Shipowners' Associations (ECSA), ICS has consistently argued that the application of a regional EU ETS to all ships calling at EU ports, regardless of flag, would have been completely inappropriate and would have led to serious market distortion. Many ships would have simply diverted to non-EU ports (including potentially a post-Brexit United Kingdom) in order to minimise exposure to the EU system. Moreover, the unilateral application of the ETS to shipping could have generated trade disputes with China and other Asian nations, as happened several years ago when the EU tried unsuccessfully to impose its ETS on international aviation.

Notwithstanding the industry's doubts about the real CO₂ reductions that can be delivered via Market Based Measures (MBM), the only appropriate forum to have this debate is IMO. But the application of emissions trading – a system designed for heavy industries such as power generation and steel and cement production – would have been far too complicated to apply to an industry such as shipping which comprises thousands of companies, most of which are Small and Medium Sized Enterprises (SMEs). Given that many of the companies potentially included are located outside of the EU, this would have also greatly complicated efforts by the European Commission to reform the ETS which, since its establishment, has actually done little to reduce CO₂ emissions, other than to encourage those industries which generate significant emissions to relocate their activities elsewhere.

But this EU decision does not remove the pressure from IMO. The terms of the EU political agreement are that continued exclusion from some form of regional MBM may be dependent on IMO adopting some kind of alternative measure by 2023, which is understood to mean that the EU believes there should indeed be a global MBM. Moreover, the European Commission will be required to make an annual report to the European Parliament and EU Member States on progress being made by IMO. In effect this could mean that, if at any time, the European Commission deems progress insufficient, it may seek to justify the need to continue working on unilateral measures. Nevertheless, the EU decision in 2017



represents a recognition that IMO is the best forum in which to have the debate about the appropriateness or otherwise of applying an MBM to shipping.

Despite the industry's serious reservations about emissions trading, ICS is conscious that many other non-EU nations are now establishing carbon taxes and ETS systems as a policy tool. Regardless of the hostility of the Trump Administration to the Paris Agreement on climate change, many individual U.S. States have established carbon markets which are now linking up with Canadian provinces to form a single North American trading system. Many governments in Asia, most notably China, are also setting up emissions trading systems. It will therefore be vital to ensure that IMO continues to make real progress in addressing CO₂ from shipping, in order to discourage any suggestion that these local carbon taxes and ETS systems should be applied on a mandatory basis to visiting foreign flag ships.

ICS continues to assert that policy makers will achieve far more by focusing on additional technical measures and the development of new fuels that will deliver genuine CO₂ reductions from shipping. But compared to the nightmare of participating in regional ETS systems, a global fuel levy would clearly be preferable for the vast majority of shipowners should IMO eventually decide that MBMs are in fact required for international shipping.



Operational Efficiency Indexing

ICS remains strongly opposed to the concept of IMO establishing a mandatory system of operational efficiency indexing for application to individual ships. This is because of the potential inaccuracies of such a metric and the significant danger of market distortion.

CO₂ efficient ships are correctly rewarded by the market because their lower fuel costs make them more commercially competitive. The ultimate purpose of operational efficiency indexing, however, is to penalise individual vessels twice, on the basis of a theoretical and arbitrary operational rating that has little relation to the actual CO₂ emissions of the ship in real life.

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 changing trading patterns and the nature of charters over which the ship operator has little control.

The merits of operational efficiency indexing, which ICS strongly disputes (and which are very different to efficiency standards for ship design) will be debated further at IMO as it develops its CO₂ reduction strategy. ICS has therefore been frustrated by the European Union's decision to pre-empt these IMO discussions by proceeding with the implementation of its regional system for collecting data on individual ship emissions.

The EU Regulation on the Reporting, Monitoring and Verification (MRV) of CO₂ emissions applies to all ships trading to Europe, with the apparent intention of eventually developing this into some kind of regional operational efficiency indexing system.

In November 2017, ICS and ECSA submitted detailed comments to a European Commission consultation on the possible alignment of its MRV Regulation with the global CO₂ Data Collection System (DCS) that has now been established by IMO and which will be up and running by 2019. The EU had previously underlined its willingness to consider this alignment in order to help persuade non-EU governments to agree to the establishment of the IMO DCS.

The DCS adopted by IMO in 2016 was viewed as an acceptable compromise between those IMO Member States which are interested in having reliable information about fuel consumption and CO₂ emissions in order to inform the development of future IMO work, and those nations that wished to collect more detailed information about fuel efficiency and so called 'transport work'.

ICS support for this IMO compromise was given with the understanding that the DCS should be simple for ships to administer and primarily be based on fuel consumption. Most importantly, data relating to fuel consumption under the IMO system will remain anonymous. The purpose of the IMO DCS is to inform future policy making rather than to penalise or reward individual ships.

The EU MRV Regulation was adopted during 2015, and includes controversial provisions for the submission of data by ships on 'transport work' using different metrics to those now agreed by IMO in addition to data on fuel consumption. Moreover, the verification and certification method that has been developed by the EU will be overly complex. It seems that EU climate officials wish to ignore the tried and tested processes for statutory certification used in international shipping, and instead propose an additional administrative burden for ship operators.

But the greatest concern about the EU MRV Regulation 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. In short, the EU Regulation contains many of the elements which most IMO Member States chose to reject when adopting the global CO₂ Data Collection System.





The EU Regulation is meant to be fully implemented during 2018, one year before the IMO DCS. In its response to the EU consultation, ICS emphasised that nothing less than full alignment with the IMO DCS would be regarded as acceptable and that partial alignment would be seen as 'bad faith' by those non-EU States which had been encouraged to agree to the IMO system on the understanding that the EU would then fully align its unilateral regulation.

Disappointingly, the European Commission decided, in early 2018, to cancel a planned public meeting, having concluded that its consultation is now complete. Once the Commission has published its proposals for any change to the current MRV Regulation, these will then be subject to negotiation with EU Member States and the Parliament through the 'trialogue' process.

Despite going through the motions of a consultation, in reality it appears that the European Commission has no intention of recommending full alignment with the IMO system. Rather it is simply trying to identify what changes are necessary to make the EU regime compatible with that agreed by IMO. Unpalatable as this might be, this will probably require an acceptance by industry of the political reality that there will be two different reporting systems with different approaches to the verification of ship data.

However, ICS intends to maintain its strong objection to the publication by the Commission of data about individual ships, an objection which is shared by a number of non-EU Member States. ICS will also continue to oppose the development of any system of mandatory operational efficiency indexing that may be considered at IMO.



Developing Zero CO₂ Fuels



The vision of the shipping industry, also articulated by the IMO Green House Gas strategy adopted in April 2018, is to achieve zero CO₂ emissions as soon as the development of new fuels and propulsion systems will allow.

The huge technical challenges and research required should not be underestimated and, taking account of the new bunkering infrastructure that would also be required, the worldwide availability of zero CO₂ fuels could take at least another 30 years to deliver. However, ICS is now engaged in a number of initiatives with various industry stakeholders, including engine manufacturers and academics, to explore what the path to a zero CO₂ future might be.

The greater use of LNG and biofuels may well form part of the interim solution, supplemented by renewable sources such as wind and solar. But the ultimate goal of zero emissions can only be delivered with genuine zero CO₂ fuels that are both environmentally sustainable and economically viable.

Batteries

Advances in chemistry and technology could eventually mean that even large ocean going ships powered by batteries, using renewable sources of energy, could potentially become a viable zero CO₂ alternative.

Although currently only suitable for ships engaged on short voyages, there is potential to apply battery hybrid technologies widely used in the automotive sector. There are already ferry conversions and offshore support vessels using hybrid propulsion to optimise efficiency and reduce fuel consumption. Engines can run at a constant stable load, with batteries either boosting output or being recharged by the engines according to operating conditions.

In the longer term, there seems to be a genuine potential to utilise batteries as the primary source of power even for larger ships. Such batteries would probably be extremely large, but with appropriate adjustments to the ship the loss of cargo capacity could be offset by eliminating fuel tanks and conventional engine machinery.

Large batteries are currently expensive, and their high energy density imposes additional risk management requirements. The availability of sufficient rare metals to manufacture batteries with necessary power might also limit viability.

Adopting pure battery power operations – including more frequent port calls to permit recharging – will require radical adjustments to how ships are operated and careful route management. A global recharging infrastructure would be needed with access to electricity from renewable energy, capable of recharging extremely large and high capacity batteries quickly. But the challenges involved might not be insurmountable.

Hydrogen

Significant research is underway to develop energy efficient processes for producing hydrogen from water using thermochemical processes (unlike most commercially available hydrogen which is currently derived from fossil fuel feed stocks). The main challenges for hydrogen as a marine fuel are the cost of production, transport and storage. An appropriate bunkering infrastructure will also be needed.

Hydrogen can be utilised by direct combustion in a conventional engine. But fuel cells are more efficient and avoid NOx emissions. However, fuel cell stacks (the component where energy conversion takes place) have a finite life, which can be quite short in terms of the service life of a ship.

Hydrogen has a lower energy density than conventional fossil fuels and would need careful risk management. It has a very wide flammable range and very low minimum ignition energy, while embrittlement of metals might lead to leakages. However, hydrogen could be reformed on board ship from almost any feed stock in order to ease fuel storage and handling, and to minimise the safety risks

At atmospheric pressure, liquid hydrogen would need to be cooled below -252°C , significantly below the temperature required to liquefy LNG. Compressed gaseous hydrogen would probably be impractical on longer voyages.

Ammonia

As an alternative to liquefied or compressed hydrogen, ammonia could be used as a hydrogen carrier, avoiding the necessity for a cryogenic plant on board. (Methanol is also being explored as another possible hydrogen carrier.) Liquefaction of ammonia, at far higher temperatures than for hydrogen, is possible under pressure (similar to propane gas). Ammonia can also be stored as an aqueous solution which is safer.

Although 'green' ammonia production (like hydrogen) from renewable sources is more energy intensive than traditional processes, the increased availability of carbon free electricity generation could make this viable.

Ammonia could be used as a fuel itself, but technical difficulties mean it is more likely to be used with hydrogen fuelled systems after dehydrogenation, avoiding the cryogenic systems necessary for the carriage of liquid hydrogen or the limited voyage length required if using compressed hydrogen gas.

The principal concern about using ammonia as a marine fuel is safety. Exposure to gaseous anhydrous ammonia can cause caustic burns, lung damage and death. Some types of fuel cell stack are incompatible with ammonia, so that even very small quantities of ammonia remaining after reforming into hydrogen could seriously affect performance. Nevertheless, as with battery technologies, the challenges involved might not be insurmountable.

Nuclear

Nuclear fuels are a proven technology that could be readily applied to many merchant ships in order to eliminate CO_2 emissions completely. Only a small nuclear reactor would be required, with a life of many years, removing the need for ships to refuel or carry bunkers. Russia successfully operates a number of nuclear ice breaking vessels in the Arctic. However, it is currently assumed that widespread use of nuclear fuels is unlikely to be viewed as politically acceptable by the majority of governments, due to concerns about safety and security.



Shipbuilding Issues

In November 2017, over 100 representatives of classification societies, shipbuilders and shipowners – including ICS – came together in Nantong, China, for their annual Tripartite forum on shipbuilding and design issues of common interest. The 2017 meeting was hosted by the China Classification Society. CO₂ reduction, safety and cyber-security were at the top of the agenda.

At the end of two days of debate it was agreed that the industry collectively needs to design future ships differently, and be more technologically innovative to achieve CO₂ reduction goals and to counter the growing problem with cyber-security risks. The organisations present also reconfirmed their ongoing collaboration towards industry self-regulation as an important complement to the mandatory regulations developed by IMO.

The Tripartite forum agreed that the shipping industry urgently needs new ship designs, equipment, propulsion systems and alternative fuels to achieve the CO₂ reduction goals established by the Paris Agreement on climate change, and the specific objectives now established for international shipping by IMO as part of its GHG reduction strategy. It was agreed that the shipping industry needs to use all available technology to a much greater extent, and increase technological innovation to reduce CO₂ emissions to the ambitious level required by the international community.

However, the meeting confirmed that the safety of life at sea must always remain paramount, and considered concerns that new regulations governing ship design, aimed at further reducing CO₂ emissions, could potentially have adverse effects on the safe operation of ships. One example would be any legal requirements that led to a further reduction of engine power. The concern is that ships could get into difficulties during bad weather if engines are insufficiently powered, putting both the crew and the environment at serious risk.

The Tripartite forum reviewed how recent cyber-attacks in shipping have increased awareness of potential threats facing the industry. When it comes to ship design and construction, it was generally agreed that the industry needs to adopt new methods and standards to create more resilient digital systems on board. A more layered approach to a ship's digital system and greater segregation can increase safety, so that a single attack cannot readily spread to IT and other systems, both on board the ship and ashore.

It was therefore agreed that in advance of its next meeting in Korea, in autumn 2018, the industry partners represented at the Tripartite forum will work together to develop new design standards, which will help raise the resilience of ships' digital systems and make them more resistant to possible cyber-attacks.





Perfecting Garbage Management

While the vast majority of garbage found at sea originates from land, the provisions of Annex V of the MARPOL Convention mean it is no longer permitted for any merchant ship to dispose of garbage at sea because of the damaging effects on the marine environment. The generation of garbage must be minimised, recycling should be undertaken as a matter of course, and discharge to port reception facilities must be the norm.

In 2018, ICS will be publishing a new edition of its Guidance for the Preparation and Implementation of Garbage Management Plans. This revised guidance will be timely as new attention is given to the negative impacts of plastics on the health of the world's oceans. This has been given new impetus by the widely acclaimed BBC documentary series 'Blue Planet', and the high level UN Ocean Conference, which was held in New York in June 2017, at which ICS represented the global shipping industry.

The revised ICS Guidance is intended to provide those with responsibility for developing mandatory Garbage Management Plans with a better understanding of the intentions behind the IMO MARPOL requirements, to enable effective implementation and full compliance.

Garbage dumped at sea can actually be as harmful as oil or chemicals. Plastics in particular can take years to degrade, and fish and other marine life can easily confuse plastics with food. As well as doing great harm to marine life and threatening biodiversity, dangerous toxins can enter the food chain, ultimately being consumed by humans.

Any incident involving the illegal dumping of garbage may result in criminal convictions and heavy fines. This in turn may severely damage a company's reputation and impact its commercial performance. Ignorance of the regulations is

no defence. If a ship and its crew are seen to pose a risk of marine pollution, the vessel can be detained by Port State Control until any deficiencies are corrected.

Modern products commonly use materials, like plastic, which persist in the marine environment and therefore require special processing before disposal on shore. An essential feature, therefore, of the current IMO MARPOL regime is the requirement for ships to prepare and implement Garbage Management Plans.

The new edition of the ICS Guidance updates advice on best practice in line with the most recent changes to MARPOL Annex V. These increased the application of the regulations, expanding their scope by broadening the definition of what constitutes garbage and introducing a general prohibition of its discharge into the sea.

It is a fundamental requirement of MARPOL that IMO Member States should provide adequate facilities for the reception of waste from ships calling at their ports and terminals. However, the quality and availability of reception facilities worldwide is inconsistent. Indeed some developed countries actually provide poorer facilities than their developing nation counterparts, or offer services based on varying tariff structures which often do not encourage their use.

The provision of reception facilities and the extent to which ships use them are both factors influenced by cost. Many ports which have installed reception facilities find their facilities ignored in favour of ports which provide them at more favourable rates.

The new ICS Guidelines therefore emphasise the important need for ships to report inadequate reception facilities to their flag administration so that reports can be communicated to IMO.





The Migrant Rescue Crisis

While no longer dominating news headlines in the same way it did three years ago, the migrant rescue at sea crisis in the Mediterranean is still far from over, with tens of thousands of migrants still attempting to make the dangerous sea crossing in overcrowded and unseaworthy craft. Shockingly, according to the office of the United Nations High Commissioner for Refugees (UNHCR) a further 3,000 migrants lost their lives during 2017 (with over 5,000 lives lost in 2016).

The primary concern of shipowners is humanitarian, and ICS continues to promote the use of the industry Guidelines for Large Scale Rescue operations, whose development was led by ICS as a direct response to this terrible situation.

Despite increased efforts to clamp down on their activities, the main cause of the continuing large number of migrant deaths is the murderous practice by criminal smuggling gangs of sending hundreds of people to sea at the same time, making it extremely difficult for rescuers to save them all.

However, the dynamic in the Mediterranean has evolved. Notwithstanding the impact of the 2017/2018 winter period, the number of attempted crossings appears to have reduced, and there has also been a reduction in the number of migrant rescues being carried out by merchant shipping. Nevertheless, merchant ships are still routinely diverted by Rescue Co-ordination Centres (RCCs) to support large scale rescue operations. It also has to be remembered that the merchant seafarers involved are civilians, many of whom have been severely affected by the desperate situations which they have had to face.

Although the crisis and human suffering continues, the improving situation, so far as merchant ships are affected, is in part due to the EU border protection initiative 'Operation Sophia' which, although not constituted primarily with a Search and Rescue role, has conducted an increasing proportion of the rescue operations.

Also, although a number of NGO operations have been redeployed to other regions, a substantial number of rescues are still being carried out by these NGO operators – sometimes controversially, with concern among governments about the inappropriate communications they are alleged to have sometimes had with the people smugglers.

Italy in particular has worked closely with the Libyan authorities to establish a functional coastguard, and has provided both equipment and training to facilitate this. Within its territorial waters, the Libyan coastguard has itself now rescued, and returned to Libya, a significant proportion of migrants seeking to make the crossing.

Meanwhile, ICS continues to engage in the stakeholder process associated with Operation Sophia and participates in the 'SHADE-MED' meetings hosted by the Italian Navy. In April 2018, ICS hosted a workshop in support of SHADE-MED so that experiences of the industry and other stakeholders can be considered and shared. As a part of the process, ICS has agreed to encourage ship operators to cooperate, on a voluntary basis, in a new reporting programme which is intended to provide the military authorities with information about suspicious maritime activities.

ICS also continues to liaise with a variety of international fora whenever migration issues affecting shipping are considered. The United Nations is developing a 'global compact' on migration with leads being taken by UNHCR and the International Organization for Migration, and throughout 2018 ICS will be seeking to ensure that the shipping industry's ideas and concerns are fully addressed.

Although the significant reduction in the need for merchant ships to be involved in migrant rescues is welcome, the

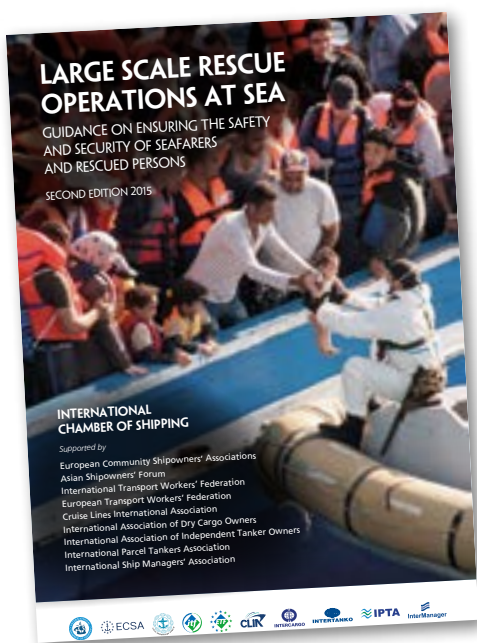


further development of the Libyan Coast Guard could present new challenges. Currently, Italy is the de facto authority for sea areas that in normal times (when there is a unified government authority) would be under the jurisdiction of Libya. Consequently ships that carry out rescues in these areas currently communicate with the Italian RCC in Rome and, importantly, are directed to disembark those rescued in Italy.

It is anticipated that the Libyan authorities will at some time declare a Libyan SAR region and that a Libyan RCC would then assume control of the sea areas involved. If the Libyan RCC directed a ship to disembark rescued migrants to Libya, the ship's Master could risk contravening the international principle of non-refoulement, as well as risking conflict with any rescued people who might object to being returned to Libya. ICS is carefully watching developments in dialogue with the relevant parties.

To their great 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. Tensions due to concerns about migration have been increasing across Europe. Some senior national politicians have been making statements to the effect that rescued migrants should not be permitted to enter Europe in the first place.

Following the elections in Italy in March 2018, ICS is following developments closely. As attitudes in Europe towards illegal immigration harden, the real fear is that shipping might face the prospect of prompt disembarkation of rescued persons being refused. In the meantime, until the root causes are resolved (war in the Middle East plus instability in many parts of Africa and the increasing effects of climate change on water supply) large numbers of migrants can be expected to continue their perilous attempts to enter Europe by sea.



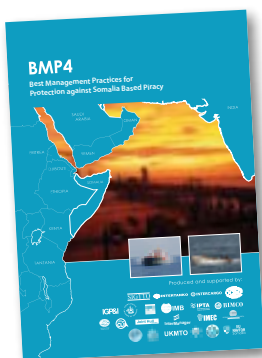
Piracy and Security

There are continuing signs that Somali pirates remain active in the Indian Ocean, but it is still too early to tell if there will ever be a resurgence of the level of piracy that occurred in the Indian Ocean between 2007 and 2012, when over 4,000 seafarers were taken hostage for ransom. However, ICS continues to emphasise the vital importance of ships and their crews remaining vigilant, and to continue applying the latest version of the industry Best Management Practices (BMP 4) which has played such an important part in the prevention of successful attacks.

In 2018, new security threats have emerged in the Southern Red Sea and Bab Al Mandab, due to the ongoing conflict in Yemen, with several instances of ships having been attacked.

In January 2018, the EU Naval Force (EUNAVFOR) and the NATO Combined Maritime Forces (CMF) advised that a range of threats, including sea mines and water-borne improvised explosive devices, are also potential risks in the area. ICS, in conjunction with BIMCO and INTERTANKO, therefore published interim guidance to help ship operators be aware of new threat patterns in the area, and how the required preventive measures differ from the more familiar threat of piracy.

The new industry guidance stresses the importance of using the Maritime Security Transit Corridor established by coalition navies, and the need to adhere to registration and reporting requirements with the Maritime Security Centre



– Horn of Africa (MSCHOA) operated by EUNAVFOR, as well as reviewing and updating risk assessments and plans to address these new threats. The guidance also includes advice specific to identified threat types including water-borne devices, and complements the guidance provided on piracy by BMP 4. This guidance is available, inter alia, on the ICS website.



ICS and other industry partners are working on the development of new global counter-piracy guidance that would also address issues in West Africa and South East Asia, while also incorporating advice on other maritime security threats. This should be available during 2018.

The reduction in Somali pirate attacks has largely been attributed to the combined success of measures taken by shipping companies, including BMP 4, and the protection that has been provided by military assets in the region. But the future maintenance of current levels of military protection against piracy has become problematic due to competing pressures on navies as a result of the political situation in the Middle East and elsewhere, as well as the need to respond to the migrant crisis in the Mediterranean.

The current mandate for the EU counter-piracy operation, Operation Atalanta, finishes at the end of 2018, and its future thereafter remains uncertain. ICS, with other industry partners, is in discussion with EUNAVFOR about transition planning for 2019 onwards, including what elements of the operation might be maintained, and what could be passed over to others such as the U.S. led CMF and other independent military deployers.

ICS is keen to see the continuation of the Maritime Security Centre – Horn of Africa, possibly with an expanded role. ICS is also advocating the possibility of a contingency EU force that could be called upon quickly in the event of sudden resurgence in pirate activity.

New STCW Training Regime

According to the latest manpower estimates conducted by ICS and BIMCO, there are currently over 1.6 million seafarers serving international merchant trades. Shipping is a global industry and for 40 years, under the auspices of IMO, it has had a global system in place for ensuring that all of the world's seafarers have competences and qualifications that comply with a global standard, regardless of the nation responsible for training and issuing the certificate.

In 2017, the five year transitional period for implementing the 2010 amendments to the IMO Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 2010) finally came to an end. ICS had raised concerns at IMO about the extent to which all maritime administrations were fully prepared for the end of this major transition and the possibility that, through no fault of their own, some ships and crews might be unfairly penalised for not having all of the required certification.

As a consequence, IMO issued guidance to Port State Control inspection regimes requesting that they apply a pragmatic approach until 1 July 2017. For the most part this changeover appears to have gone smoothly with little evidence of serious problems.

To prevent last minute certification log jams and potential difficulties during Port State Control inspections, ICS had encouraged maritime employers to liaise closely with IMO Member States, to ensure that those maritime administrations responsible for issuing their seafarers' STCW certification were fully prepared, and that arrangements had been made to ensure that any necessary training has been undertaken by the seafarers which they employ.

The new STCW provisions include updated seafarer competences, as well as changes to some seafarer grades and certification requirements. Most maritime administrations determined that seafarers holding national certificates of competence needed to have completed mandatory updating courses in order to be certified beyond 2017.

Maritime administrations should, where necessary, have therefore approved any special updating courses for seafarers, and made any necessary arrangements for the issue and revalidation of seafarers' certificates in accordance with the 2010 amendments. In their capacity as flag states, administrations have also needed to be ready to process a large number of applications for flag state endorsements, given that the majority of seafarers serve under a flag state that is different to that which issued their original STCW certificate.

One new requirement that should not be overlooked is that trainee ratings – including the new STCW grades of Able Seafarer (Deck) and Able Seafarer (Engine) – now need to provide documentary evidence of structured on board training that has been recorded in an approved training record book.

Thousands of trainee ratings worldwide are now using On Board Training Records produced by ICS, in addition to the thousands of officers worldwide that have qualified in accordance with STCW 2010 competence standards using the ICS books for cadets. Many maritime administrations have approved these ICS books for use in conjunction with their national certification regime including the Philippines, which produces a special edition of the ICS books tailored for its own certification system.

In September 2017, ICS published a revised version of its Personal Training and Service Record Book for qualified seafarers, which has been fully updated to take account of the current STCW regime as well as relevant requirements under the ILO Maritime Labour Convention. The intention is to provide seafarers and their employers with a uniform

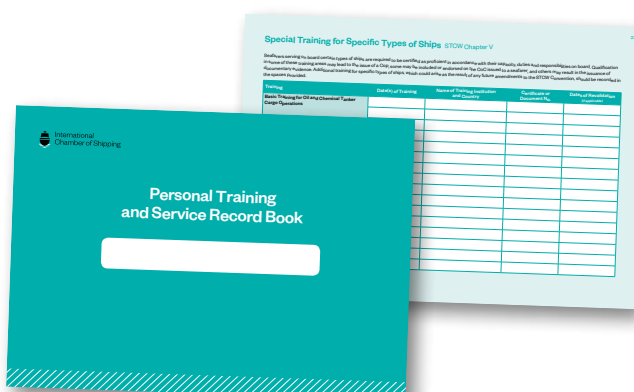


means of recording the training and drills which have been undertaken, for use when transferring between ships or employers, or when seeking to revalidate certificates.

In 2018, ICS will be considering the training and familiarisation of relevant personnel related to ballast water management and responsibilities under the IMO BWM Convention which entered into force in 2017. ICS is collecting information on company approaches to training and familiarisation via an online questionnaire..

ICS is also now considering the training implications of the increasing automation of ship systems, equipment and operations. This work will contribute to the wider ICS engagement with the regulatory scoping exercise for the use of Maritime Autonomous Surface Ships now being undertaken at IMO.

As an overarching activity, ICS members have also started to consider possible issues and priorities that might need to be addressed in any future major revision of the STCW Convention by IMO Member States, to ensure that this vital regime remains fit for purpose in meeting the requirements of the industry. A continuing issue is reducing the need – which regrettably still exists with respect to many crew nationalities – for companies to provide significant additional training to seafarers that are meant to be fully qualified for seagoing service under the STCW regime.



Navigational Safety

The cause of the collision and devastating fire, in January 2018, that led to the tragic loss of the Panama flag (and Iranian owned) tanker 'Sanchi' and its 32 crew, in waters between China and Japan, is currently unknown. But this terrible incident serves as a stark reminder that there is always a risk associated with seafaring that can certainly be greatly mitigated but unfortunately not entirely eliminated.

A central function of ICS's Marine Department is to engage on behalf of the global industry in the detailed work of IMO's technical committees. These meet in almost continuous session throughout the year as IMO Member States seek to further improve maritime safety. This includes the important work of the IMO Sub-Committee on Navigation, Communications and Search and Rescue (NCSR).

IMO's work on navigational safety is currently focused on three thematic priorities: digitalization of information exchange, modernisation of communications and the standardisation of bridge equipment.

Much effort is being made by IMO Member States to develop new standards and guidance for the digitalization of information exchange between ships and between ship and shore, with the intention of ensuring that Masters and bridge teams have access to digital maritime services that will provide additional information which is reliable and easily assimilated into navigational decision making. This also includes work at the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and at the International Hydrographic Organization (IHO).

However, the pathway to global implementation remains uncertain, and new risks are emerging. There is an apparent belief that it is always desirable for ships to have more and

more data in order to navigate safely, requiring increasingly complex systems on board to manage this. It may be difficult for digital aficionados to accept, but international shipping already has well developed navigational data and information needs. There is always an appetite for additional information which contributes further to safety and efficiency. But there is little appetite among shipowners for data that is not absolutely necessary for the safe and efficient execution of a voyage. In particular ICS is concerned that bridge teams may be overwhelmed by information to the detriment of navigational safety.

Modernisation of the Global Maritime Distress and Safety System (GMDSS) has been ongoing at IMO for the past five years. The plan when first developed included a comprehensive package of amendments to the SOLAS Convention and associated IMO instruments. The objectives were ambitious and included support for the e-Navigation concept, and ensuring that any human element risks associated with a modernised GMDSS would be properly addressed. It is therefore surprising that the modernisation to date has been a much more limited exercise, mainly focusing on removing obsolete provisions, providing clarifications and allowing for additional mobile satellite service providers. No new carriage requirements are planned or expected, and the GMDSS is unlikely to change noticeably for the bridge teams that use them.

IMO work on the standardisation of bridge equipment has emerged from experience with the entry into force of the IMO carriage requirement for electronic chart display and information systems (ECDIS). During 2017, under the leadership of Australia and the Republic of Korea, draft guidelines for standardised display (S-Mode) were developed which were considered by the NCSR Sub-Committee in February 2018. With the support of manufacturers, these guidelines should enhance the standardisation of user interfaces and recognition of key functions, making ECDIS familiarisation in accordance with the STCW Convention and the ISM Code a more efficient process.

The support for the IMO guidelines offered by the manufacturers they affect is a welcome sign of positive intentions. However, ICS is still unconvinced that non-mandatory requirements for standardisation will be sufficient to respond to the needs of Masters and bridge teams.

Notwithstanding the human cost of major maritime incidents and the ongoing work to enhance navigational safety, the law of diminishing returns suggests that the effort required to achieve further marginal improvements will need to be significant. The question is whether the thematic priorities of current work will make a tangible contribution to enhancing maritime safety.





Ship routing and reporting measures are a continuous element of navigational safety work at IMO. ICS remains an active participant in the consideration of new and amended measures for ship's routing. Increasingly, however, this work now involves the challenge of balancing protection of the marine environment and wildlife, with optimum safety and freedom of navigation. ICS is committed to ensuring that all proposals for new measures are objectively assessed based on the evidence provided, and that they genuinely optimise solutions for protection of the marine environment and the safety of navigation.

Meanwhile, in June 2017, the IMO Maritime Safety Committee (MSC) agreed to a major regulatory scoping exercise to accommodate the expected development of Maritime Autonomous Surface Ships (MASS). This work will begin in May 2018. While not an issue exclusively related to navigational safety, it is expected that navigation and collision avoidance will be activities where autonomous systems are applied first.

ICS does not currently agree with the ambitious timescales for adoption of MASS expressed by some IMO Member States. Instead ICS believes that autonomous systems on board ships will be adopted, but at a more conservative rate driven by the operational and commercial needs of shipowners. Consequently, ICS will attempt to guide the IMO discussion towards ensuring that the work comprehensively addresses the process of change that the adoption of autonomous systems represents, rather than simply providing for specific types of autonomous vessel.

Indeed, the consensus within ICS is that automated systems already present challenges with respect to the knowledge and skills required to manage and operate them safely and effectively. ICS will therefore seek to ensure that the regulatory framework for vessels making use of autonomous systems is sufficiently robust that it allows adoption of autonomy in the future without negative impacts on safety or pollution prevention.



Lifesaving Appliances

ICS co-ordinates the Industry Lifeboat Group (ILG) which is centrally involved in a number of important initiatives to improve the safety of lifesaving appliances (LSA) feeding into work at IMO, where the speed of current progress remains less than ideal.

Shipowners continue to express concern that some LSA are built to too low a standard and require disproportionate resources to maintain. Following a survey of members in 2017, ICS also remains concerned that the actual capacity of some freefall lifeboats, particularly some of those being built in Asia, does not always match the certified capacity due to inadequacy of some of the criteria of the existing IMO LSA Code.

Several years ago, following a fatal accident, the UK Marine Investigation Branch also made recommendations regarding water entering voids in foam filled chambers in the enclosed hulls of rescue boats. As this recommendation has yet to be closed out the ILG is considering what action may now be appropriate.

A key part of the current IMO work programme includes the development of new requirements for ventilation of survival craft, and consequential work related to the new IMO Code for ships navigating in polar waters. Given the need to cool lifeboat interiors in hot climates and to heat them in cold regions, while simultaneously maintaining an appropriate oxygen and CO₂ balance, this work has been challenging due to the established concept of having a standard ship's lifeboat being approved for use in all geographical areas. There is also a need to address the risk of carbon monoxide produced from machinery within lifeboats.

This IMO work is therefore ultimately expected to lead to the development of revised standards for new lifeboats and other LSA. The likely development of requirements for lifeboats in polar regions to carry additional supplies, together with increased space and facilities for occupants, is also likely to reopen the debate about capacity for at least some LSA.



ICS has now concluded that maintaining the current approach to LSA, particularly the concept of 'one size fits all' for lifeboat design may not be appropriate in future. It is anticipated that the emerging requirements for LSA will drive new thinking on the regulatory approach towards them, and ICS agrees with the Royal Institution of Naval Architects (RINA) regarding the need for new IMO construction standards.

ICS is also following work being undertaken by a number of stakeholders regarding the safety of wire ropes which have been implicated in a number of recent lifeboat accidents. Some wire rope failures have reportedly been attributed to a lack of the correct lubrication or a failure to follow the correct procedures, a problem that may have been compounded by the trend of using solid core wire rope. Concern has also been expressed regarding the quality and suitability of some wire rope falls, and the path taken on some ships by the falls between davit sheaves, particularly on some modern designs where available space is often at a premium.

The Industry Lifeboat Group considers that the safety of wire rope falls is currently the biggest single safety issue affecting LSA and will continue to pursue solutions with the relevant stakeholders that have particular knowledge or expertise in this critical safety area.



ILO and the Maritime Labour Convention



The purpose of the International Labour Organization (ILO) Maritime Labour Convention (MLC) is to establish a global level playing field of employment standards for seafarers, embracing the ILO concept of 'Decent Work'. Over 80 nations have so far ratified the Convention which entered into force in 2013. This now covers all of the major seafarer supply nations, including China, India and the Philippines, and the MLC's provisions are now being fully enforced worldwide through Port State Control.

Important matters covered by the MLC include the obligations of employers for 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 is 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 represents seafarers. ICS therefore has a special interest in ensuring that the MLC continues to be properly implemented.

In April 2018, in Geneva, ICS co-ordinated employers' representatives from over 20 national shipowners' associations at the third 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 STC was preceded by a bilateral preparatory meeting between national shipowners' association representatives and ITF union affiliates, hosted at the ICS office in February 2018.

The STC agenda in April included the future process for the submission of amendments to the MLC, and the issue

of how best to approach the payment of wages during situations of piracy.

The latter is rightly an emotive issue, but ICS members argued that there is no compelling need for additional ILO legislation given that crew claims in situations of

abandonment are already covered by recent amendments to the MLC. Other issues discussed by the STC in 2018 included flag state implementation problems; whether the MLC amendments addressing crew abandonment (which entered into force in January 2017) have had a positive effect, and issues arising from the reports submitted by governments to the ILO Committee of Experts.

In discussion with governments, work continues on harmonising provisions related to the renewal of Maritime Labour Certificates with similar certificate renewal provisions contained in other international maritime instruments, following the earlier acceptance by the ILO STC of a proposal by the employers' group in 2016.

During the course of 2018, additional MLC amendments will enter into force that highlight the importance of health and safety on board ships. These also take account of voluntary Guidance on Eliminating Shipboard Harassment and Bullying, which has been jointly developed by ICS and ITF and which can be downloaded from the ICS website. ICS is also working with ITF to produce a new handbook on the provision of welfare services to support the provisions of the MLC.

The ILO STC meeting in April 2018 was the final occasion when the Employers' Group was led by its elected spokesperson, Arthur Bowring, who has recently stepped down as the Managing Director of the Hong Kong Shipowners Association. His very significant contribution in helping the industry to see through the entry into force and implementation of the MLC is gratefully acknowledged and appreciated by ICS members.



Review of ILO Minimum Wage

In June 2018, in Geneva, the ILO Joint Maritime Commission (JMC) will review the current level of the ILO Minimum Wage for the rating grade of Able Seafarer, formally known as Able Seaman (AB). The vast majority of ratings are recruited from developing nations.

The shipping industry is unique in that it has a recommended global minimum wage, which is reviewed periodically by the ILO JMC. The bipartite JMC comprises employers' representatives co-ordinated by ICS and seafarers' union representatives co-ordinated by ITF.

The present minimum wage negotiation period technically expired on 1 January 2018. The current figure is US \$614 basic wage per month (i.e. excluding substantial overtime payments) and has applied since January 2016 when it was increased as a result of an agreement in 2014. However, during a JMC Sub-Committee meeting in 2016 no further increase was agreed.

ICS will argue that the economic challenges still being faced by maritime employers are significant, although in February 2018, the separate International Bargaining Forum (IBF) negotiations, concerning ITF-approved pay contracts for open register vessels, agreed an increase of 2.5% from 1 January 2019 with a review scheduled after two years.

In order to determine if it is appropriate to consider an increase to the ILO Minimum Wage, ICS will be taking careful account of a report by the ILO Office looking at the value of the US dollar in relation to the cost of living in a number of seafarer supply countries.

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 seafarer grades other than Able Seafarers, it has a strong moral authority. It is particularly important for employers in some developing



countries and may also be relevant to future collective bargaining negotiations, including those which take place in the IBF, as well as those conducted by several ICS national associations on behalf of their member companies.

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 and other mandatory payments, such as leave entitlements, are taken into account. By definition the ILO wage is a minimum. But most ratings from developing countries that serve on internationally trading ships, especially where ITF contracts apply, receive significantly higher wages than those recommended by ILO.

Pollution Liability Regime Under Threat

The global regime for oil pollution damage from tankers is widely regarded as a success story. The IMO Civil Liability (CLC) and Fund Conventions have been remarkably effective in ensuring that those affected by oil pollution from tankers are provided with prompt compensation without legal wrangling. The shipowner's contribution is paid regardless of fault, and on the rare occasions that valid claims exceed the shipowner's liability under the CLC, additional compensation is provided by the International Oil Pollution Compensation Fund (IOPCF) financed by oil importers.

Today, over US \$1 billion is available in countries that have joined the Supplementary Fund to cover the cost of clean-up and to compensate those affected by a single spill. However, the stability of this system is threatened by decisions of national courts and domestic legislation that are inconsistent with the manner in which the regime is intended to function.

These include the controversial decision of the Spanish Supreme Court in 2016 on the 'Prestige' incident (of 2002), and the enactment of a law in France in August 2016 providing

for unlimited liability for environmental damage, following a decision of the French Supreme Court in 2012 on the 'Erika' incident (of 1999). The court decisions in both cases were inconsistent with fundamental principles of the IMO Civil Liability and Fund Conventions (CLC/Fund), in particular the 1992 CLC 'limitation' and 'channelling' provisions.

In the 'Prestige' case, the Spanish Supreme Court overturned the decision of the trial court and held that the Master was guilty of the crime of reckless damage to the environment and that as a result the Master and shipowner were not entitled to limit their liability under the CLC. The shipowner's insurer was also held directly liable above the CLC limit, for up to US \$1 billion (the limit of cover provided by member clubs of the International Group of P&I Clubs (IG) for oil pollution damage).

In November 2017, the local court in La Coruña delivered a judgment on the quantification of the losses resulting from the incident. This confirmed that the 1992 Fund is liable for damages resulting from the spill in accordance with the 1992 Fund Convention. However, the Court has recognised moral and environmental damages and has awarded over €1.6 billion in compensation. This amount includes €1.57 billion payable to the Spanish Government, €61 million to the French Government as well as various amounts to individual claimants.

At the April 2018 session of the 1992 Fund Executive Committee, it was reported that the 1992 Fund and other parties have appealed the judgment to the Spanish Supreme Court. In particular, the 1992 Fund has requested the Supreme Court to declare that the 1992 Fund's liability does not include pure environmental damage or moral damage, since these types of damages are outside the scope of the 1992 Fund Convention. The compensation awarded exceeds by far the assessment of losses carried out by the 1992 Fund which quantified them at €300 million for the Spanish State and €42 million for the French State. The Supreme Court's decision is expected later this year.

The ICS Maritime Law Committee has kept this serious issue under close scrutiny, in co-operation with the IG. In 2017, at a session of the IOPCF governing bodies, an ICS and IG submission on this critical issue generated a lengthy debate. Almost all of the many delegations that spoke, with the notable exceptions of France and Spain, were in favour of further work to address the industry's concerns.

The IOPC Funds Director was requested to develop a discussion paper providing a range of options for consideration at a meeting in October 2017, which was duly prepared in consultation with ICS and the IG. The paper helpfully identified measures to address the issue of inconsistent interpretation of the Conventions, and also to encourage wider ratification and better implementation of the

Conventions in national law – including the important 2003 Supplementary Fund Protocol, which provides claimants with access to a third tier of compensation of more than US \$1 billion per incident. Unfortunately, the IOPCF discussion at the October 2017 session was confused and ultimately derailed by a small group of states led by Spain and France that raised procedural impediments.

It was decided that work could proceed on the ratification and implementation measures that had been identified in the discussion paper. However, agreement could not be reached on how to address the important issue of inconsistent interpretation of the Conventions, and it was left open for delegations to come forward with further submissions at future meetings. This outcome was disappointing because it had been hoped to build upon the support and momentum for further work that had been generated by the previous industry submission to the IOPCF.

ICS is now carefully considering how this matter can best be taken forward. A clearer exposition of the industry's concerns and how they could be addressed might be needed.

Meanwhile, although the extent of any pollution damage is not yet fully known, the tragic 'Sanchi' incident in January 2018 could cause China to reconsider its stance on membership of the 1992 IOPC Fund, which is currently in force for Hong Kong only. China is a party to the 1992 CLC and has its own national oil pollution compensation fund, but the amount is considerably less than would be available under the 1992 Fund or the Supplementary Fund. The incident highlights the potential for pollution from 'passing' tankers i.e. not calling at ports in China, and could also be a spur for ratification of the HNS Convention concerning liability and compensation for dangerous cargoes.



Convention Ratification Campaign

Shipping is an inherently global industry reliant on global regulatory frameworks to operate efficiently. The alternative would be a plethora of regional or unilateral regulations, which would lead to chaos within the international shipping industry while hindering the smooth flow of global trade.

In November 2017, ICS and the Comité Maritime International (CMI) – the international association for maritime lawyers – released an updated brochure to promote the importance of governments ratifying international maritime conventions, especially those adopted by the UN IMO. This was then submitted to the biennial meeting of the IMO Assembly.

The aim of the brochure 'Promoting Maritime Treaty Ratification' is to encourage more widespread ratification of some key maritime instruments that would benefit from a greater level of global acceptance. This includes a number of important instruments which have not yet received adequate ratifications from governments to enter into force globally.

The new campaign particularly focuses on three key IMO instruments: the Hong Kong Convention on ship recycling;

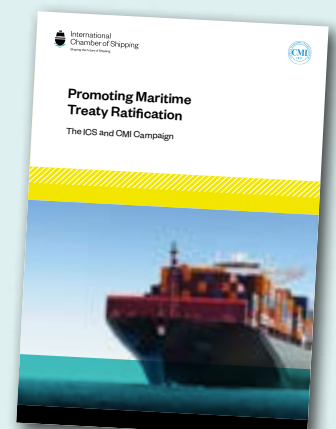
the 2003 Protocol to the 1992 Civil Liability and Fund Conventions concerning oil spill compensation; and the 2010 Protocol to the HNS (liability and compensation) Convention.

While the slow pace of ratification of these crucial IMO instruments remains disappointing, there is now some cause for optimism. In particular, the Hong Kong Convention on ship recycling has been ratified by the world's largest flag state, Panama, having previously been ratified by Belgium, Denmark, France and Norway. Turkey, a major ship recycling nation, is also expected to ratify soon. But other IMO Member States now need to build on this momentum or else be faced with the confusion likely to be caused by unilateral or regional regulation.

The new brochure, which can be downloaded from the ICS website, also highlights a number of other conventions that require wider ratification, including the IMO Ballast Water Management Convention, which entered into force in September 2017. The brochure also promotes several other instruments that address international liabilities and compulsory insurance cover for ships.

The following Conventions are the main focus of the current ICS/CMI campaign

- IMO Convention for the Safe and Environmentally Sound Recycling of Ships (Hong Kong), 2009
- IMO 2003 Supplementary Fund Protocol to the 1992 Fund Convention
- IMO 2010 Protocol to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996
- IMO Convention on Control and Management of Ships' Ballast Water (BWM), 2004
- IMO Protocol of 1997 to MARPOL (Annex VI – Prevention of Air Pollution from Ships)
- IMO Protocol of 1996 to the Convention on Limitation of Liability for Maritime Claims (LLMC Protocol), 1976
- IMO Convention on the Facilitation of International Maritime Traffic (FAL), 1965
- ILO Seafarers' Identity Documents Convention (Revised) (ILO 185), 2003
- IMO Nairobi International Convention on the Removal of Wrecks (Nairobi WRC), 2007
- IMO Protocol of 2002 to the Athens Convention Relating to the Carriage of Passengers and their Luggage by Sea (PAL), 1974
- United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (Rotterdam Rules), 2009





UN Sustainable Development Goals

There is increasing momentum at the highest political level to take action to protect the world's oceans from environmental degradation. This includes the latest Our Ocean Summit attended by a number of world leaders, which was hosted by the European Union in Malta, in October 2017, at which ICS participated on behalf of the shipping industry.

In June 2017, ICS also represented the shipping industry at a major conference in New York, hosted by the UN General Assembly, on the sustainability of the oceans. This important event considered how the UN can best implement its Sustainable Development Goal (SDG 14) concerning the protection of the oceans, which was adopted at the UN Summit of world leaders held in Rio de Janeiro in 2012.

ICS made the case that the shipping industry is undoubtedly a driver of 'green growth' given its impressive environmental performance. The UN Conference provided an opportunity to present the progress which the shipping industry is making to play its part in reducing environmental impacts on the oceans, especially with regard to CO₂ emissions, sulphur emissions and ballast water management. However, the UN Summit in Rio had agreed that there are three pillars to sustainability including the economic and social as well as the environmental.

ICS believes that government regulators should give equal priority to each of the three pillars of sustainable development, including the economic. This is especially

important in view of shipping's role in the continuing spread of global prosperity and the movement of about 90% of trade in goods, energy and raw materials.

The vital need to protect the environment and for ships to comply fully with all new environmental regulations is recognised by ICS. But unless the industry is commercially viable it will not be able to deliver the investments in environmental and social improvements that are sought by regulators on behalf of society at large.

While shipping's regulators have a responsibility to protect the environment and the interests of wider society, they also need to be practical and have an understanding of the impact that their actions can have on the industry's own long term sustainability, especially if the 'compelling need' for potentially expensive proposals has not been properly demonstrated.

The international shipping industry, as represented by ICS, is committed to the delivery of further environmental and social improvements in the interests of sustainable development. But sustainable development requires a shipping industry that is economically sustainable too.





UNCLOS Implementing Agreement

In December 2017, the UN General Assembly agreed that a formal Diplomatic Conference should be held to adopt a new UNCLOS implementing agreement to permit regulation for the environmental protection of the High Seas. This work could potentially have implications for the future regulation of shipping. In liaison with IMO, ICS plans to be present throughout these negotiations which will commence in New York in September 2018.

The United Nations Convention on the Law of the Sea (UNCLOS) provides the fundamental legal framework for protecting the oceans, and under the authority of UNCLOS the shipping industry is comprehensively regulated by IMO. But the regulation of other ocean activities, especially on the High Seas, is not so well developed.

In 2016, the United Nations, in New York, started some high level preparatory negotiations on a new UNCLOS implementing agreement concerning conservation of Biodiversity in areas Beyond National Jurisdiction (BBNJ) – in other words the High Seas. While shipping is not the main focus of this UN initiative, which is primarily aimed at strengthening the regulation of deep sea fishing and new activities such as seabed mining, this work is likely to lead to the establishment of Marine Protected Areas on the High Seas.

In order to ensure that sectors such as fishing cannot argue for exclusion on the grounds that there are already other mechanisms in place to regulate them, it is proposed that the agreement should be as comprehensive as possible in scope. This means that it may also apply to shipping, even though there is currently no suggestion that shipping is insufficiently regulated by IMO.

Potentially therefore, there is a risk that this UN work could adversely impact on shipping, interfering with principles such as freedom of navigation, or otherwise cut across the work of IMO. It could also potentially upset the current balance that exists between the rights and obligations of flag states, coastal states and port states.

Alongside IMO, ICS has therefore attended three sessions of the UN Preparatory Committee that have already taken place in New York, also speaking at an IMO side event to help explain to the UN negotiators how shipping is comprehensively regulated. Most of the national UN negotiators are drawn from foreign affairs, environment and ocean ministries which are not necessarily closely engaged in the work of IMO. A similar event is being planned in New York for September 2018, in conjunction with the Norwegian Government.

The UN negotiations are still at an early stage and the issues are complex because, in addition to IMO, the ocean is already regulated by a large number of different UN and regional agencies. But for the moment it appears that most of the key governments are broadly aware of the importance of ensuring that any new measures that could affect shipping should not be taken forward without the full involvement of IMO. None of the key players seem to have serious concerns about shipping or question the ability of IMO to deal with MPAs should it be decided to apply them to shipping on the High Seas. But it will be important for the shipping industry to be vigilant.

It currently seems that there is little appetite among governments to establish a new UN agency to administer the new implementing agreement. However, it is possible that ocean issues – such as the designation of High Seas MPAs – could be determined by regular Conferences of Parties, administered by the UN Division of Ocean Affairs and Law of the Sea. It is hoped that the detail and appropriateness of any measures that might apply in such MPAs – for example special navigational measures to avoid harm to rare species of whales – would still be determined by the relevant specialist agency, in this case IMO. It is also hoped that such decisions would have to be based on proper scientific analysis, e.g. with input from bodies such as GESAMP (the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection).

Flag State Performance

Following the entry into force of amendments to the relevant IMO Conventions, the IMO Member State Audit Scheme has become mandatory. This is a significant development that should make 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 voluntary audits of maritime administrations into a mandatory programme (although it will still take some time before all the world's maritime administrations have passed through the IMO audits).

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 has also welcomed the practice of some regional Port State Control (PSC) authorities to request information from flag states as to whether they have been through an IMO audit and including this in their criteria for targeting inspections.

In March 2018, 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 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.

For the first time, the ICS Table includes information about the extent to which flag states have been through IMO audits, while continuing to assess performance using criteria such as Port State Control records, the ratification of IMO and ILO Conventions, and participation at IMO meetings.

This year's ICS Table continues to highlight the sound performance of all of the world's major flag administrations, regardless of whether they are open registers or so called 'traditional' maritime flags. But in response to feedback from IMO Member States, the Table includes refinements in order to make it as objective and useful as possible. This includes the way in which the performance of Recognized Organizations conducting surveys is now recorded.

Flag states which do not qualify for the United States 'Qualship 21' programme have again not been given negative performance indicators in the latest ICS Table. Because the list of flag states qualifying for Qualship 21 now varies considerably from year to year, non-inclusion is therefore no longer viewed as being a sound indicator of negative performance. However, flag states that continue to qualify for the U.S. programme are still given a positive performance indicator.

One development that ICS is monitoring carefully is the decision by the Paris MOU on Port State Control, and other PSC authorities around the world, to consider moving away from the current system of publishing 'white', 'black' and 'grey' lists indicating flag state performance for PSC targeting purposes. Encouragingly, the rationale for this change is that the decreasing number of ships that are subject to detention makes the use of such lists inappropriate (while also being unfair to smaller flag states whose ships may have a low number of port calls in a particular region). But it will be important for PSC authorities to continue to publish data that will make it possible to hold flag states accountable for their level of performance.



In Defence of Open Registers

In the 21st century there is nothing inherently unusual about an international ship registration system. According to the United Nations Conference on Trade and Development (UNCTAD), 60% of shipping activity now serves the maritime trade of emerging economies, which also now own nearly half of the world's tonnage.

However, so called open registers, where the majority of the ships using a flag are beneficially owned in a different country, have recently come under renewed attack, despite being responsible for the highest levels of compliance by the ships they control with respect to safety and environment performance.

In January 2018, the Tax Committee of the Organization for Economic Co-operation and Development (OECD) requested several major open registers to provide additional information about their shipping tax regimes, despite already having given them a clean bill of health as part of the work OECD is doing on Base Erosion and Profit Shifting (BEPS), which refers to tax avoidance strategies that may exploit gaps in tax regimes to artificially shift profits to low tax locations. None of these open registers from which the OECD has sought additional information appear on the black list of offshore tax jurisdictions which the EU decided to publish at the end of 2017.

Shipowners using open registers may not pay conventional corporation tax. But this is the same in many other jurisdictions, including within Europe, where shipowners of course pay significant tonnage taxes, even in years when they are making a loss.

Those investors that inject billions of dollars into shipping, with all the attendant risks of volatile and cyclical markets, are frequently drawn from more than one country, simply because shipping projects are so big. So it makes sense to

utilise offshore centres, with their high levels of service and maritime expertise, to keep capital movements as simple as possible when they are already extremely complicated. That said, many OECD flags apply similar tax regimes, and successful flags such as the United Kingdom, for example, have few beneficial shipowners that are actually domiciled in the UK.

Open registers were also unfairly criticised for supposedly asserting undue influence at IMO, in a report published in October 2017 by an NGO calling itself 'InfluenceMap', which appears to be supported by environmental NGOs. The specific charge was that open registers were somehow seeking to undermine the successful development of the ambitious CO₂ reduction strategy which was adopted by IMO in April 2018. It is therefore ironic that one of the world's largest open registers, the Marshall Islands, has been one of the most vociferous advocates of ambitious CO₂ reduction targets, while flag states such as Bahamas and Liberia have worked hard to overcome the concerns of traditional maritime nations such as China, India and Brazil.

The fact that the world's largest flag states, which are responsible for the successful implementation of IMO rules across the majority of the world fleet and are now staffed by expert officials that choose to take an active part in IMO discussions seems a strange thing to criticise. The eight largest open registers now administer almost two thirds of the world fleet, and all of these feature on the 'white lists' of quality low-risk flags published by the Paris and Tokyo MOUs on Port State Control. All of these open registers have also undergone voluntary audits under the IMO Member State Audit Scheme, and they have all ratified every principal maritime Convention currently in force governing safety, pollution prevention and seafarers' employment standards; whereas many of these instruments have still not been ratified by a number of OECD nations.

Meanwhile, the International Transport Workers' Federation (ITF), which represents seafarers' unions, maintains its high profile campaign against so called 'flags of convenience', a term not recognised by IMO. ITF is probably the most powerful global trade union ever, and has a direct impact on the pay and working conditions of almost two million seafarers worldwide. Ironically this is partly because shipowners pay ITF around US \$30 million a year for the privilege of using open registers without having their ships boycotted by ITF's stevedore affiliates.

While ICS continues to question the relevance today of ITF's 'FOC' Campaign, ICS respects ITF as a responsible and influential social partner, and co-operates on many issues precisely because the huge resources it derives from the use of open registers allow it to wield such influence.





Shipping Policy

Shipping policy requires ICS engagement in 'behind-the-scenes' diplomatic activity, in order to help ensure the maintenance of free trade principles and market access for international ships. ICS works closely in this area with the Consultative Shipping Group (CSG), which comprises maritime administrations from Europe and Canada, as well as Japan, Korea and Singapore, which are particularly committed to free trade and the preservation of the multilateral regulatory framework for international shipping.

In September 2017, the ICS Board had a high level meeting with representatives of the CSG in London to review current threats of protectionism, particularly from the United States, as well the possibilities for market distortion that could be created by new environmental regulations. In November 2017, ICS also met with CSG representatives of the Cotton Club, which comprises transport attachés based in Washington DC. A further meeting with the CSG is scheduled to take place in Halifax, Canada, in autumn 2018.

At the top of the shipping policy agenda is the announcement by President Trump, in March 2018, of his intention to impose tariffs on steel and aluminium imports, and – in response to immediate threats by China and the EU to apply retaliatory measures – his suggestion that these might be extended to automobile imports too.

Whether this war of words will develop into a genuine trade war, which could have damaging impacts on shipping markets, remains to be seen. Hopefully the view that trade is a zero sum game will turn out to be political rhetoric and saner voices will prevail in the U.S. Administration and Congress. What is disturbing is that regardless of whether U.S. complaints about the low cost of Chinese steel are justified, President Trump now appears to want to launch a trade war with all of the United States' trading partners. Rather than using normal World Trade Organization (WTO) procedures, the U.S. has also invoked national security as the justification for imposing tariffs, even against its military allies.

Without full U.S. commitment to WTO, any possibility of making progress on a long awaited multilateral trade deal as part of the 23 year old Doha Round is on hold for the foreseeable future. This also applies to the related Trade in Services Agreement (TiSA), which a smaller group of governments has been trying to negotiate in Geneva. While this is a setback for global trade in general terms, this also makes shipping especially vulnerable because it means that the specific trade commitments that governments have made with respect to maritime services at the WTO still remain uncodified at the global level. The free trade practices which shipping enjoys are therefore dependent upon the survival of bilateral agreements.

More positively, despite the withdrawal of the United States from the Trans Pacific Partnership (TPP), the other participating nations signed a new agreement in Chile in March 2018 (which the United Kingdom, preparing for Brexit, has also indicated an interest in joining).

Meanwhile, the industry faces a number of threats to market access. In the U.S. there is still talk in Congress of introducing some kind of cargo reservation for energy exports, both for LNG and crude exports. In 2017, Democrat Congressman John Garamendi introduced 'The Energizing American Maritime Act' proposing new legislation which would require 30% of exports of crude oil and LNG to be transported on U.S. flag vessels by the year 2025, with 15% to be carried on U.S. flag ships by 2020.

Energy security is a very sensitive political issue in the United States, and there are vested interests, especially in the shipbuilding industry, as well as the seafarers' unions, which are seeking to link concerns about jobs and defence to the growth in energy exports being carried on non-U.S. ships, especially in view of concerns about the decline of the U.S. flag fleet engaged in international trades, which is now very small.

Similar proposals have been made in recent years but these were usually watered down following interventions by the State Department and the office of the U.S. Trade Representative, which were conscious of U.S. free trade commitments in the context of ongoing negotiations at WTO about maritime services. However, in view of President Trump's recent pursuit of tariffs, if security is used as a pretext this latest attempt at cargo reservation could possibly gain more traction. The very unpredictability of the Trump Administration means that anything is potentially possible.

Elsewhere, in January 2018, the Russian Parliament adopted changes to its cabotage regulations applicable to the Northern Sea Route. This includes provisions for oil, natural gas and coal produced in Russian territory to be transported exclusively by Russian flag ships to the 'first point of unloading or transshipment', although these particular provisions will not come into force until 2019.

It is understood that first 'point of unloading or transshipment' means a point within Russian territory – although this is still to be confirmed. If this is indeed the case, the measure would not appear to impact directly on international voyages. It is also understood that the measure is principally aimed at encouraging Russian owned ships to return from open registers to the Russian flag, which lost large numbers of ships following the collapse of the Soviet Union. However, there is potentially a protectionist undercurrent to the new

Russian regulations which hints of a new atmosphere when it comes to the automatic acceptance of the concept that all free trade is good.

Meanwhile, in December 2017, the Indonesian Government proposed a decree that would reserve the carriage of coal exports, palm oil exports and rice imports to Indonesian controlled vessels, which would appear to be an instance of blatant protectionism. ICS has therefore written to the Indonesian Government to express the global industry's concerns, as has the Consultative Shipping Group of maritime administrations. It is currently understood that Indonesia is planning to postpone implementation of the new law, which is also opposed by many Indonesian exporters.

In conjunction with the World Shipping Council and ECSA, ICS is preparing for a European Commission consultation on the renewal of its current block exemption for liner consortia which expires in 2020, something which it undertakes every 5 years and which ICS supports. However, the indications are that maintaining the block exemption may be more difficult this time, and shippers' organisations are keen to oppose any renewal, arguing that recent mergers between shipping lines may have changed the situation.

Meanwhile, the United Nations Conference on Trade and Development (UNCTAD) – whose mandate is to serve the

interests of developing nations – has also become involved in competition issues, claiming that recent mergers in liner trades may have reduced the access to shipping services enjoyed by developing nations.

In particular, analysis which UNCTAD has conducted into 'port pairs' suggests a possible decline in the number of direct services between individual ports, particularly in 'north-south' trades, and a reduction of competition on routes between individual ports, which may be restricted to one alliance or even to a single carrier. ICS has serious questions about this analysis. Controversially, UNCTAD has suggested that maritime competition authorities may need to review the regulatory regimes which currently apply to liner shipping. UNCTAD will be holding a meeting on these issues in Geneva in July 2018, at which ICS will participate.

On a positive note, the OECD Working Party on Shipbuilding (at whose workshop ICS participated in Paris in November 2017) has now decided in principle to have another attempt at negotiating a new agreement on shipbuilding, in order to remove subsidies and market distorting measures. However, much will depend on whether China will be willing to participate in these talks. National state subsidies to encourage early ship recycling might have superficial attractions but they risk distorting global markets, and can be counterproductive if they are conditional on the recipients ordering more tonnage at national yards.





Fighting Corruption

The shipping industry operates in a wide variety of ports under many different jurisdictions. Masters and seafarers therefore have frequent and multiple interactions with many government officials around the world, sometimes being exposed to corruption and demands for bribes.

This can particularly occur during Port State Control inspections. Rejecting and challenging corrupt demands, including so called 'facilitation payments', can lead to severe delays, place the safety of the crew and ship at risk, and have seriously damaging commercial consequences for shipping companies. By acquiescing to demands to make potentially corrupt payments, companies and seafarers also expose themselves to the risk of criminal prosecution in their home state.

ICS believes that tackling instances of bribery and corruption must remain a key priority, which the industry's regulators, both internationally and nationally, must work very seriously to address, so that the integrity of shipping companies – and the safety of the seafarers they employ in the service of world trade – is adequately protected.

The Maritime Anti-Corruption Network (MACN) was established in 2011 as an industry led initiative working towards the vision of a maritime industry free of corruption,

enabling fair trade to the benefit of society at large. In 2017, ICS and MACN established a cross industry working group incorporating a number of industry organisations, in order to collaborate, share ideas and address key issues which the shipping industry is currently facing with respect to bribery and corruption.

ICS is actively involved with this working group, which now has an important role in demonstrating how corruption can present a serious safety risk for seafarers as well as being an obstacle to efficient maritime trade.

In order to promote wider awareness among maritime administrations about the impact of corruption, the group has made a submission to the IMO Facilitation Committee (FAL) meeting in June 2018. The paper comments on how anti-corruption measures might best be integrated into the current IMO work programme for governmental improvement, and addresses risks frequently encountered during Port State Control inspections.

A presentation will also be delivered to IMO FAL delegates about the activities of MACN and the wider challenges regarding anti-corruption. It is hoped that this will encourage greater recognition of the problems encountered by ships and their crews. In the context of problems sometimes

experienced during Port State Control inspection, this will also hopefully demonstrate the need for IMO to mitigate the risk of corruption when new regulations are developed and implemented.

The MACN working group, co-ordinated by ICS, intends to take collective action to address corruption wherever it occurs by leveraging the specific capabilities of the members of the group. This currently includes providing support to ongoing anti-corruption initiatives in the Suez Canal.

The group is also keen to share information about best practices and is developing an industry guide on how to tackle corruption, explaining the different forms which corruption can take and providing advice on the actions which can be taken by shipping companies and seafarers.

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 2018, ICS is scheduled to publish a new edition of the ICS Tanker Safety Guide (Liquefied Gas), a major project that has taken over three years to complete. ICS will also be publishing a new edition of its Guidelines on Garbage Management Plans. Meanwhile, in conjunction with the Oil Companies International Marine Forum (OCIMF), work has commenced on a new edition of the International Safety Guide for Oil Tankers and Terminals (ISGOTT). Several inter-industry work groups have now been established with publication anticipated by 2020.

In September 2017, ICS published a new version of its Personal Training and Service Record Book for qualified seafarers to complement the On Board Training Record Books for trainee officers and ratings that are widely used by thousands of young seafarers across the global industry.

The 'ISF Watchkeeper' seafarers' work hour record software, which is produced jointly with IT Energy, continues to prove popular. A major upgrade was launched during 2017 in order to ensure that the product remains the best available to help ship operators demonstrate compliance with complex IMO and ILO work hour regulations and record keeping requirements.

In addition to publications for sale, which are available from maritime booksellers worldwide, ICS also produces a large number of free resources for ship operators which can be downloaded from the ICS website.



ICS is a part of the Transport Taskforce of United for Wildlife. This is an initiative which is being personally led by HRH Prince William of the United Kingdom, pictured below.

Many species of wildlife are now being hunted to extinction, as part of an illegal trade that benefits organised criminal gangs, with devastating effects on wild populations of animals such as elephants, rhinos and tigers, as well as lesser known species such as the pangolin.

Due to the vulnerabilities in Customs in many countries, the maritime transport chain can be exploited by criminal traffickers to move illegal animal products. With current levels of poaching devastating wildlife at rates never before witnessed, engagement with the private sector, and in particular the transport industry, is crucial if the trade chains between source and consumer are to be broken.

The establishment of the Transport Taskforce is a way for United for Wildlife to work with the transport industry, including shipping companies, to identify any role it may unwittingly play in facilitating the illegal wildlife trade, with the aim of identifying means by which the maritime sector can assist.

ICS will continue to work with United for Wildlife on promoting its transport commitments, and distributing information about specific issues of concern of which shipping companies and their crews should be aware. A zero tolerance policy on illegal wildlife trafficking has been published and is available via the ICS website.



Internal Affairs

The ICS Annual General Meeting was generously hosted by the Turkish Chamber of Shipping in Istanbul in May 2017. The 2018 AGM will be hosted by the Hong Kong Shipowners Association, in conjunction with its 60th Anniversary and the AGM of the Asian Shipowners' Association.

The membership of ICS currently includes national shipowners' associations from 37 countries and territories, with the Nigerian Chamber of Shipping joining under a new low cost membership category in April 2018.

ICS also continues to work closely with its Regional Partners, the Asian Shipowners' Association (ASA) and the European Community Shipowners' Associations (ECSA).



ICS Annual General Meeting, Turkey, May 2017

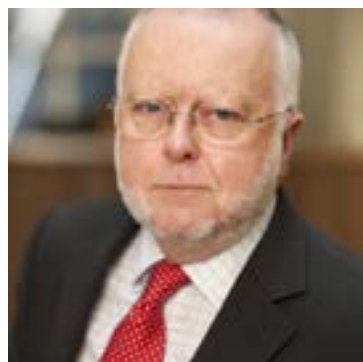


ICS Chairman, Esben Poulsson (Singapore) has completed an initial two year term of office and will be standing for re-election at the 2018 AGM. In addition to receiving support from the ICS Board, he has been assisted during 2017/2018 by the four Vice Chairmen: John Adams (Bahamas), Emanuele Grimaldi (Italy), Mark Martecchini (Liberia) and Karin Orsel (Netherlands).

The Secretariat and staff of ICS continues to be provided by Maritime International Secretariat Services Limited which is wholly owned by ICS.

In May 2017 John Bradshaw joined ICS as a Technical Director, while in November 2017 Chris Oliver was appointed Director Regulatory Affairs. In July 2018, Marine Director, John Murray will retire having joined ICS in 2003 and having contributed significantly to ICS efforts to improve maritime safety, overseeing the production of a number of important ICS technical publications. He will be succeeded internally by Jonathan Spremulli. Meanwhile, in February 2018, Simon Bennett was promoted to the new position of Deputy Secretary General.

In August 2018, the current ICS Secretary General, Peter Hinchliffe, below left, will be stepping down. He will be succeeded by Guy Platten, below right, who is currently CEO of the UK Chamber of Shipping, following his appointment by the ICS Board in February.



ICS Board of Directors 2017 – 2018

CHAIRMAN

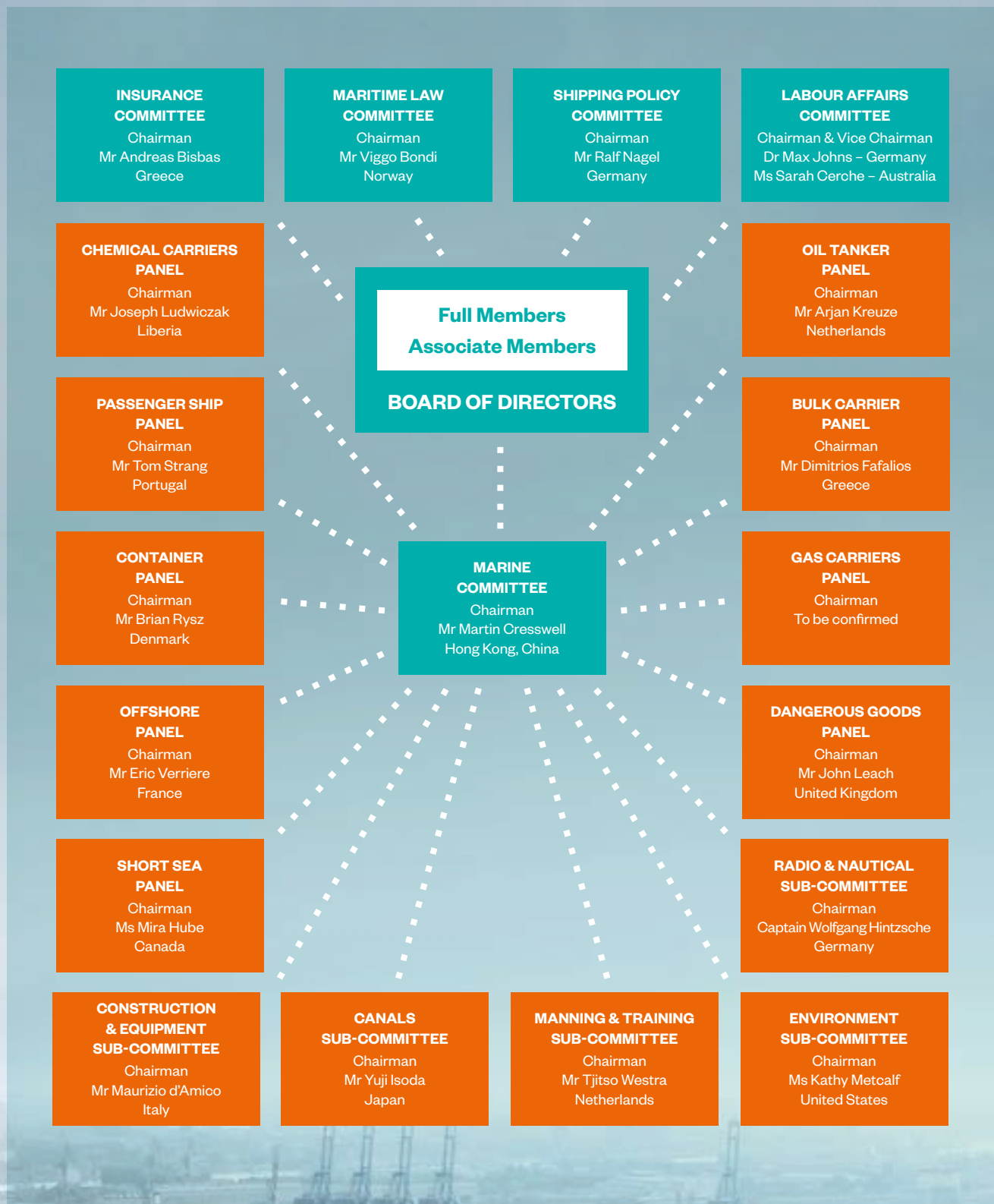
Mr Esben Poulsen

AUSTRALIA	Mr Noel Hart	LIBERIA	Mr Mark Martecchini*
BAHAMAS	Mr John Adams*	MEXICO	Mr Luis Ocejo
BELGIUM	Mr Ludwig Criel	NETHERLANDS	Mrs Karin Orsel*
CANADA	Mr Kirk Jones	NORWAY	Mr Hans Olav Lindal
CYPRUS	Mr Themis Papadopoulos	PHILIPPINES	Mr Gerardo Borromeo
DENMARK	Mr Claus Hemmingsen	PORTUGAL	Mr Tom Strang
FAROE ISLANDS	Mr Jens Meinhard Rasmussen	RUSSIA	Mr Yury Tsvetkov
FINLAND	Mr Matti-Mikael Koskinen	SINGAPORE	Mr Lim Sim Keat
FRANCE	Mr Jean-Marc Roué	SPAIN	Mr Juan Riva
GERMANY	Captain Alfred Hartmann	SWEDEN	Mr Ragnar Johannson
GREECE	Mr John C Lyras	TURKEY	Mr Tamer Kiran
HONG KONG, CHINA	Mr Robert Ho	UNITED KINGDOM	Mr Kenneth MacLeod
IRELAND	Mr Andrew Sheen	UNITED STATES	Mr Rob Grune
ITALY	Mr Emanuele Grimaldi*		
JAPAN	Mr Svein Steimler		

* Vice Chairmen



ICS Committee Structure



ICS Membership

FULL MEMBERS

AUSTRALIA	Maritime Industry Australia Limited
BAHAMAS	Bahamas Shipowners' Association
BELGIUM	Royal Belgian Shipowners' Association
BRAZIL	Union of Brazilian Shipowners [‡]
CANADA	Canadian Chamber of Marine Commerce
CHILE	Chilean Shipowners' Association
CYPRUS	Cyprus Shipping Chamber
DENMARK	Danish Shipping
FAROE ISLANDS	Faroese Merchant Shipowners' Association
FINLAND	Finnish Shipowners' Association
FRANCE	French Shipowners' Association
GERMANY	German Shipowners' Association
GREECE	Union of Greek Shipowners Hellenic Chamber of Shipping [§]
HONG KONG, CHINA	Hong Kong Shipowners Association
INDIA	Indian National Shipowners' Association
IRELAND	Irish Chamber of Shipping
ITALY	Italian Shipowners' Association
JAPAN	Japanese Shipowners' Association
KOREA	Korea Shipowners' Association
KUWAIT	Kuwait Oil Tanker Co.
LIBERIA	Liberian Shipowners' Council
MEXICO	Grupo TMM S.A.
NETHERLANDS	Royal Association of Netherlands Shipowners
NORWAY	Norwegian Shipowners' Association
PHILIPPINES	Filipino Shipowners' Association
PORTUGAL	Portuguese Shipowners' Association
RUSSIA	Russian Chamber of Shipping
SINGAPORE	Singapore Shipping Association
SPAIN	Spanish Shipowners' Association
SWEDEN	Swedish Shipowners' Association [§] Swedish Shipowners' Employer Association [‡]
SWITZERLAND	Swiss Shipowners' Association [§]
TURKEY	Turkish Chamber of Shipping
UNITED KINGDOM	UK Chamber of Shipping
UNITED STATES	Chamber of Shipping of America

ASSOCIATE MEMBERS

Abu Dhabi National Tanker Co.[§]
 Chamber of Shipping of British Columbia[§]
 Cruise Lines International Association
 European Dredging Association
 Interferry[§]
 International Maritime Employers' Council
 Monaco Chamber of Shipping
 Nigerian Chamber of Shipping
 Sail Training International
 Shipping Australia Limited[§]
 World Shipping Council[§]

REGIONAL PARTNERS

Asian Shipowners' Association
 European Community Shipowners' Associations

[§] Trade Association Only

[‡] Employers' Organisation Only





Published in May 2018 by

International Chamber of Shipping
38 St Mary Axe London EC3A 8BH

Telephone + 44 20 7090 1460
info@ics-shipping.org
www.ics-shipping.org

