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IFSMA NEWSLETTER

The Shipmasters' International Voice

Silja Europa alongside in Helsinki

UNITY FOR SAFETY AT SEA
IFSMA

International Federation of Shipmasters' Associations

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Secretary General's Report

The last period has been very busy for us at the Secretariat and I hope you have all seen the change to the website and the Members only section. If you have not done so, please use the registration to obtain a password.

Early September saw us at the Carriage of Cargoes and Containers Sub Committee which was a very technically demanding meeting and nothing of particular significance to report for you. This was following by the Intersessional Working Group on Maritime Autonomous Surface Ships (MASS) Regulatory Scoping Study. Phase 1 is now complete and Phase 2 which is the production of the report and the next steps will be delivered to MSC 102 in the spring of 2020. That meeting of the MSC will determine the way ahead and timelines for the process of changing/amending the Codes, Conventions and Regulations in all of the Committees under the MSC for the years ahead.

I will be sending out a programme of the way ahead and seeking help from you to provide us with specialist Shipmasters willing and able to work on the changes.

One of the most critical will be the changes to SOLAS, STCW and the COLREGS. This will be an enormous task and there will be some that want to make wholesale changes and start to make special cases of, and provision for, MASS rather than ensuring that MASS fits into the current regulations. When called for, please volunteer assistance as your future as Shipmasters and mariners needs to be properly articulated and we must not let the Industry highjack this based on an ideological technical solution.

I would like to thank our colleagues from Finland, the Finnish Ships' Officers' Union (FSOU), who stepped in at short notice to host the first of the new Biennial General Assemblies. We were made very welcome indeed and the FSOU demonstrated how easily a relatively small Association is able to provide us with such excellent facilities and programme and all who attended said how much they enjoyed Helsinki. You can find the full report and minutes on our website. I will soon be sending out requests for volunteers to host the next AGAs in 2021 and 2023.

In early October I was honoured to be invited to speak at the Nautilus International Quadrennial Congress in Rotterdam. I was able to inform a large and interested audience about the progress IFSMA has been making and the influence we have on the International stage, and not just at the IMO. Currently I am attending the Maritime Anti-Corruption Network as a key member of their Cross Industry Working Group. Along with the International Chamber of Shipping and the International Transport Federation, we have been key to the production of papers to the IMO Facilitation Committee on the issue and I expect in December that the IMO Council and Assembly will put anti-

Corruption on the Agenda at the IMO for the first time in its history. We are currently working on a Guide to Anti-Corruption and Code of Best Practice in the Industry. This is a real coup for us and highlights just what an impact we are having at the IMO.

We at the Secretariat wish you a very happy festive season and hope that some of you are able to spend time with your families as a respite for your busy life on the High Seas.

Good luck in 2020.

Editor's note

How IMO perfects efficient port management

From London we learn that an intensive training event on port management and operational efficiency took place in France in mid-October.

High-level officials and decision-makers from maritime and port authorities around the world took part in this annual five-week course provided by the *Institut Portuaire d'Enseignement et de Recherche* (IPER) and was concluded on 11 October in Le Havre, France.

At this 33rd Advanced Course on Port Operations and Management participants came from 19 countries, 15 of them in Africa.

It is understood that the course included class-based training and site visits. Lectures were in French and English on a variety of port matters, including shipping and port economy, port organization, ship call operations and management, port security, port technology and information systems, port works and maintenance, marketing and the environment.

IMO delivered a presentation on getting ports closer to its organisation. This course was sponsored by, among others, IMO, the French port Administration and the Port and Maritime Union of Le Havre and is a splendid example of training provided by an international organisation for the benefit of the worldwide maritime community.

GAINN4MOS

18 & 19 September 2019

Public Demonstration of LNG station in Fos-Marseille and Final GAINN4MOS Information Day

By Captain Danielle Quiani, IFSMA Vice President

From January 2020 Regulation 14 of MARPOL Annex VI provides that the sulphur content in fuel oil used on board ships shall be reduced from a maximum limit of 3.5 % to a maximum limit of 0.5 %.

Among the decarbonisation solutions (scrubbers, use of alternative fuel with less 0.5 % sulfur, hydrogen cells and so forth) a number of ship owners chose to use Liquefied Natural Gas (LNG) as marine fuel, supported by Governments as well as by the European Union (EU).

Gainn4Mos is a project co-financed by EU, selected at the first call of the Connecting Europe Facility Program and group of six Member States (Spain, France, Croatia, Italy, Portugal and Slovenia) in order to improve the Motorways of the Seas by carrying out engineering studies on ship retrofitting and/or newbuilding, port LNG infrastructures, bunkering stations and a large set of pilot projects.

The action involved preparation of engineering studies and plans, as well as construction drawing of four LNG retrofitted prototype vessels, and seven LNG bunkering stations at core ports (that is five prototype stations in Koper, Genova, La Spezia, Livorno, Venezia and two fully operational LNG break-bulking stations in Nantes-St-Nazaire and Fos Marseille.

The action was coordinated by Fundacion Valenciaport and was implemented from 1 May 2015 to 30 September 2019. (More information is to be found at: www.gainnprojects.eu/about-gainn4mos/

On 18 and 19 September, as Gainn projects coordinator, Fundacion Valenciaport team organised in Marseille the final event of the GAINN project.

On the first day those attending visited the adaptation works of ELENGY's LNG plant to offer bunkering services to LNG barges and ships and supply LNG trucks and ISO containers to comply with Directive 2014/94/EU on the deployment of alternative fuel infrastructures.

On the second day, the most prominent results of GAINN4MOS and other related actions were presented by ten international speakers.

Picture caption

Public Demonstration of LNG station in Fos-Marseille: Fos Cavaou ELENGY's LNG Terminal. Fos Cavaou is owned 72,5% by ELENGY and 27 % by TOTAL.

ELENGY is a GDF SUEZ's subsidiary. Fos Cavaou was commissioned in 2010.

Photo: ELENGY©.

A conventional LNG terminal receives gas carriers loaded with liquified natural gas (LNG) from production zones. On gas carriers LNG is already purified (the process involves removing water, other gas molecules and particles before liquefaction). Liquefied Natural Gas has different rates of methane depending on the production zones.

To be transported, the LNG is purified and cooled down until -160°C to be liquefied and its volume is reduced by 600 times.

Conventional operations: The gas carrier is moored by the Terminal, the LNG gas is unloaded through pipes specially designed to withstand very low temperatures (-160°C)

LNG is stored in cryogenic tanks (designed for low temperature) capable to withstand a temperature of -160°C to maintain the gas in liquid form. The outer walls of the storage tanks are made of pre-stressed reinforced concrete and they are insulated to limit evaporation.

Despite an accurate insulation a small amount of heat still penetrates the LNG terminal tanks. This causes a slight evaporation of the product. The resulting boil-off gas is captured and reinjected into the LNG flow using a compressor and recondensing systems.

During maintenance, boil-off gas can no longer be recovered and it is burnt off by the flare stack in order to avoid venting natural gas into the atmosphere. This is to reduce the impact on the greenhouse effect.

Regasification of the LNG is necessary in order to send the gas into the national transmission grid.

LNG is extracted from the tanks by submerged pumps then pressurised by high pressure pumps until 85 atmospheres. The pressurised LNG is turned back into a gaseous state in vaporisers.

Different technologies are used by ELENGY terminals in their vaporisers:

- Open rack vaporisers that use seawater
- Vaporisers fed by a closed hot water loop from the Air Liquide plant next to the Fos Tonking Terminal (Fos Tonkin Terminal is also owned by ELENGY and is part of the LNG industrial site).
- Stand-alone submerged-combustion vaporisers (a water bath heated by natural gas burner).

Odorisation

Before being sent into the national transmission grid the LNG which is odourless will be odourised with a tiny amount of tetrahydrothiophene (THT) giving gas its characteristic familiar odour.

Fos Cavaou LNG ELENGY Terminal is additionally operating the reloading of gas carriers, transhipment from gas carrier to gas carrier, supplying of bunkering barges, loading of trucks.

The installation is a hub for LNG and its terminal can receive gas carriers of 75 000 m³ (Med. Max class) with capacity to 267 000 m³ capacity (Q-max). Storage capacity is of 300 000 m³ in three tanks.

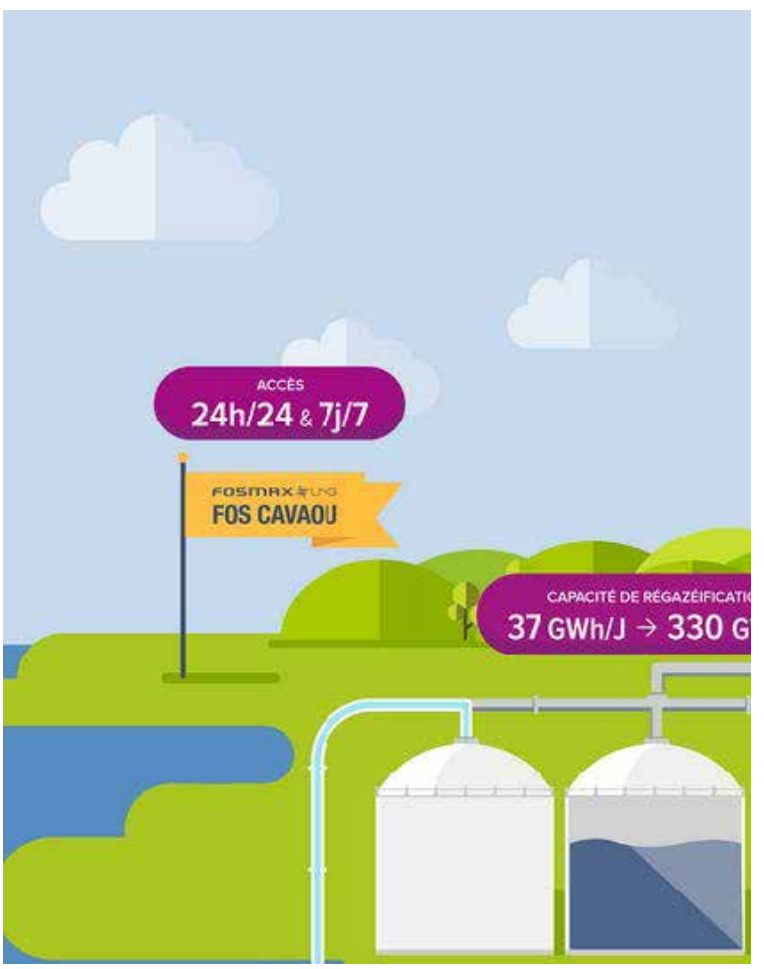
Finally, the work undertaken at Fos Cavaou terminal was adaptation of the jetty for mooring and loading bunkering barges and the building of two new LNG truck loading stations with capacity of 40 trucks per day.

Truck motors run on gas for at least 50 % of their parking time whereas other trucks are running totally with diesel.

Safety in the terminal is of high concern even if LNG is not flammable in its liquified state. ELENGY propose training courses for LNG handling.

Editor's note:

We are pleased to report that one of the experts behind this project is an 84 year-old shipmaster, a member of our French Association, HYDROS.



The Fos-Cavaou ELENGY's LNG Terminal.
Drawing is by ELENGY©
Storage capacity here is 330 000 m³
Regasification capacity is 8,25 Gm3/year
Maximum capacity of vessels accommodated is 267 000

Obituary

Captain Jean Chenneviere

1926-2019

It is with deep regret that we record the passing of Captain Jean Chenneviere, former President of IFSMA, on 13 October 2019 at the age of 93.

The funeral was held on 21 October in Le Havre, where IFSMA was kindly represented by Captain Hubert Ardillon, Vice President of AFCAN[1] and President of CESMA[2].

Captain Ardillon pays tribute here: '*Our colleague Captain Jean Chenneviere was one of the very first French captains who helped form the French association AFCAN in 1979. Being part of the board of the association, he was its representative at IFSMA and was the first vice-president from 1983 to1990.*

'*As vice-president he was one of the French captains who organised the IFSMA AGA in Le Havre in 1988* (see photo, from left to right: President Goldberg, Vice President Captain Chenneviere, Captain Colson, Captain Kawashima)*. With three other European captains, he was one of the four founding fathers of CESMA.*

'*Following a 40-year seagoing career he became a maritime expert and took a keen interest in maritime and shipping affairs.*

'*He was a great raconteur with a fund of stories based on his experiences and had strong views on the captain's specific function regarding safety at sea for the vessel and her crew. Moreover, he had very clear and comprehensive knowledge of French and European maritime law.*

'*A great organiser Captain Jean Chenneviere possessed a sparkling wit and was fastidious in his attention to detail. Drafting of CESMA statutes owes him a lot. To answer a question in a general manner was not his style as he was keen to present a text which was clear, understandable and accurate.*

m³. One berth has a draft of 15 m.

'*He had a passion for the maritime world of course, and also a desire to achieve very high standards in all he undertook. This was apparent when he was in contact with administration, journalists, in organising a General Assembly and in playing an important role in the founding of CESMA.*

'*In recent years, despite not being able to attend regional meetings due to infirmity he was, nonetheless, aware of the maritime news. Each time I telephoned him I was most impressed by his clear view of the situation about which we were speaking. Of course our discussions mostly regarded international and/or CESMA news and affairs.*

'*Thanks a lot Captain Chenneviere*.'

[1] Association Française de Captaines de Navires (www.afcan.org).

[2] Confédération Européene des Ship Masters' Associations (www.cesma-europe.org).Captain Jean Chenneviere 1926-2019

Feeling tired – the effect of fatigue on seafarers

By Neale Rodrigues

Loss Prevention, Britannia P&I

In a number of accident reports fatigue is mentioned as a major contributory factor. The IMO Maritime Safety Committee has issued a new set of Guidelines (MSC.1/Circ.1598) to help everyone understand their roles and responsibilities when managing the issue of fatigue.

The IMO uses the following definition of fatigue: '*A state of physical and/or mental impairment resulting from factors such as inadequate sleep, extended wakefulness, work/rest requirements out of sync with circadian rhythms and physical, mental or emotional exertion that can impair alertness and the ability to safely operate a ship or perform safety-related duties*.'

Fatigue has been directly linked to accidents involving personal injury, groundings and other near miss incidents. Investigation reports from the (UK) Marine Accident Investigation Branch (MAIB) have noted the following examples:

- Whilst on passage, the officer on watch fell asleep shortly after taking over the watch at midnight. The ship continued on for more than three hours and then grounded.
- In another grounding investigation, the chief officer who was on watch fell asleep, having worked solidly for 17 hours in the previous port. The entries in the log recording hours of work and rest had been falsified.

- People are often reluctant to admit that they feel so tired that it starts to affect their ability to carry out tasks and especially to carry out their watch keeping duties.

Case study

At one of our recent loss prevention seminars we were discussing the issue of fatigue and a master in the audience told us of about how he had followed his company's SMS procedure for fatigue management and believed he had suffered because of this.

The ship had been in port for 18 hours and all staff on board had been working very hard. Everyone was tired when the ship finally left the berth and so the master anchored for three hours in a safe anchorage so that the watchkeepers could rest before proceeding. This was in accordance with the SMS guidelines.

The ship arrived at the next port on time and within the laycan and the ship managers did not mention the three hours at anchor. However, when the master came to the end of his contract he was not offered another position (despite having worked for the company for many years without incident) and he believed this was linked to his decision to allow the rest period.

Conclusion

The responsibility for effective fatigue management must be a shared one. Crew must take responsibility to assess their own levels of fatigue and keep accurate sleep records. In turn, the senior officers and management ashore must make sure that there is an effective system in place that takes into account the effects of fatigue on all ship staff and operations.

Addressing invasive species in ships' ballast water

IMO BWM Convention amendments now in force

With regard to the Ballast Water Management Convention (BWM), amendments formalizing the implementation schedule for the D-2 standard are now in force.

Amendments to this international treaty aimed at preventing the spread of potentially invasive species in ships' ballast water entered into force on 13 October and was the subject of an IMO briefing the following day.

The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (the BWM Convention*) was adopted by the IMO to address this problem.

The BWM Convention entered into force in 2017. Amendments formalise an implementation schedule to ensure ships manage their ballast water to meet a specified standard known as the D-2 standard – see below. This is aimed at ensuring that viable organisms are not released into new sea areas, and it makes mandatory the Code for Approval of Ballast Water Management Systems, which sets out how ballast water management systems used to achieve the D-2 standard have to be assessed and approved.

It is understood that this will help ensure that aquatic organisms and pathogens are removed or rendered harmless before the ballast water is released into a new location. This will avoid the spread of invasive species as well as potentially harmful pathogens.

Amendments to the BWM Convention were adopted in April 2018. In essence, the schedule for implementation means that compliance with the D-2 standard set out in the Convention will be phased-in over time for individual ships, up to 8 September 2024. Over time, more and more ships will be compliant with the D-2 standard, it is reported.

In many cases, meeting the D-2 standard will be achieved through fitting ballast water management systems. There are now many such approved systems on the market, ranging from those which use physical methods such as ultraviolet light to treat the ballast water, to those using active substances, for example chemicals. Those that use active substances have to go through a thorough additional approval process. (A list of approved systems can be found below**.)

Other amendments to the BWM Convention which entered into force on 13 October relate to survey and certification.

The BWM Convention – D-2 standard

The D-2 standard specifies that ships can only discharge ballast water that meets the following criteria:

- Less than 10 viable organisms per cubic metre which are greater than or equal to 50 micrometres in minimum dimension;
- Less than 10 viable organisms per millilitre which are between 10 micrometres and 50 micrometres in minimum dimension;
- Less than 1 colony-forming unit (cfu) per 100 millilitres of Toxicogenic Vibrio cholerae;

- Less than 250 cfu per 100 millilitres of Escherichia coli; and
- Less than 100 cfu per 100 millilitres of Intestinal Enterococci.

The BWM Convention and the SDGs

Implementation of the Ballast Water Management Convention contributes to achieving a number of the United Nations Sustainable Development Goals (SDGs), in particular, SDG 14 on life below water, which calls for sustainable use of the oceans; and SDG 15, which includes targets relating to biodiversity and curtailing the spread of invasive species.

The BWM Convention requirements

Since the Convention entered into force in September 2017, ships have been required to manage their ballast water to avoid the transfer of potentially invasive aquatic species.

All ships must have a ship-specific ballast water management plan and keep a ballast water record book. Ships are also required to manage their ballast water to meet either the D-1 ballast water exchange standard or the D-2 performance standard.

Amendments brought into force on 13 October 2019 formalise the implementation schedule for the transition from the D-1 to the D 2 standard.

* http://tinyurl.com/yxn8fhjj
** http://tinyurl.com/y6n52h3d

Spot checks on ferries for dangerous goods

1 August 2019

Maritime NZ, partner regulatory agencies and the shipping industry worked together at the beginning of August in a joint compliance and information-gathering operation on the carriage of dangerous goods (DG).

Checks were specifically targeted to ensure that goods being carried on Cook Strait ferries were declared and compliant with safety regulations.

Spot checks had been undertaken at the end of July in Wellington, Picton and Blenheim on vehicles and cargoes being loaded onto the Cook Strait ferries. The checks were carried out to determine whether dangerous goods are being loaded, transported and documented in accordance with road and maritime transport rules and regulations. There was good compliance from those inspected, it was reported.

Dangerous goods can be carried on ferries provided they are declared and classified. The amounts and categories of dangerous goods that can be carried are limited on passenger ferry sailings in line with international and New Zealand regulations.

Inspections were undertaken on 88 vehicles stopped at five locations in Wellington, Picton and Blenheim and 83 of the vehicles inspected were commercial trucks.

Of the vehicles inspected, 48 of them intended to travel on a Cook Strait ferry. Of the 88 vehicles stopped 21 vehicles were carrying dangerous goods.

Police undertook inspections of vehicles and were supported by inspectors from Maritime NZ , WorkSafe , Environmental Protection Authority (EPA) and NZ Transport Agency (NZTA). Interislander and Strait NZ Bluebridge Cook Strait ferries operational staff provided cargo manifests, cargo declarations and relevant documents.

Police regularly undertake road transport compliance and safety checks on commercial vehicles, including for dangerous goods. These inspections are conducted anywhere on the road network.

Senior Sergeant Mike McRandle, Team Leader of South Island Commercial Vehicle Safety Team said that: '*Police and our partner agencies see the value of working collectively to examine dangerous good transportation across Cook Strait. It's important for public safety that this is being carried out safely and in accordance with regulations*.'

Maritime NZ provided maritime officers (MO), flag state inspectors (FSI), inspectors appointed under the Health and Safety at Work Act (HSWA) and Hazardous Substances and New Organisms Act (HSNO) and a senior manager to both support Police at road layby areas and to observe cargo loading activities at the Wellington and Picton port entry areas.

Maritime NZ is responsible for collecting and recording information during these operations.

Deputy Director Compliance Systems Delivery Pelin Fantham said: '*There was good compliance from those inspected and they positively engaged in the process.*

"Everyone who was involved, including the transport com-

panies, ferry operators and regulators are working togeth-

er to ensure that dangerous goods are transported safely on road and at sea. Information from (the) *exercise will be used in subsequent compliance checks as well as in other activities by regulators to ensure dangerous goods are transported safely in compliance with the law*.'

Photo: Maritime NZ ©.

Drop in major incidents in the Port of Singapore

On 29 August the Maritime and Port Authority (MPA) of Singapore reported that the number of major incidents [1] in the Port of Singapore has dropped over the last ten years, with fewer than 0.12 major incidents per 100,000 vessel movements in 2018, down from 0.8 in 2009.

Speaking at the fourth International Safety@Sea Conference held on 29 August Dr Lam Pin Min, Senior Minister of State for Transport and Health, said: '*I thank the maritime community for the good work in improving maritime safety. The use of technology and digitalisation can further enhance maritime safety by providing seafarers better access to critical safety-related information and early warning of potential incidents*.'

Besides Safety@Sea, MPA reported that it will also be pushing for digitalisation in two other areas:

- MPA will embark on a Digital OCEANS strategy to encourage Open or Common Exchange And Network Standardisation. This strategy aims to allow digital platforms of port authorities e.g. maritime single windows of shipping lines and of logistics service providers to link up. This will allow business entities, government agencies, and vessels to connect seamlessly between different digital platforms and to achieve end-to-end connectivity. For example, MPA is developing a Maritime Single Window (MSW) to provide a single portal access to submit documents for port clearance. The MSW will have the ability to exchange relevant data through standard Application Programming Interfaces (APIs).

- MPA is also supporting the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) in putting into action the IMO concept of e-navigation for vessels which aims to make marine navigation safer and to digitalise key maritime services. These initiatives, it is understood, will improve efficiency, reduce transaction costs and enhance maritime safety.

MOUs with Centre of Excellence in Maritime Safety

At the event, Dr Lam also witnessed the signing of three memoranda of understanding (MOUs) following the launch of the Centre of Excellence in Maritime Safety (CEMS) last year. Set up by the Singapore Maritime Institute and Singapore Polytechnic, CEMS focuses on research and innovations that enhance navigational safety. It also contributes to the training and development of future-ready seafarers, through the use of emerging digital technologies such as augmented reality and virtual reality. The three MOUs are with:

- A*STAR's Institute of High Performance Computing to conduct research in human behavioural analytics, advanced computational models and intelligent maritime traffic simulation in navigational safety.

- Singapore's Transport Safety Investigation Bureau to jointly promote and enhance maritime safety investigations via the development of immersive training platforms and programmes.

- Group Nautical Pte Limited to create, design and develop Virtual Reality maritime training courses using immersive technologies.

[1] Major incidents are those involving loss of life or pollution or those that affect safety of navigation in surrounding waters.

Dr Lam Pin Min, Senior Minister of State for Ministry of Transport and Ministry of Health, Singapore, giving his opening address.

Fourth Propulsion Revolution

ICS reaches beyond the shipping community

On 11 September as part of London International Shipping Week (LISW) a packed house of delegates in London was confronted with the reality of powering global trade without the use of fossil fuels.

At the International Chamber of Shipping's 2019 Confer-

ence – Setting Course for 2050: Powering Global Trade, more than 30 influential speakers from around the world challenged the shipping community to fully explore the options open to the industry and the decisions it faces – decisions which will have implications beyond the sector's own boardrooms.

Speakers included the Rt Hon Nusrat Ghani MP, Parliamentary Under Secretary of State for Maritime, Department for Transport; HE Kitack Lim, Secretary-General, IMO; the Rt Hon The Lord Turner of Ecchinswell, Chair, Energy Transitions Commission; Dr Rhian-Mari Thomas, CEO of the Green Finance Institute and Emanuele Grimaldi, President and Managing Director, Grimaldi Group S.p.A.

Professor Anders Hammer Strømman of the United Nations Intergovernmental Panel on Climate Change.

One of the most sobering statements came at the beginning of the day from Professor Anders Hammer Strømman of the United Nations Intergovernmental Panel on Climate Change who reminded the audience that: '*Depending on the amount of CO_2 released, between 15 to 40% of emitted CO_2 will remain in the atmosphere for up to 2,000 years.*'

Emanuele Grimaldi, President and Managing Director, Grimaldi Group S.p.A.

In his opening remarks on behalf of ICS Emanuele Grimaldi reflected on the challenge ahead and the ground-breaking agreement on CO_2 emissions concluded in April last year, known as The Paris Agreement for Shipping. He reminded the audience that we (the shipping community) are embarking on the most important transformation to face the maritime sector since the transition from sail to steam saying: '*We all know that change is coming and as in all business the winners will be those who identify the opportunities and make the right decisions*.'

He added: '*It represents a fundamental transformation in the business of shipping, something that we at ICS call the Fourth Propulsion Revolution*.'

Acknowledging the panel of speakers he concluded with: '*What is also clear is that we can't do it alone. Without the support of consumers, policymakers, the finance community and suppliers the Fourth Propulsion Revolution will be stifled. We must all work together to mitigate the risk of transformation. Risk is our common language. And we need to reach beyond our own community to ensure that the risk is equitably allocated and priced*.'

Third from right Rt Hon Nusrat Ghani MP, Parliamentary Under-Secretary of State for Maritime, Department for Transport with the panel.

The packed agenda covered climate science, research and development, finance, policy instruments and the role of the Global Maritime Value Chain.

Illustrations kindly provided by ICS ©

Space: EU's satellite navigation system Galileo reaches 1 billion smartphone users

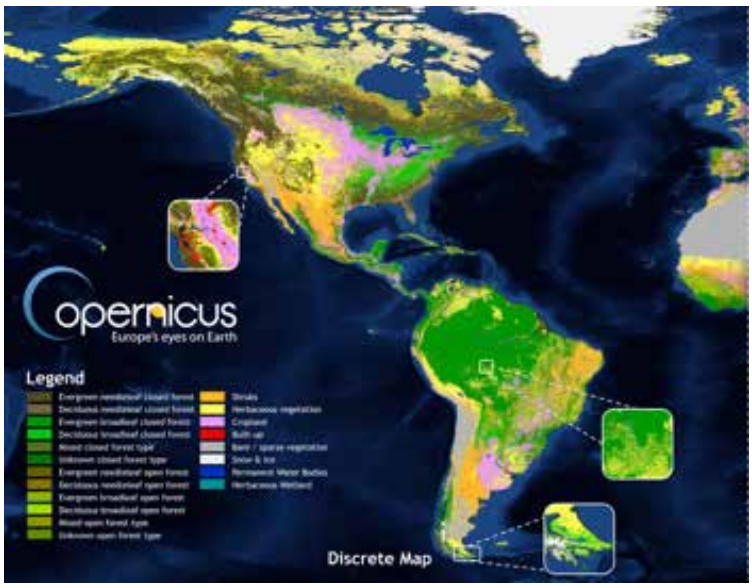
According news from Brussels on 10 September the European Commission reported that Galileo, Europe's satellite navigation system, now reaches 1 billion smartphone users worldwide.

Atlantic ship tracks. *Photo: ESA / Copernicus ©.*

This milestone coincided with the 15th anniversary of the European Global Navigation Satellite Systems Agency (GSA), the Commission's key partner in operating Galileo.

Ahead of a special event at GSA's HQ in Prague, Elżbieta Bieńkowska, Commissioner for Internal Market, Industry, Entrepreneurship and SMEs, commented: '*Galileo is now providing high quality timing and navigation services to one billion smartphone users globally. This has been made possible by a truly European effort to build the most accurate navigation system in the world, with the support and dedication of the GSA. I am confident that our space industry will continue to thrive with more work, ideas and investment under the new EU Space Programme*.'

Since December 2016, Galileo has provided so-called "initial services" which already improve everyday life for citizens and businesses with accurate positioning, navigation and timing signals.



Copernicus World *Photo: ESA / Copernicus ©.*

Progress

Today 95% of companies that produce smartphone chips for satellite navigation make chips that enable Galileo. The '1 billion users' milestone is based on the number of smartphones using Galileo sold across the world. The actual number of Galileo users is larger. In Europe, all new car models approved for the market are equipped with the eCall system, which uses Galileo to communicate the vehicle's location to emergency services.

Since this year, 2019, Galileo is integrated in the digital tachographs of lorries – a speed and distance recording device – to ensure the respect of driving time rules and improve road safety.

Galileo has also been providing crucial Search and Rescue (SAR) Service, reducing the time it takes to detect a person equipped with a distress beacon to less than ten minutes at sea, in mountains or deserts.

With Galileo, the accuracy of localisation has improved from 10 km to less than 2 km, it is reported. In the future, the system will also confirm to the person that help is on the way.

Finally, Galileo supports public authorities with its Public Regulated Service, for sensitive security use. It offers a robust and fully encrypted service for government users during national emergencies or crisis, such as terrorist at-

Copernicus surveillance. *Photo: ESA / Copernicus ©.*

tacks, to ensure continuity of services.

The European space industry, the second largest in value in the world, is strong and competitive. To help maintain and further enhance the EU's leadership in space, the Commission has proposed a €16 billion Space Programme for the next long-term EU budget 2021-2027.

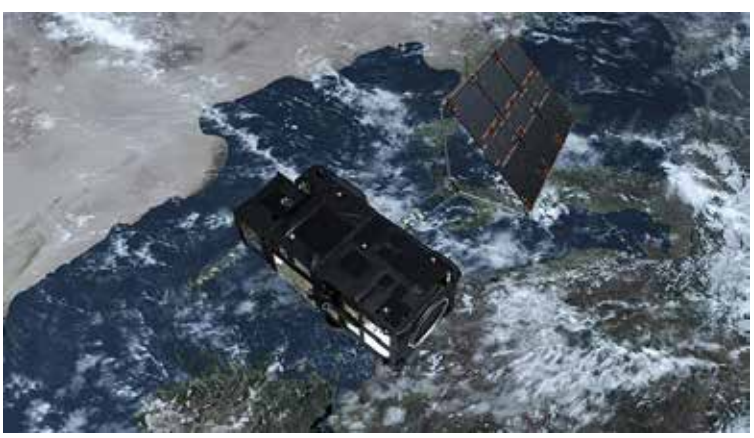
Background

Galileo is the EU's own global satellite navigation system. It is a civilian system under civilian control, which provides accurate positioning and timing information. Galileo aims to ensure Europe's independence from other satellite navigation systems and its strategic autonomy in satellite navigation. Europe's autonomy in this sector will boost the European job market, help the EU step up its role as a security and defence provider, and support emerging technologies such as Artificial Intelligence, drones, automated mobility and the Internet of the Things.

In addition Galileo has provided initial services since December 2016. During this initial pilot phase preceding the full operational services phase, Galileo signals are used in combination with other satellite navigation systems. In the full operational phase, users will be able to use Galileo signals independently of other satellite navigation systems.

Other EU space activities include Copernicus (free and open Earth observation data of land, atmosphere, sea, climate change and for emergency management and security), EGNOS (regional satellite navigation system) and Space Surveillance and Tracking (SST).

The new Space Programme will bring all existing and new EU space activities under the umbrella of a single programme. It will maintain existing infrastructure and services and introduce a number of new features to foster a strong and innovative space industry and preserve the EU's autonomous, reliable and cost-effective access to space.



Copernicus Sentinel. *Photo: ESA / Copernicus ©.*

Furthermore, it was reported that the new programme also

International Mobile SIM cards for seafarers

One of the most valuable welfare assets for the seafarer is, surely, the SIM card and adequate connection to a network.

According to the web journal *Marine Insight* there are many providers to be considered.

In the edition of 10 September no fewer than twelve SIM card providers were listed, see here: http://tinyurl.com/y2hqpx78

These range from Three UK to Planet Roam Seafarer SIM by way of One SIM Card and Uni Connect.

We at IFSMA are not able to comment on the value of each SIM card provider listed.

Corsica Linea ferries

ABB enables emissions-free Marseilles port stay

With ABB's shore connection technology, three Corsica Linea ferries will cut emissions and noise pollution when berthed in the Port of Marseille, France.

Instead of running diesel-fuelled auxiliary engines the ferries *Paglia Orba*, *Jean Nicoli* and *Pascal Paoli* will use electricity for power at the berth. Each of the three vessels is being modified to feature ABB's power compensation device Dynacomp, which allows electricity available from the local grid in Marseille to be stepped down to 11KV in order to take care of ship power needs while in port.

In the words of Ludovic Amouroux, Project Manager, Corsica Linea: '*ABB shore connection technology enables the type of emissions-free ship power that regulators, ports and local residents increasingly demand. With ABB's proven technology, Paglia Orba, Jean Nicoli and Pascal Paoli will be emissions-free when berthed in Marseille. We estimate we will use between 7MWh and 11 MWh of zero-emission power per call, depending on the vessel*.'

Jyri Jusslin, Head of Service, ABB Marine & Ports added: '*Decision-makers in the ferry sector like Corsica Linea continue to lead on zero-emission shore power, proving that existing vessels can significantly reduce environmental impact with technology that is available to shipowners today. We are delighted to offer our turnkey shore connection solution to meet Corsica Linea's shoreside power needs*.'

This project covers the supply and shipboard installation of electrical, mechanical and automation systems to enable shore power connection. On the shore side, ABB will deliver a custom-designed cable management system on the quay at Marseille, it is understood.

These three Corsica Linea ferries carrying vehicles and

passengers connect Marseille and Corsica, for 48 weeks of the year.

Installation of ABB's shore connection technology in one of the ferries, *Paglia Orba*, is currently underway, while the two remaining vessels will be connected to shore power in 2020.

The ferry Jean Nicoli of Corsica Linea
Photo: Corsica Linea / ABB ©

Worldwide, ferries transport 2.1 billion passengers and 250 million vehicles every year, according to trade association Interferry. With increasing passenger volumes, the ferry industry is under pressure to meet the IMO target of reducing annual emissions by 30% by 2025.

After France presented an impact assessment to IMO in late 2018, momentum is building to designate the Mediterranean Sea as an Emissions Control Area where stricter controls are in place to minimize emissions from ships.

It has been reported that the Port of Marseille's efforts to reduce emissions include participation within the EU-funded CLIMEPORT greenhouse gas initiative, while Grand Port Maritime de Marseille (GPPM) has also built the infrastructure at two berths to facilitate shore side power connections.

About ABB

ABB with a history of innovation spanning more than 130 years has four customer-focused, global leading businesses: Electrification, Industrial Automation, Motion, and Robotics & Discrete Automation. It is understood that ABB's Power Grids business will be divested to Hitachi in 2020. ABB with about 147,000 employees operates in more than 100 countries.

Game-changing Viking LifeCraft™ receives approval

It was reported on 16 September that Viking's entire LifeCraft™ system has now obtained flag state approval as a novel life-saving appliance to be installed in passenger ships for safety in evacuation emergencies. This announcement indicates that the world-first inflatable and electrically powered evacuation system has now been cleared for installation on ships worldwide.

The stamp of approval was issued by the Danish Maritime Authority (DMA) on 23 August and follows earlier approval of key components of the system, such as the Survival Craft™, as part of development of this innovative system.

It is understood that full commercial availability of the triple award-winning Viking LifeCraft™ is set to follow within a few months of this approval.

It was reported that these units reflect the dual nature of the Viking LifeCraft™ system, which could make it possible to replace current lifeboat and liferaft evacuation methods with a hybrid system.

In the words of Viking CEO, Henrik Uhd Christensen: '*The LifeCraft™ system goes far beyond the capabilities of existing evacuation solutions and I am very proud of my team and our achievements.*'

Innovative design

Furthermore, it was reported that the LifeCraft™ system has a capacity to save 812 people and consists of two main elements: inflatable Viking LifeCraft™ survival craft, and a fully self-contained stowage and launching appliance that can either be placed on deck or built into the ship's side.

Additionally, it was reported in the Viking statement of 16 September that every system is equipped with four survival craft each holding 203 persons. With four independent electric engines at its corners, each survival craft is said to be highly manoeuvrable with the ability to rapidly turn 360 degrees.

Worldwide roll-out

To quote Christensen again: '*We expected the final approval process to go every bit as smoothly as the previous novel life-saving approval, and it did and this achievement*

comes at a perfect time, considering the amount of interest cruise shipowners are showing in getting this new evacuation solution installed and operational. Now they can take their plans for incorporating Viking LifeCraft™ into both newbuilds and existing ships to the next level.'

About Viking

Headquartered in Denmark, the corporation manufactures, supplies and services everything from chute and slide-based evacuation systems to liferafts, lifejackets, immersion suits, firefighting equipment, aviation safety gear, lifeboats, hooks, davits and so forth.

Founded in 1960, the privately held corporation manufactures in Denmark, Norway, Bulgaria, Greece, China and Thailand.

Illustrations kindly provided by www.VIKING-life.com ©.

Using artificial intelligence to automate sea-ice charting

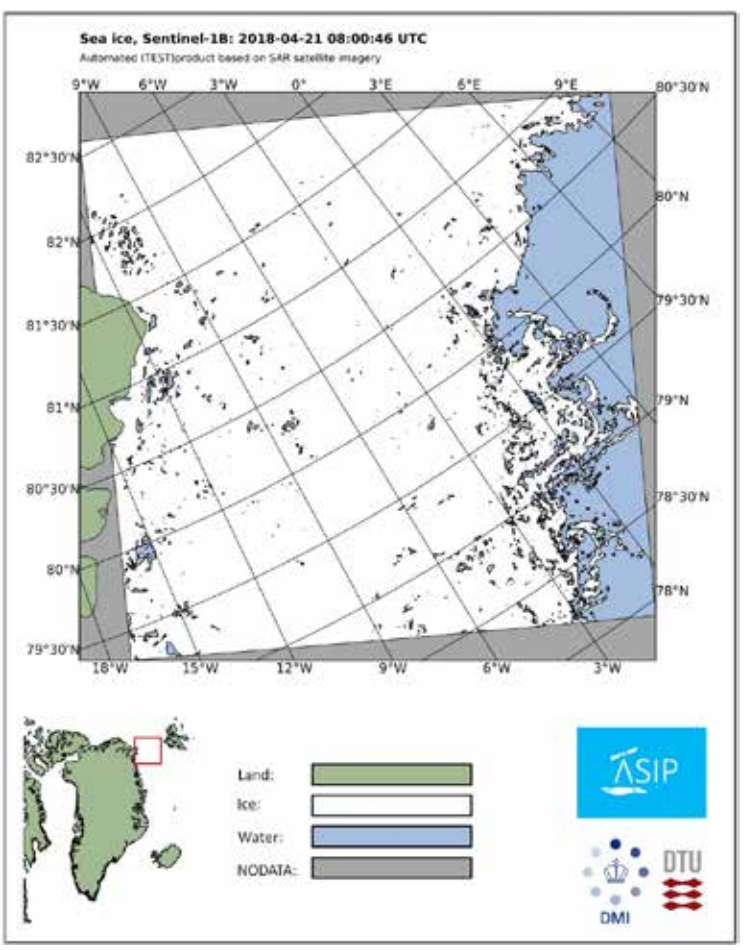
Reliable charts of sea-ice conditions and forecasts are of vital importance for maritime safety, safe navigation and planning. Continued retreating and thinning of Arctic sea ice calls for a more effective way of producing detailed and timely ice information – which is where artificial intelligence comes in. This was reported in a feature by the European Space Agency (ESA) on 10 September.

As we well know manual ice-charting from multi-sensor satellite data has been used for years, but it is time-consuming because of the vast area of the Arctic Ocean. In order to provide relevant ice data, there is a need for automated ice observations from satellite data, to integrate into ice forecast models.

In response to this, the Danish Meteorological Institute (DMI), the Technical University of Denmark and Harnvig Arctic & Maritime have initiated the project known as Automated Sea Ice Products (ASIP) – funded by the Innovation Fund Denmark. This project aims, it is reported, to develop an automatic sea-ice service that can provide more timely and detailed sea-ice information to improve efficiency and safety of marine operations in the Arctic.

Sea-ice. *Photo: ESA/Copernicus ©.*

ASIP merges Copernicus Sentinel-1* imagery with other satellite sensor data, such as passive microwave data from the Advanced Microwave Scanning Radiometer 2 (AMSR2) to resolve ambiguities that can occur in SAR imagery, such as during windy sea conditions. ASIP uses a convolutional neural network system that is trained with vast datasets of ice charts, to generate ice maps automatically.



ASIP sea-ice map. *Photo: ESA/Copernicus ©.*

In the words of David Malmgren-Hansen from DTU Compute: '*ASIP will be a great opportunity for users to have an up-to-date map of sea-ice products. We are currently working hard to get this in production and validate it with both the ice experts and the users.*'

It is understood that ASIP will be made freely available through the DMI Ice Service, for maximum value for both public and commercial users.

As part of the ESA news service it was reported on 10 September that David Malmgren-Hansen had presented his project at this year's Φ-week event, which focused on Earth observation and FutureEO **. The week included a variety of inspiring talks, workshops on how Earth observation can benefit from the latest digital technologies and help shape future missions.

*See: https://sentinel.esa.int/web/sentinel/home

** See: https://earth.esa.int/web/guest/missions/esa-eo-missions

Cargo theft

A growing issue and the need to improve prevention

In September the International Union of Marine Insurance (IUMI) published a revision of its position paper containing recommendations aimed at improving the prevention of cargo theft in an effort to counter this growing issue.

Cargo crime has reached alarming proportions, and IUMI urges further steps to better facilitate the safe and secure flow of goods within the global supply chain and to minimise risk. In particular, efforts by law enforcement agencies to increase transnational cooperation to combat cargo theft must be further enhanced, reflected the Union.

On 14 September the topic was raised by IUMI whose Policy Forum Chair, Helle Hammer (*pictured*) commented: '*Unfortunately, cargo theft continues to surge, and it is having a negative impact on supply chains and economies around the world. We are calling for improved preventative measures to be put in place. Cargo crimes are a large burden to society as the costs caused by stolen cargo, business interruption and loss of reputation do not simply disappear but are factored into the pricing of the products which are moved around the globe every minute of every day.*'

A study conducted in Germany in 2018, estimated the direct losses caused by cargo theft from trucks to be €1.3 billion with an additional €900 million due to penalties for delays in delivery, repair costs as well as lost sales and business interruption.

In 2008, an EU/Europol study, based on the Transported Asset Protection Association's (TAPA)* figures, estimated that the economic damage of cargo theft in Europe alone amounts to €8.2 billion per year.

Even though there are no similar official studies in other areas of the world, IUMI suggests that cargo thefts have a similar negative impact across all continents. These are no small numbers, and a more updated and better overview is needed for relevant authorities to decide on further actions in their respective country or region.

Helle Hammer continued: '*Cargo theft is often portrayed as a victimless crime. It is important to remember that cargo theft is not only a financial consideration but is also putting at risk the safety of the people working in the transport sector. Protecting their safety is vital.*'

As one commentator said of this problem of theft: '*With the losses as indicated, for once the ship is not being blamed and this makes a refreshing change.*'

IUMI's position paper includes a number of considerations that will help prevent cargo theft. These include the continuation of exchange of best practice across borders on local initiatives; establishing a dedicated cargo theft taskforce; training with a focus on cargo theft awareness and prevention; and enhanced due diligence by shippers, logistics/transport companies when selecting agents and staff.

The full position paper is available from IUMI's website here: https://iumi.com/opinions/position-papers

About IUMI

The International Union of Marine Insurance (IUMI) represents 43 national and marine market insurance and reinsurance associations. Operating at the forefront of marine risk, it gives a unified voice to the global marine insurance market through effective representation and lobbying activities.

As a forum for the exchange of ideas and best practice, IUMI works to raise standards across the industry and provides opportunities for education and the collection and publication of industry statistics. IUMI is headquartered in Hamburg and traces its roots back to 1874.

For more information about IUMI readers are invited to see here: www.iumi.com

*See: Transport Asset Protection Association EMEA: https://www.tapa-global.org/

IMO 2020 sulphur regulations

BIMCO and others call on IMO Member States for full implementation

It was reported by BIMCO on 19 September that the organisation with the World Shipping Council (WSC), the Cruise Lines' International Association (CLIA), and the International Parcel Tankers' Association (IPTA) have initiated a call on IMO member states to fully implement the new global marine fuel sulphur cap mandated through the

IMO. As of 1 January, 2020, the maximum sulphur content of fuel consumed at sea will be limited to 0.50%, unless an exhaust gas cleaning system is used.

New rules, including the 1 January, 2020, implementation date, have been known for a long time, and the industry has worked diligently to be ready to comply. However, the cost of compliance is high, so it is critical that the rule is consistently applied and enforced. There must be a level playing field if this important regulation is going to work.

John Butler, President & CEO of the World Shipping Council commented: '*Recent reports suggesting that some nations might not fully implement the new rules are disturbing. Lack of full implementation would risk undermining improvements to public health and the environment.*

'*The rules and implementation date for the new sulphur limits are clear and must be enforced. We urge any country considering deviation to abandon those ideas and put plans in place to fulfill their enforcement responsibilities as of January 1, 2020, and we encourage the IMO to remind member states of their commitments*.'

Angus Frew, Secretary-General and CEO of BIMCO, observed: '*The primary reason to move to low sulphur fuel is to improve air quality. For nations not to implement this regulation is to continue to put at risk the health of their coastal populations*.'

Brian Salerno, Senior Vice-President for Environmental Policy at CLIA, noted: *The cruise industry is prepared for the 2020 global sulphur limit through a diverse approach using low-sulphur fuels, alternative technologies such as exhaust gas cleaning systems (EGCS) and new ships propelled by liquefied natural gas (LNG) fuel. Consistent application of the requirements globally remains critical, as adopted by the IMO*.'

IPTA Chairman, Manish Jain, commented: '*IPTA members are supportive of the IMO as the sole agency with the mandate to regulate global shipping. 1 January 2020 will herald a major change for ship operations and IPTA members have been working hard to prepare for it. It is important that IMO member states play their part in ensuring consistent implementation of the global sulphur cap that they developed and adopted*.'

Butler concluded: '*There is a lot at stake for the IMO community here. This regulation affects vessel operations 24/7/365 everywhere on the planet, and it will be expensive. This will be an important test case for IMO member states to demonstrate that they will exercise the political will to implement and enforce the fuel sulphur limits they have adopted*.'

About WSC, BIMCO, CLIA and IPTA

The World Shipping Council is an association of liner shipping companies with offices in Brussels, Singapore and Washington, DC. Its members transport over 90% of containerized international trade and a high percentage of transoceanic vehicle carrier traffic.

BIMCO is the world's largest international shipping association, with around 1,900 members in more than 120 countries. BIMCO's global membership includes shipowners, operators, managers, brokers, agents and P&I clubs.

Cruise Lines International Association (CLIA) is the world's largest cruise industry trade association, providing a unified voice for the global cruise community. CLIA supports policies and practices that foster a safe, secure, healthy and sustainable cruise ship environment for more than 28 million passengers who cruise annually.

The International Parcel Tankers' Association (IPTA) represents the interests of the specialized chemical tanker sector.

Shore power at ROK Port of Incheon to reduce passenger vessel emissions

It was reported on 19 September that ABB will install the Port of Incheon's first shore-to-ship power facility, enabling passenger vessels to cut emissions, noise and vibrations at the berth

ABB has secured the contract covering the Republic of Korea's commitment to sustainable shore-to-ship power, after a pilot scheme for passenger ships to plug into the local grid received approval from Incheon Port Authority (IPA).

Photo: Reproduced by kind permission of Port of Incheon ©.

Juha Koskela, Managing Director, ABB Marine & Ports commented: '*As the first agreement covering shore-to-ship power in South Korea, this is a truly significant breakthrough for ABB. We are honoured to be selected by IPA to support their efforts in reducing greenhouse gas emissions from ships, as well as moving towards increasingly sustainable port operations*.'

In addition to a new $160 million ferry terminal opened in April 2019, the Port of Incheon inaugurated South Korea's

largest cruise terminal in June this year. Given its metropolitan location and IPA's ambitions to develop its 'Golden Harbor' vision for Incheon as a new tourism hub for the Northeast Asia, environmental credentials rank highly in port priorities, it is reported.

ABB's full scope of delivery includes the installation of an onshore power connection at the Incheon passenger terminal consisting of an enclosure featuring a 2000 kVA capacity Static Frequency Convertor with 50/60HZ output, a transformer, a Neutral Grounding Registor Unit and an outdoor enclosure.

More than fifty ports equipped

ABB's shore-to-ship power technology is proven from the performance and reliability point of view, but also in terms of optimizing the cost of electricity. It has already been integrated by over 50 ports around the world into strategies that reduce emissions overall and encourage clean shipping.

In conclusion ABB reported that an increasing number of ports around the world offer shore power for ferries, as well as for other passenger vessel types. There is a clear interest to lower pollution in ports, and this can be arrived at by the installation of shore power.

LISW 2019 proves highly popular

Highlighted event in the global maritime calendar

New Lighthouse Service tonnage

London International Shipping Week once again exceeded all expectations by welcoming thousands of global shipping industry leaders to more than 200 official events throughout the week known as LISW19.

Initial estimates placed the number of UK and international visitors at approaching 20,000 but this figure could rise further when the number of peripheral events are considered.

Here the UK government used the week to host bilateral meetings with government delegations and senior industry figures to explore partnerships, future opportunities outside the European Union and examine how to help significantly boost maritime exports.

It was a week of business with event organisers reporting very strong attendance at their functions. Such was the interest of the varied subject matter under discussion and the high quality of venues, impressions left were that LISW19 was truly an essential global event.

Charities associated with this year's event also declared the week a *tour de force* with £11,000 raised at the headline LISW19 Gala Dinner alone and the £155,000 collected at the Sixth Annual Dragon Boat Race taking total contributions for that event to exceed £2 million.

LISW19 prides itself on the close association it has with the four maritime charities: Apostleship of the Sea; Sailors' Society; Seafarers UK; and The Mission to Seafarers. In addition the OSCAR Campaign's Dragon Boat Race proved to be a highly popular end-of-week event during LISW.

Llewellyn Bankes-Hughes and Sean Moloney, founders of LISW and Directors of Shipping Innovation, organisers of the event, said LISW19 exceeded all expectations with industry leaders networking with politicians and regulators from the UK and abroad.

In the words of Bankes-Hughes and Moloney: '*We were delighted to enjoy the support of 13 UK Government Departments and even welcomed the Prime Minister Boris Johnson onto one of the three vessels that visited London as part of London International Shipping Week.*

'*The number of international trade associations and individual companies wishing to become part of this amazing week of events continues to grow and underlines London and the UK's important role in helping to mould the international shipping and maritime sphere*'

Bankes-Hughes reflected: '*The energy, enthusiasm and hard work demonstrated throughout the week by Maritime Minister Nusrat Ghani MP, who must have attended at least half of the 200 events taking place, raised the level of discourse between Government and Industry and added kudos to the week*.'

He added: '*The presence of the Secretary of State for Transport, Grant Shapps; HRH The Princess Royal; and the drums and bugles of the Royal Marines at Banqueting House, lifted the week to even greater heights*.'

THV Patricia, built 1982, to be replaced by new tonnage.
Photo: Trinity House London ©.

New Lighthouse Service tonnage

Trinity House has launched a Vessel Replacement Project to commission the design and build of a vessel to replace THV *Patricia*, delivered in 1982 and reaching the end of its operational life.

This announcement was made at a launch event at Trinity House in London on 9 September 2019, attended by Maritime Minister Nusrat Ghani. At the same event, a contract notice was issued to the shipbuilding industry to open the procurement process.

The Minister announced her support for the project in July 2019, following a comprehensive Fleet Review that concluded that the three General Lighthouse Authorities of the UK and Ireland (Trinity House, Northern Lighthouse Board and Irish Lights) require seven vessels to deliver their critical aids to navigation service.

The new vessel will look to harness technological and environmental innovation to ensure that Trinity House continues to provide over 600 critical aids to navigation in its waters marking channels and hazards.

Nusrat Ghani, Maritime Minister, commented: '*95% of our imports and exports are transported to and from the UK by sea and, with our waters becoming even busier, dealing with incidents quickly and efficiently is more important than ever. This new ship will support the General Lighthouse Authority to help future-proof their fleet and continue to support maritime trade for generations to come.*'

Captain Ian McNaught, Executive Chairman of Trinity House, added: '*We were pleased to hear that the Maritime Minister was content for us to move the Vessel Replacement Project closer towards the design and build phase. While we must ensure that value for money is central to the design, we will also be looking for new, tested and robust technologies in the vessel design; these technologies will need to offer high performance and resilience and also reduce our environmental impact.*'

About Trinity House London

Trinity House is a charity dedicated to safeguarding shipping and seafarers, providing education, support and welfare to the seafaring community with a statutory duty as a General Lighthouse Authority to deliver a reliable, efficient and cost-effective aids to navigation service for the benefit and safety of all mariners.

The Corporation of Trinity House was incorporated by Royal Charter in 1514 to regulate pilotage on the River Thames and provide for aged mariners.

With a mandate that has expanded considerably since then, it is today the UK's largest-endowed maritime charity, the General Lighthouse Authority (GLA) for England, Wales, the Channel Islands and Gibraltar and a fraternity of men and women selected from across the nation's maritime sector.

Its long-standing familiarity with the channels, hazards, currents and markings of the coastline also qualify it to inspect and audit over 11,000 local aids to navigation, license Deep Sea Pilots and provide Elder Brethren as Nautical Assessors to the Admiralty Court.

Per annum the charity donates around £5m to the charities it supports; these include the provision of cadet training schemes, welfare provision for retired mariners and educational programmes teaching safety at sea skills.

What causes seasickness?

*Text based on material kindly provided by the (US) National Ocean Service**

As we well know seasickness results from a conflict in the inner ear and the erratic motion of a vessel.

One of the least pleasant aspects of going to sea is the possibility of getting seasick. An individual's susceptibility to seasickness is highly variable. If you've ever had motion sickness when travelling by car, plane, or amusement park ride, you may be more susceptible to seasickness while aboard a vessel.

A large wave towering astern of the NOAA Ship Delaware II in 2005 while crossing the Atlantic Ocean's New England Seamount Chain.

Illustration reproduced with thanks from www.oceanservice.noaa.gov

The How and the Why

Seasickness is a result of a conflict in the inner ear, where the human balance mechanism resides, and is caused by a vessel's erratic motion on the water. Inside the cabin of a rocking craft, for example, the inner ear detects changes in both up-and-down and side-to-side acceleration as one's body bobs along with the boat.

But, since the cabin moves with the passenger, one's eyes register a relatively stable scene. Agitated by this perceptual incongruity, the brain responds with a cascade of stress-related hormones that can ultimately lead to nausea, vomiting, and vertigo.

Additionally, an affected person's symptoms can be magnified by the strong odours of things such as diesel fumes and fish. Seasickness usually occurs in the first 12 to 24 hours after setting sail, and dissipates once the body acclimates to the ship's motion. It's rare for anyone to get or stay ill beyond the first couple of days at sea—unless the

vessel encounters really rough waves.

If you do get seasick, take comfort in the fact that recovery is only a matter of time, and the survival rate is 100%. Sensible eating, good hydration, and some patience are all that are usually required to get past a bout of seasickness.

To help ease the symptoms of seasickness:

- Maintain your fluid intake. Seasickness and related medications cause dehydration and headaches. Drink water, low-acidity juices like apple and carrot, or clear soup, and avoid milk and coffee.

- Keep moving. Most people find that being busy keeps their minds off their discomfort.

- Stay on deck, even if it's raining, because the fresh air is often enough to speed recovery. The closed-in quarters below deck magnify the vessel's motion and worsen symptoms.

- Carry a plastic bag. This simple approach allows for peace of mind by eliminating some of the panic of getting seasick. If you have to vomit over the side, though, check the direction of the wind and waves. Staying leeward will ensure that an unpleasant experience doesn't get even worse.

- Consider an over-the-counter medication to prevent or minimize motion sickness. A dose is usually recommended about an hour prior to setting sail, and as needed at sea. These medications tend to be dehydrating, though, so drink plenty of water.

Finally, do not be embarrassed for getting seasick. Many people do including seasoned travellers, professional fishers, sailors, and marine scientists.

* The National Ocean Service (NOS) provides data, tools, and services that support coastal economies and their contribution to the national economy.

One of its priorities is safe and efficient transportation and commerce. Ships move $1.5 trillion worth of products in and out of US ports every year. Every ship moving in and out of US ports relies on navigation charts and water level information that NOS alone provides.

All mapping, charting, and transportation activities and infrastructure are founded on a reliable, accurate national coordinate system. NOS is solely responsible for maintaining that system, which provides more than $2.4 billion in potential annual benefits to the US economy.

Businesses in the maritime community rely on NOS for a range of decisions, from how much cargo to load to choosing the safest and most efficient route between two points. They use NOS data, tools, and services to plan seasonally for ship schedules to service global trade more safely and efficiently as significantly larger vessels transit through US ports as a result of the Panama Canal expansion.

UECC goes for third battery hybrid LNG PCTC

Close on the heels of their call for two new battery hybrid LNG Pure Car Truck Carriers (PCTCs), Oslo-based UECC has confirmed an option with China Ship Building Trading Co., Ltd and Jiangnan Shipyard Group Co. Ltd. for a third battery hybrid LNG vessel, this time proposed for UECC's Atlantic short sea trade.

In the words of Glenn Edvardsen, CEO of UECC: '*This order is another step in our commitment to cleaner shipping. Our experience with LNG duel-fuel vessels has been good, and we want to keep moving forward to expand our sustainable fleet.*'

Already winners, UECC's two first ECO-class vessels achieved first and second place in Bremenports' Greenports Award 2018 for being cleanest ships calling at one of Europe's busiest ports. With the addition of battery hybrid technology, the three new ships raise the environmental protection bar even further. This was reported by UECC on 2 October.

Taking smart new steps

The new orders will push the UECC duel-fuel LNG fleet to five vessels. Edvardsen added: '*When our third battery hybrid LNG PCTC is delivered in 2022, it ushers in a new era for UECC and short sea shipping in Europe. That will give us a total of five eco-friendly vessels in our fleet. This represents more than 50% of the UECC owned fleet, and no other short sea company, or deep sea for that matter, can demonstrate such a sustainable fleet.*'

Illustration kindly provided by UECC ©

Edvardsen acknowledged the importance of experience in the decision to invest in battery hybrid LNG. He continued: '*A ship is a significant and long-term investment. We wanted to expand the use of new technologies to meet or exceed future sustainability requirements, and we feel our choice with the first two LNG vessels has been justified over nearly three years of operation. This experience gives us the confidence to move forward with even more eco-friendly technologies.*'

It is understood that the new battery-hybrid vessels will take UECC beyond the IMO target of 40% reduction in

carbon intensity by 2030. These

three vessels will also meet the IMO Tier 3 NOx emissions limitations entering into force in the Baltic and North Sea from 2021 keel lays.

Electric power saves fuel, reduces emissions

To continue Edvardsen said: '*Batteries are a key step toward next generation sustainability. It also provides an option for reducing emissions while in port, and that is becoming more important for many cities*.'

It is clear that battery power on the new vessels will improve operational efficiency and further reduce emissions through peak shaving, in addition to handling partial accommodation load and driving auxiliary equipment.

Edvardsen concluded by saying: '*UECC's parent companies, NYK and Wallenius Lines, have sustainability in their DNA. It is an honour to be able to take UECC to the next level of clean shipping with their support*.'

Making Critical Decisions at Sea

The CHIRP Charitable Trust collaboration

The UK-based CHIRP Charitable Trust* announced on 1 October the release of a booklet and accompanying video entitled *Making Critical Decisions at Sea*.

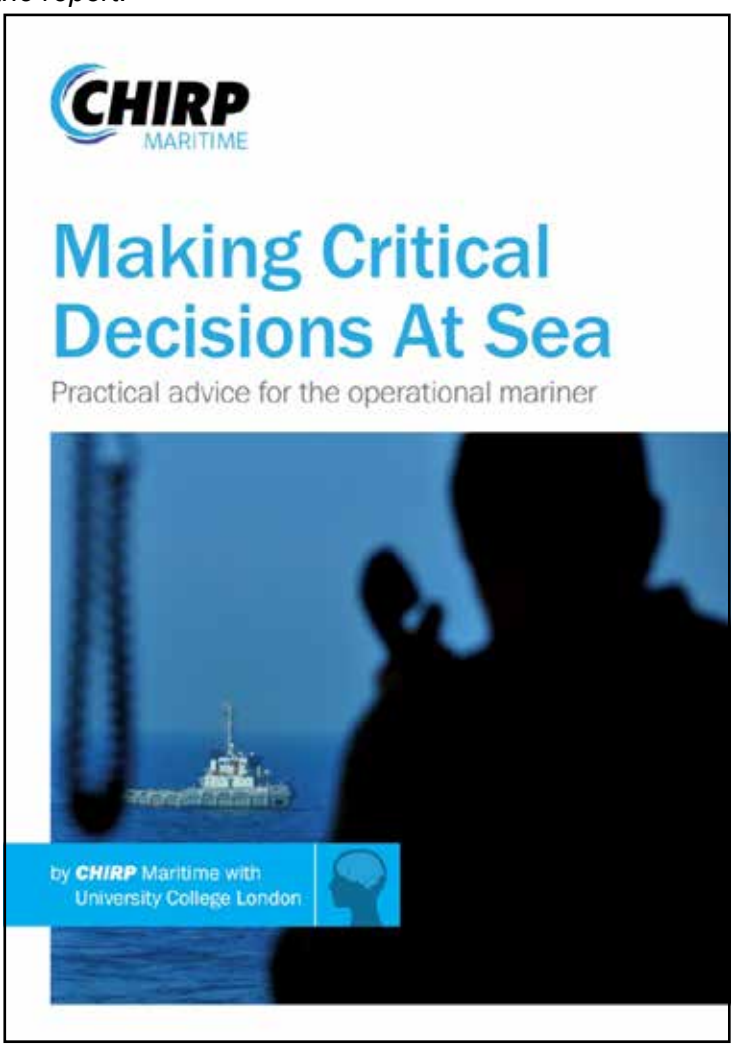
This work is a summary of findings and recommendations produced in collaboration with the Arts & Sciences and Neuroscience Departments at University College London and follows on from the highly successful publication *Perception, Decision Making and Fatigue at Sea* issued in 2018.

The paper includes recommendations important for seafarers, managers and maritime regulators. It is principally aimed at operational mariners as a guide to improving the decision making process by encouraging a more inclusive team environment. The "cockpit culture" scenario of uncontested hierarchy (otherwise known as crew resource management) is where subordinates are less likely to question their superiors which in turn increases the possibility of negative resultant decision making.

The guide is also relevant to shore management from where the master may be subject to duress which in turn may lead to poor on board critical decision making. The study considers the interaction of team-work, the cultural influences of different crew members, variances in training, experience and qualification all of which may influence the "critical decision". It promotes the "positive error culture" as a suggested way forward and makes comparisons with other safety critical industries.

Knowing and understanding these issues and knowing how to avoid them is the route to first class and ever-improving seamanship, helping to make our ships more efficient and keeping our seas safe.

In the words of CHIRP: '*Act now! Take a moment to read the report*.'



CHIRP Maritime putting the Mariner FIRST

The 20 page report and accompanying 10 minute video can be downloaded from
www.chirpmaritime.org/publications/

*The UK Confidential Reporting Programme for Aviation and Maritime. The aim of CHIRP is to contribute to the enhancement of aviation safety in the UK and maritime safety worldwide, by providing a totally independent confidential (not anonymous) reporting system for all individuals employed in or associated with these industries.
How to submit a report

An online report form is available here:
https://report.chirpmaritime.org/submit.aspx

Further information may be found here:
www.chirpmaritime.org

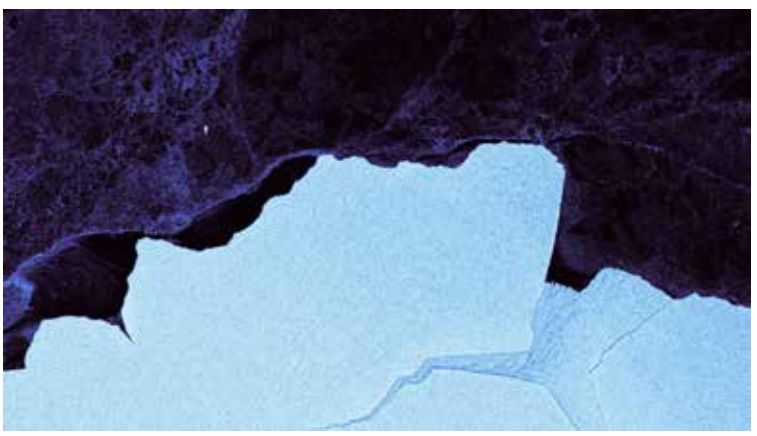
CHIRP always protects the identity of its reporters. It is a confidential programme and, as such, the Trust only keep reporters' personal details for as long as needed to keep in contact with them.

Amery Ice Shelf calving, Antarctica

Our illustration kindly provided by the European Space Agency (ESA) on 1 October indicates that a huge iceberg has broken off the Amery Ice Shelf in Antarctica.

Dubbed D28, the iceberg is around 1600 sq km – about the size of Greater London. It is approximately 30 km wide and 60 km long, and is estimated to weigh over 300 billion tonnes.

This image was captured by the Copernicus Sentinel-1 mission. Animation shows before and after images of the berg breaking away, known as calving was estimated to have taken place on the Amery Ice Shelf between 22 and 25 September.



Id 431085. Title Amery Iceberg. Released 01/10/2019 5:00 pm. Copyright ESA, CC BY-SA 3.0 IGO. ESA ©.

ESA reported that polar scientists indicate that this is the biggest calving of the Amery Ice Shelf in 50 years.

ESA report, further, that satellites will continue to monitor and track the iceberg, as it poses a threat for ships in the vicinity.

A grounding in Scottish waters

mv *Priscilla*

UK Accident Investigation Report

Safety lessons learned and the recommendation made

On 18 July 2018, the Netherlands registered general cargo vessel *Priscilla* ran aground on Pentland Skerries, Scotland. For about two hours prior to the accident, the officer of the watch had been unaware that *Priscilla* was drifting away from the planned passage.

When the officer of the watch realised what had happened, the route chosen to regain the navigational plan resulted in the vessel heading directly into danger. The accident happened because the officer of the watch was distracted from the critical task of monitoring the passage by watching videos on his mobile phone. He was the sole lookout at night as the vessel headed towards land, and the electronic navigation system was not set up to warn of danger ahead. *Priscilla*'s officer of the watch also responded to two radio calls from shore authorities warning of the danger ahead; however, his reaction to the warnings was not sufficient to avoid danger.

Since the grounding, the Maritime and Coastguard Agency has taken steps to improve the standards of vessel traffic monitoring in Pentland Firth. Additionally, *Priscilla*'s owner has updated onboard procedures; nevertheless, a safety recommendation has been made to the owner to take further steps intended to improve standards of watchkeeping.

Safety lessons

- Monitoring the vessel's progress along the planned passage is a vital component of safe navigation, and the officer of the watch should not become distracted from this responsibility.
- Reducing to a sole lookout must be properly assessed; it was not appropriate at night when *Priscilla* was heading towards Pentland Firth.
- Electronic navigation aids should always be set up to aid the officer of the watch by giving warning of danger ahead. The Bridge Navigational Watch Alarm System (BNWAS) should not be left off at sea.

Recommendation

A safety recommendation (No 2019/118) has been made to the owner of *Priscilla* to take measures necessary to improve the standards of watchkeeping and safety management on board.

The 45 page MAIB Report is available here:
http://tinyurl.com/y3vlr9uc

In addition there are Annexes A, B, C and D (15 pages) relative to the vessel and its operation and to be found here:
http://tinyurl.com/y4hbwlvh

On MAIB reports

With regard to reports from the (UK) Marine Accident Investigation Branch (MAIB) readers are reminded of part of the United Kingdom Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 – Regulation 5 which states: '*The sole objective of the investigation of an accident under the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 shall be the prevention of future accidents through the ascertainment of its causes and circumstances. It shall not be the pur-*

pose of an investigation to determine liability nor, except so far as is necessary to achieve its objective, to apportion blame.'

The report quoted here is not written with litigation in mind and, pursuant to Regulation 14(14) of the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, shall be inadmissible in any judicial proceedings whose purpose, or one of whose purposes is to attribute or apportion liability or blame.

Wind powered ships

ClassNK grants AIP related to Wind Challenger Project

On 3 October ClassNK reported from Tokyo that it had granted an Approval in Principle (AIP) based on its *Guidelines for Wind-Assisted Propulsion Systems for Ships* and related regulations for the basic design of a hard sail system. This method converts wind energy to propulsive force with a telescopic hard sail, and is a fundamental technology of the Wind Challenger Project* that Mitsui OSK Lines, Ltd (MOL) and Oshima Shipbuilding Co Ltd are spearheading.

Along with other participating organizations, MOL and Oshima Shipbuilding have played a central role in research and development on the Wind Challenger Project, which aims to reduce greenhouse gas (GHG) emissions by using wind energy.

The project details can found at:
https://www.mol.co.jp/en/pr/2019/19065.htm

Meanwhile ClassNK released its *Guidelines for Wind-Assisted Propulsion Systems for Ships* in September 2019 in order to contribute to the safe integrity and design of this technology and the ships in which it is installed.

Upon receiving the application from MOL and Oshima Shipbuilding, ClassNK reviewed the basic design of the hard sail system in line with relevant international conventions, ClassNK rules, and the above-mentioned guidelines.

Following its successful completion, ClassNK granted the AIP for the basic design of the hard sail system, which marks the world's first AIP based on these guidelines.

It is understood that ClassNK will continue to support the smooth implementation of new technologies through its role as a third-party certification body.

*The Wind Challenger Project started in 2009 with the Wind Challenger Plan, an industry-academia joint research project led by The University of Tokyo, and in 2013, the team was chosen to receive a Subsidy for Next-generation marine environment-related technology research by the Japnaes Ministry of Land, Infrastructure, Transport and Tourism. In January 2018, MOL and Oshima Shipbuilding took charge of the plan and now play a central role in this project.

Maritime piracy incidents down in Q3

Gulf of Guinea remains a hot spot

On 15 October it was announced jointly from London and Kuala Lumpur that the International Chamber of Commerce International Maritime Bureau's (IMB) had issued its report for the third quarter of 2019. This document demonstrates that fewer incidents of piracy and armed robbery against ships were reported than in the first nine months of 2018.

A total of 119 incidents of Piracy and Armed Robbery Against Ships have been reported to the IMB Piracy Reporting Centre (IMB PRC) in 2019, compared to 156 incidents for the same period in 2018. Overall, the 2019 incidents include 95 vessels boarded, 10 vessels fired upon, 10 attempted attacks, and four vessels hijacked. The number of crew taken hostage through the first nine months has declined from 112 in 2018 to 49 in 2019.

While the overall number of incidents has dropped, incidents involving guns and knives remain consistent. There have been 24 knife-related and 35 gun-related incidents reported in 2019, compared to 25 and 37 for the first nine months of 2018. These statistics confirm IMB's concerns over continued threats to the safety and security of seafarers.

Gulf of Guinea

The Gulf of Guinea remains a high risk area for piracy and armed robbery. The region accounts for 86% of crew taken hostage and nearly 82% of crew kidnappings globally.

In July a general cargo vessel was hijacked approximately 120nm SW of Brass. Ten crew members were kidnapped from the vessel and released four weeks later. In August a bulk carrier and a general cargo vessel were boarded within hours of each other at Douala anchorage, Cameroon, and a total of seventeen crew were kidnapped from the vessels. Within six weeks all kidnapped crew were released. This incident demonstrates the range of piracy activity in the Gulf of Guinea and that all types of ships are vulnerable to attack. Lagos recorded 11 incidents in 2019, the highest number for any port.

In the words of Pottengal Mukundan, Director, ICC IMB: '*Although incidents are down, the Gulf of Guinea continues to be a concern for piracy and armed robbery-related activities with kidnappings of crew members increasing in both scale and frequency. It is important that shipmasters and owners continue to report all actual, attempted, and suspected incidents to ensure that an accurate picture of these attacks emerge and action is taken against these criminals before the incidents further escalate*.'

Continued improvement in Indonesia

Meanwhile, Indonesia reported a decline in overall piracy related incidents with 20 actual and attempted attacks for

the first nine months of 2019. Over the past five years, Indonesia has gradually reduced its share of piracy related incidents. As recent as 2015, Indonesia reported 86 actual and attempted piracy incidents through Q3. Indonesia's impressive gains can be attributed to continued information sharing between the Indonesian Marine Police and the IMB PRC.

No incidents in Somalia, but threats remain

Meanwhile, Somalia has no piracy-related incidents recorded for the first nine months of 2019. Although no incidents have been reported, Somali pirates continue to possess the capacity to carry out attacks in the Somali basin and wider Indian Ocean. As a result, the IMB PRC advises ship owners to remain cautious when transiting these waters.

Global anti-piracy support

Since 1991 the IMB PRC's 24-hour manned centre, has provided the maritime industry, governments and response agencies with timely and transparent data on piracy and armed robbery incidents – received directly from the Master of the vessel or its owners.

The IMB PRC's prompt forwarding of reports and liaison with response agencies, its broadcasts to shipping via Global Maritime Distress and Safety System (GMDSS) Safety Net Services and e-mail alerts to Company Security Officers, all provided free of cost, has helped the response against piracy and armed robbery and the security of seafarers, globally.

IMB strongly urges all shipmasters and owners to report all actual, attempted and suspected piracy and armed robbery incidents to the IMB PRC globally. This first step in the response chain is vital to ensuring that adequate resources are allocated by authorities to tackle piracy. Transparent statistics from an independent, non-political, international organization can act as a catalyst to achieve this goal.

About the International Chamber of Commerce (ICC)

The International Chamber of Commerce (ICC) is the world's largest business organization with a network of over 6.5 million members in more than 130 countries. It works to promote international trade, responsible business conduct and a global approach to regulation through a unique mix of advocacy and standard setting activities—together with market-leading dispute resolution services. The International Chamber's members include many of the world's largest companies, SMEs, business associations and local chambers of commerce. See also: www.iccwbo.org

For further information readers are invited to contact:
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Director, IMB, Tel: +44 20 7423 6960
e-mail: pmukundan@icc-ccs.org

The IALA VTS eNavigation Symposium

25-29 May 2020 Rotterdam

Enhanced Maritime Safety and Efficiency by Connectivity

The Netherlands Ministry of Infrastructure and Water Management together with IALA are the host organizations for the IALA VTS eNavigation Symposium to be held from 25-29 May 2020 in the WTC, Rotterdam, The Netherlands.

This event will be the first Symposium of its kind combining the topics of modern Vessel Traffic Services (VTS) and the implementation of maritime services under the e-Navigation concept.

Hosting city Rotterdam, one of the largest and busiest ports in the world, is the location as a maritime capital of Europe, where these developments have become a reality and are progressing.

This IALA Symposium will provide a unique five-day programme full of opportunities. Here organizational, operational, technical and industrial maritime managers and experts from all over the world will be able to present, share knowledge and discuss innovative developments. These will contribute to the safe, efficient, secure navigation of shipping with cooperation between various stakeholders in the maritime domain.

Please see here the link to an introductory video:
https://iala-rotterdam2020.nl/

Registration for this event will open from mid-November 2019.

Readers interested in sponsoring the Symposium are invited to e-mail info@iala-rotterdam2020.nl.

Danish aid to Africa and China

Tug operations training in Ghana

A team of tugboat masters has completed a training programme in Denmark as part of strategic sector cooperation between Denmark and Ghana. Training here has provided the tugboat masters with new tools for them to carry out tugboat operations in the Port of Tema – one of the busiest ports in West Africa. These tugboat masters have shared in kind their views and experiences from tug operations in their own territorial waters. This was reported by the Danish Maritime Administration (DMA) on 15 October.

Charlotte Ahrendt Steen, Deputy Director at the Danish Maritime Authority reflected: '*The two weeks of training in Denmark is a great example of how the maritime sector cooperation improves the collaboration between Denmark and Ghana for mutual benefit.*'

This training programme has been compiled by the Dan-

ish Maritime Authority in collaboration with Danpilot and the Port of Aarhus. Tugboat masters have, among other things, undergone an intensive tugboat course at Force Technology, completed a safety course at RelyonNutec in Esbjerg, and carried out tugboat missions in the Port of Aarhus.

Maritime sector cooperation with Ghana

Since 2016, Denmark and Ghana have been engaged in official maritime sector cooperation which will continue until 2021.

One of the primary purposes of the cooperation is to assist with capacity development in the maritime sector in Ghana, for the mutual benefit of Ghana and Denmark. This includes training of tugboat masters as part of the Port of Tema's combined measures to handle larger container ships. The maritime sector cooperation is financed by the Ministry of Foreign Affairs of Denmark (Danida)

Maritime cooperation with China, the world's largest ship builder

Based on long lasting cooperation between Denmark and China in the maritime area, a Strategic Sector Cooperation project with two tracks was established in 2017.

The first concerns green shipbuilding. In this area, Danish experience on fuel-efficient design and construction are used.

The second track concerns maritime safety by exchange of experience on port state control, emissions, and fuels.

In the words of Jenny N Braat, CEO of Danish Maritime: '*The maritime sector counsellor in China has helped strengthen contact and dialogue with the relevant Chinese authorities responsible for shipbuilding, maritime equipment, and technology. In addition, through ongoing contact with Danish maritime industrial companies in Denmark as well as through their branches and offices in China, the sector counsellor has helped strengthen their commercial opportunities in China.*'

Strategic Sector Cooperation – more Denmark in the World

The Ministry of Environment and Food helps to ensure cleaner air in China and helps improve water supply in South Africa, the Ministry of Industry, Business and Financial Affairs increases transparency and fights corruption through digitalisation in Brazil.

Danish authorities and companies contribute with technology and knowledge in areas such as urban development, agriculture, energy, environment, shipping, and water.

Promoting sustainable development

Urbanisation, increase in population and excessive use of natural resources in countries such as Indonesia, South Africa, Brazil, and Mexico are challenging sustainable development.

In the words of Danish Minister for Development Cooperation, Ulla Tørnæs: '*We need more Denmark in the world. Danish solutions in areas such as sustainable energy, energy-efficient solutions, environment and clean tech as well as food production are in demand in many countries. These partnerships benefit sustainable development abroad, our bilateral relations, and the Danish private sector.*'

Danish tug simulator training of Ghanaian tugmasters .
Photo: DMA ©.

About Danish Strategic Sector Cooperation

Danida is at work in 18 countries in South and North America: Argentina, Brazil, Colombia and Mexico.

In Africa: Egypt, Ethiopia, Ghana, Kenya, Morocco and South Africa.

In Asia: Bangladesh, China, India, Indonesia, Iran, Myanmar and Vietnam.

And in Europe in Turkey

The Danish Foreign Ministry reports that 13 Danish authorities, most recently the City of Aarhus and the City of Copenhagen have become partners.

An overview of Danish Strategic Sector Cooperation Projects can be found here: http://tinyurl.com/y2blgy5d

The Swedish Club

New Loss Prevention brochure available: *Advice to Masters*

In any casualty, the Master plays a crucial role. He or she is on the scene with the ability to minimise the consequences of the incident, and to facilitate the handling of matters between the owners and the P&I Club.

Now, the Swedish Club has issued a Loss Prevention brochure with the title: *Advice to Masters*.

This valuable publication is designed to support that process and not to supersede or contradict any instructions issued by a vessel's owners. Furthermore, the aim of the brochure is to provide the Master with advice relating to a casualty from the underwriter's point of view.

To download a copy, readers are invited to see here, the Swedish Club's publications page on line: http://tinyurl.com/y6da4n76

Looking at *Advice to Masters* over 32 pages the reader is provided with an important introduction advising how to use this guide, an overview of marine insurance, a general piece on claims and emphasis is placed on the importance of the logbook.

Twenty-seven pages take account of an introduction to Protection & Indemnity (P&I) Insurance and Hull & Machinery (H&M) Insurance. To this is added sections on advice to masters concerning security and related measures and piracy.

Two Appendixes provide (i) a form of stowaway details according to recommended practice and (ii) a notice of liability where the Master, on behalf of owners of a vessel holds an individual responsible for damage sustained in an incident.

Readers are invited to contact the Swedish Club if they have any questions or comments on the guide. See here: ellinor.boren@swedishclub.com

The Swedish Club has its Head Office in Gothenburg and there are regional office in Piraeus, Hong Kong, Tokyo, Oslo and London.

The Shipping Podcast, a link provided by The Swedish Club

For entertaining commentary on many aspects of the marine business readers are invited to tune into the Shipping Podcasts available on the Swedish Club website to be found at: www.swedishclub.com

If you key the words 'The Shipping Podcast' in the search box at the top of the page you will find a list comprising talks, two of which are to be found below:

Patrik Dahlgren of Royal Caribbean Cruises, Ltd, speaks of his job as Senior Vice President, Global Marine Operations at the company where he is responsible for operations in the global cruise company and six of its subsidiaries.

Birgitte Ringstad Vartdal, CEO of Golden Ocean Management AS speaks about being a role model for women in shipping. This is something that comes with being a CEO of a leading international dry bulk shipping company. In this podcast you get to hear more about Brigitte Ringstad Vartdals background and what she thinks about the future. She also gives good advice to young people who just started in the maritime industry.

There is also a list of monthly maritime news to be found on the same site.

VPLP design signs its first ocean transport ship equipped with Oceanwings® wings

The naval architecture firm of VPLP has reached a new milestone with the development of a 121metre loa ro-ro vessel for transporting components of the Ariane 6 rocket from Europe to French Guiana. Equipped with four Oceanwings® devices the vessel is designed to have the least impact possible on the environment.

This is a major milestone in the history of VPLP, the design firm founded in 1983 by Marc Van Peteghem and Vincent Lauriot-Prévost. After competitive sailing and cruising the firm has turned its attention to a new sector: maritime transport.

Ariane Group, the primary contractor for the Ariane launch vehicle, put out a call for tenders concerning the transport of various parts of the new Ariane 6 launcher from Europe to the launch pad in Kourou, French Guiana. This contract to build was awarded to the maritime company Alizés, a joint venture between the offshore services specialist Jifmar and Zéphyr & Borée, a young maritime company specializing in carbon-free transport.

VPLP Design was entrusted by Alizés with the task of designing a ship – named *Canopée* – in accordance with the project's specifications. The design firm came up with a ro-ro vessel which is 121 metres loa and of 23 metres beam, and featuring a bridge forward and an open deck aft with high sides to protect the cargo.

A major innovation is that *Canopée*'s hybrid propulsion comprises four 30 metre high Oceanwings® sail units providing a total surface area of 1,452 square metres. These wingsails assist the ship's main propulsion system to reduce fuel consumption and carbon dioxide emissions by an average of 30%.

Designed by VPLP, Oceanwings® are automated and reefable soft wingsails associated with a routeing system developed separately. A new company, Ayro, has been established for the specific purpose of developing Oceanwings®.

It is understood that every aspect of *Canopée*'s design contributes to using less fuel and reducing environmental impact. For example the hull is suitable for hybrid propulsion, has optimized aero-hydrodynamics, embodies dual fuel engines (LNG and MDO) with variable pitch propellers and solar panels cover energy requirements in the ship.

In the words of Marc Van Peteghem, VPLP co-founder:

'*We took a fresh look at the specifications, in particular performance and wind-generator mode, with the aim of facilitating operations and reducing fuel consumption*.'

For VPLP Design, this project is the fruit of a long period of gestation which began with the firm's collaboration with BMW Oracle and victory in the 2010 America's Cup with a trimaran featuring a rigid wingsail. This experience left Marc Van Peteghem with the firm conviction that the expertise gained in the world of yacht racing could be applied to innovating maritime transport.

He commented: '*Shipping is facing new challenges, because it alone is responsible for 5% of greenhouse gasses, a figure that is set to double by the year 2050. Pressure from institutions and the general public for clean transport is increasing and stricter regulations are coming into force*,'

Furthermore, the focus is not just on cargo vessels as VPLP is already looking into passenger ferries equipped with hydrofoils. Added: Peteghem: '*Thanks to foils, we can reduce fuel consumption by 30% to 35%*.'

Editor's note:

We are pleased to report that one of the experts behind this project is an 84 year-old shipmaster, a member of our French Association, HYDROS.

IFSMA 45th General Assembly

An introduction to the Maritime Anti-Corruption Network (MACN)

Maritime corruption is a challenge to the working environment of seafarers. This was the message MACN delivered at the IFSMA 45th General Assembly.

Maritime corruption hinders fair and transparent trade impacting society at large. With criminalisation and the administrative burden to Ship Masters and their crew these currently pose significant challenges to the working environment in ships.

We shared knowledge of how members of MACN make an important contribution to the elimination of corruption in the maritime industry. Through our resources that support internal risk management, our members learn and share best practices to improve their anti-corruption programme and efforts to implement adequate procedures.

They use tools and templates for corruption risk mitigation. Most importantly they use the MACN logo as a powerful mechanism to signal their commitment to the MACN Anti-Corruption Principles, which are modelled on the requirements of the UK Bribery Act and other relevant regulations and standards.

For more information about MACN's work readers are invited to visit the website at: http://www.maritime-acn.org/ and to read the Network's 2018 Annual report at: http://tinyurl.com/yxtel3v3

MACN invites both members and non-members to share details of corrupt demands or threats via this link - http://www.maritime-acn.org/macn-upload

We are grateful to Vivek Menon, Head of Collective Action and Partnerships (EMEA) at the Maritime Anti-Corruption Network (MACN).

Contact may be made with MACN at Vester Voldgade 8, 2nd 1552 Copenhagen V, Denmark.

Telephone: +45 2183 6906; Skype: vivek.menon3.bsr. www.bsr.org www.twitter.com/bsrnews

mv Emilie Bulker Crewman passed out in hold

Master and Chief Officer gave false information to Maritime NZ

Heavy fines and costs

The Captain and Chief Officer of the Isle of Man-flagged bulk carrier, *Emilie Bulker*, gave false information to Maritime NZ after a crewman passed out because of lack of oxygen in the ship's poorly-ventilated hold.

On 19 September, at Wellington District Court, Captain Walter Damian and Chief Officer Ian Dalingding pleaded guilty to providing false information to Maritime NZ. They were fined $13,500 and $ 4,050 respectively.

Photo: NZ Maritime ©.

Captain Damian also pleaded guilty to permitting dangerous activity. A reparation payment of $10,000 for emotional harm has been awarded to the victim.

This incident occurred at the Port of Tauranga on 6 September, when the crewman was working in a hold containing palm kernel. Palm kernel is known to deplete oxygen in the air.

Fire and Emergency NZ, rescued the unconscious man from the ship's cargo-hold. He was taken to the Tauranga Hospital and placed in an induced coma. He was discharged from hospital on 10 September.

Maritime NZ investigated, and the Captain and Chief Officer gave false information claiming that assessment and gas tests of the cargo hold had been carried out, and the hold was safe to work in. None of that was true.

Oxygen depletion and gas build up in ships' holds is an internationally known risk and a major concern for Maritime NZ. International law requires operators to have a Safety Management System (SMS) for a ship. This document sets out safety procedures to ensure that entry into enclosed spaces such as cargo holds is properly evaluated for risk and that those risks are effectively managed.

In the words of Maritime NZ's Central Region Compliance Manager, Michael-Paul Abbott: '*People's safety is our primary concern. Maritime NZ takes all steps to ensure the safety of maritime operations in New Zealand, including aboard foreign ships in our waters, in accordance with international law*'

'*As well as taking the prosecution, we have shared information about the incident and this ship with other Asia-Pacific countries' maritime authorities, and reported it to the Isle of Man Registry. This is part of an international system for monitoring ships that are involved in incidents – we help each other keep shipping safe.*'

Background to Compliance

Maritime NZ's Compliance Operating Model describes how Maritime NZ manages compliance to achieve the best outcomes in its role as guardian of the maritime environment. Prosecution is one of the compliance interventions available to Maritime NZ.

Readers may find our more about the Maritime NZ Compliance Operating Model here:
http://tinyurl.com/yyqlxnr3

Pilot transfer arrangements

New AMSA Marine Notice

On 21 October the Australian Maritime Safety Authority issued a new

Marine Notice reminding shipowners, operators, masters, crews, recognised organisations, marine pilots and pilotage providers of the obligation to provide safe pilot transfer arrangements.

AMSA notes with concern that since November 2017 several pilots' lives have been placed at risk, in six separate incidents where man ropes have parted or its securing point has failed. In addition, AMSA regularly receives reports and complaints about non-compliant pilot transfer arrangements.

Shipowners, operators, masters and crews are reminded that pilot transfer arrangements, including pilot ladders, must comply with Marine Order 21 (Safety and emergency arrangements) 2016 (MO21). MO21 implements Australia's obligations under the International Convention for the Safety of Life at Sea (SOLAS) Chapter V Regulation 23.

Pilot transfer arrangement standards

Whenever a pilot or other person embarks or disembarks from a ship by ladder, they entrust their safety to the pilot transfer arrangements provided by the ship and the pilot boat crew.

Requirements in SOLAS V/23 are the minimum standards for equipment installed and arrangements for pilot transfers on ships on or after 1 July 2012. The IMO standards can be found in IMO Resolution A.1045(27) Pilot transfer arrangements and IMO Resolution A.1108(29) Amendments to the Recommendations Pilot Transfer Arrangements (Resolution A.1045(27)).

SOLAS V/23.2.3 also states that a pilot ladder shall be certified by the manufacturer as complying with V/23 or with an international standard acceptable to the Organization and refers to ISO 799:2004 *Ships and marine technology – pilot ladders*.

Compliance with this particular provision of SOLAS V/23 can be met when a manufacturer has certified that the pilot ladder complies with either of the above standards, noting they are not identical.

Paragraph 10.1 of Part A of the International Safety Management Code (ISM) requires that vessel operators establish procedures to ensure that a ship is maintained in conformity with the relevant rules and regulations, including pilot transfer arrangements. Such procedures should include regular inspections of the pilot transfer arrangement and storage of such equipment when not in use.

Example of an unsafe man rope. *Photo: AMSA ©*

Pilot transfer arrangements

IMO Circular MSC.1/Circ.1428 illustrates the pilot transfer arrangements required by SOLAS V/23.

Strict attention should be paid to the freeboard of the vessel to determine whether a combination ladder needs to be rigged and, if a combination ladder is required, attention should be paid to arrangements for securing such ladders to the vessel's side.

Clear and efficient communication with the pilot boat master is essential to ensure the safety of the pilot transfer arrangements before a person uses the ladder. The pilot boat master is best positioned to judge correct height of the bottom of the ladder and identify any potential issues with the ladder or ropes once in place.

Responsibility

Responsibility for safe practices for personnel transfers rests with each person involved in the activity including the vessel's owners, operators, master and crew, pilotage providers, pilots and pilot boat crew, as well as the person being transferred. All parties should observe both the spirit and intent of the regulations, to ensure safety is not compromised.

Where a marine pilot suspects that the pilot transfer arrangement provided is unsafe, they should refuse to use the arrangement until it is made safe by the master and crew. Where such situations occur, AMSA will follow-up to determine the cause and actions taken. Where a vessel is not calling into an Australian port, AMSA will follow up with the flag State.

Additional information

The following are references for pilot transfer arrangements:

- AMSA Fact Sheet 399
  http://tinyurl.com/yxe3rdq2
- Marine Notice 13/2017
  http://tinyurl.com/yxmw938b
- Marine Order 21 (Section 12)
- IMO/IMPA Pilot Ladder Poster
  http://tinyurl.com/yymbjkln

This and other useful guidance material is available on the AMSA website:
www.amsa.gov.au/marine-notices

Implementation of standards

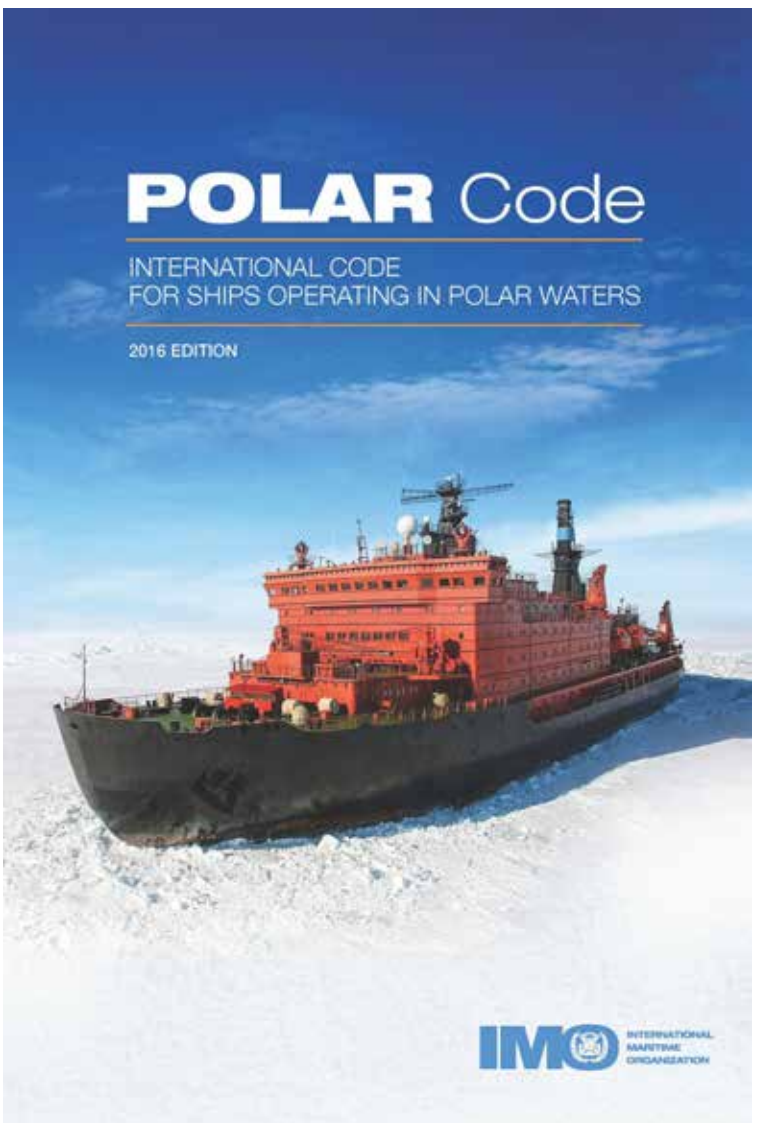
When conducting port State control inspections, AMSA inspectors will pay particular attention to the material state of all equipment and the implementation of MO21, Res.A.1045(27), ISO 799:2004, MSC.1/Circ.1428 and MSC.1/Circ.1495/Rev.1. The relevant IMO circulars and resolutions can be obtained from AMSA or www.imo.org

Compliance with the referenced standards does not of itself assure safety in each case. Therefore, the Master or responsible officer supervising the rigging of the pilot transfer arrangements should assess whether supplementary measures, such as lifejackets, harnesses, lifelines and lifebuoys be made available to enhance the safety of personnel using the pilot transfer arrangement.

Polar Code crew training offered

Adoption by the IMO of the International Code for Ships Operating in Polar Waters (The Polar Code*) makes it mandatory for ships sailing into Arctic or Antarctic waters to demonstrate that extra precautions have been taken in relation to safety, protection of the environment and seafarer competence.

In anticipation of the increase in maritime traffic in the polar regions both for leisure and commercial purposes, Stream Marine's Technical Training division has developed the world's first Bahamas Maritime approved Polar Code/ Polar Survival training course in partnership with Teekay Shipping. This was reported on 21 October.



Polar Code training at an indoor snow facility near Glasgow. Photo: Stream Marine©.

Available since January 2019, the course prepares crew regarding the actions they need to take in order to survive in icy seas for up to five days, as per the current requirement, in the unlikely event of abandoning ship in some of the remotest and hostile areas of the planet.

SMT's course takes place on its campus at Glasgow airport which has a swimming pool and an indoor real snow facility available within two miles.

It is understood that this course is delivered by Master Mariners who have a wealth of knowledge of operating in icy seas and a former Royal Marines medic who covers first aid with specific reference to injuries which may occur in a cold environment.

This training programme takes place over two and a half days and covers key areas such as: (i) An introduction to the Polar Code; (ii) Polar Regions and Characteristics; (iii) Survival on the Ice; (iv) Cold Weather Injuries and (v) Helicopter/Aircraft rescue.

In the words of Martin White, CEO of Stream Marine Training: '*Having the world's first Bahamas Maritime- approved polar survival course for crew is an amazing achievement by the technical division. Our experienced trainers all have extensive polar experience so the training programme is based on their practical knowledge which could save lives in an emergency situation. Anyone wishing to sail into Arctic or Antarctic waters needs to make sure their crew are competent in these conditions and learn key techniques to survive in these hostile conditions until help arrives*.'

* http://tinyurl.com/y3g6fn9t

Indian Register of Shipping receives RO authorisation from Denmark

It was reported from Mumbai on 22 October that the Danish Maritime Authority (DMA) had approved the application by the Indian Register of Shipping (IRClass) for authorisation as a Recognised Organisation, or RO.

Seeking RO status from key maritime flags is part of IRClass' strategy to expand its presence in Europe. The company already has offices in the UK, Greece, the Netherlands and Turkey with plans to expand its business in other Northern European countries.

With the addition of this high-quality flag, IRClass is now approved by 44 leading flag administrations globally. Having secured EU approval in 2016, IRClass has been authorised earlier by flag administrations like Malta, Cyprus, Netherlands, Bulgaria and are in the process of seeking approval from other key maritime flags in Europe.

In a letter to IRClass the DMA stated: '*We are fully convinced that IRClass is a qualified and competent organization capable of providing professional services for our Danish shipping industry. The agreement will further strengthen the maritime ties between India and Denmark*.

For IRClass PK Mishra, Vice President & Regional Manager (EU) said: '*IRClass is proud to have been formally recognised as a Recognised Organisation by the DMA. This enables us to offer our classification services to Danish-flagged vessels and further enhances our reputation in the European market as a trustworthy classification society with a commitment to provide prompt and value-added services to European ship owners*.'

P K Mishra, Vice President & Regional Manager (EU) for IRClass.

Photo: IRClass©.

The DMA letter concluded by stating: '*We look forward to establishing a sound working relationship with IRClass and will seize future opportunities for direct technical cooperation with your distinguished classification society*.'

From the IFSMA office - Login system

As annouced during the Annual General Assembly in Helsinki, we have now implemented a login system for certain areas of the IFSMA website. The purpose of this is to restrict access to certain information to IFSMA members only.

The three pages now restricted are: IFSMA Log, IMO Reports and Assemblies. The Newsletters remain free to all.

To obtain your password visit the MembersArea page where you will find two forms, at the top to form to login if you have already registered, at the bottom the registration area to obatin your password, which needs to be approved by the office so there might be a short delay until approval is given. We may need to verify your membership.

To login you should enter the email address you used to register and the password that was sent to that email address.

Once logged in you will be able to view the Members Only pages. You will be automatically logged out after twenty minutes of no activity or after one hour. There is no restriction on the number of times you can login. Your login credentials, once approved, will remain valid idefinately.