





International Federation of Shipmasters' Associations (IFSMA)

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Readers are reminded that the opinions expressed in IFSMA Newsletter are those of the author and necessarily in accord with IFSMA policy.		Lloyd Swindell, the deputy general manager of K-Line LNG UK, won the leadership category for his active encouragement of submissions from across the K-Line LNG UK fleet.		

Captain Russ Garbutt, FNI, was awarded first prize in the poster category for his attention-grabbing poster on enclosed spaces.

Ecochlor won first place in the company submission category for its NanoVapor technology. Mr Sören Scheid, the Nano Vapor Product Manager at Ecochlor collected this award.

This is just another snapshot of the work that IFSMA does on a day-to-day basis.

Fair winds.

Secretary General, Commodore Jim Scorer FNI RN

From the News Editor

EMSA publication: Update on potential of biofuels for shipping

Among the broad spectrum of technology and fuelsolution pathways available for ship designers, builders, owners and operators, biofuels potentially offer medium and long-term marine fuel alternatives that can enter the market relatively quickly; they also offer the potential, if sustainability criteria are met, to reduce carbon output compared to traditional carbon-based fossil fuels.

While the current use of biofuels in marine-engine applications is very limited, (the IMO 2020 Data Collection System (DCS) indicated that 99.91% of marine fuel use remained from carbon-based conventional fuels) there is significant potential for biofuels to capture a larger share of the total maritime fuel consumption and support the European Union (EU) and IMO's GHG-reduction ambitions for the maritime industry. Recent regulatory developments in the EU covering GHG emissions and the lifecycle aspect of fuels provide an array of measures in line with the climate goals that could accelerate their adoption.

The 'drop-in' characteristics of biofuels, that is the possibility to replace conventional petroleum-refined hydrocarbons without substantial modifications (and in some cases, without any modification) to engines, fuel tanks, pumps or supply systems, may offer an immediate, attractive and cost-effective solution, for the existing fleet.

A report from the European Maritime Safety Agency (EMSA) with title above provides an update on a previous study developed by EMSA on biofuels, examining the full range of biofuels, both liquid and gaseous, from the perspective of current production capacity, storage-anddistribution infrastructure and power-generation technologies; it also features techno-economic analyses and includes risk-based case studies to evaluate their potential for the maritime sector.

Additionally, the study clearly identifies the key advantages in the use of biofuels in shipping and the remaining challenges, technology and regulatory gaps restricting immediate application.

The publication Update on potential of biofuels for shipping can be downloaded here: https://tinyurl.com/4r3fxjmx

The IMO Digest

A summary of some of the news received with grateful thanks from the excellent IMO Media service in recent weeks.

Illustrations per <u>www.imo.org</u> ©

IMO and The Commonwealth Secretariat

Joining forces for sustainable maritime development

Newly-signed partnership will promote sustainable maritime transport through joint activities in selected countries

The Secretary-General of the IMO has signed a partnership agreement with the Commonwealth Secretariat, under which both organisations commit to strengthening the maritime and port sectors in selected developing countries through activities which will promote and facilitate the adoption of sustainable maritime transport systems and practices.

A Memorandum of Understanding (MoU) was signed on 29 September by IMO Secretary-General Kitack Lim and Commonwealth Secretary-General, the Rt Hon Patricia Scotland KC.



Commonwealth countries who are Member States of IMO will benefit from joint capacity-building activities between the two intergovernmental organisations.

Working together

Under the agreement, IMO and the Commonwealth Secretariat intend to work together to support:

- Knowledge sharing.
- Intergovernmental cooperation.
- Capacity-building.
- Joint resource mobilization.

Specific activities

Specific activities will be developed to address:

- Marine environment protection and climate change.
- Maritime safety.
- Maritime security
- Maritime legislation; and
- Maritime transport facilitation in support of global and regional trade flows.

IMO Secretary-General Kitack Lim said: 'IMO is pleased to partner with the Commonwealth Secretariat to boost

sustainable maritime transport. The maritime sector binds us all together and this agreement will help us target countries with additional support to ensure that shipping is greener and more resilient, supporting employment and driving forward the blue economy across nations.'



The MoU was signed on Thursday (29 September) by IMO Secretary-General Kitack Lim (left) and Commonwealth Secretary-General, the Rt Hon Patricia Scotland KC (right).

Commonwealth Secretary-General, the Rt Hon Patricia Scotland KC said: 'Our ocean drives economic activity, connecting us all and carrying 80% of global trade, by volume, through maritime transport. The provision of safe, secure shipping on cleaner seas has never been of greater importance than it is now. The Commonwealth covers more than a third of the ocean under national jurisdiction, so we are excited to join hands with the IMO to advance the prospects for a sustainable global blue economy.'

Commonwealth Blue Charter

The Commonwealth Secretariat is the intergovernmental organisation which co-ordinates and carries out much of the Commonwealth's work to promote good governance, multilateral cooperation and sustainable development. This includes implementing the Commonwealth Blue Charter, an agreement by all 56 member countries to actively cooperate to solve ocean-related challenges.

The MoU was signed at IMO HQ during the IMO-UNEP-Norway Innovation Forum 2022. The Innovation Forum is a two-day hybrid global platform aimed at championing innovation to accelerate the transition of the marine sector towards a zero- and low-emission future. The Forum is linked to the IMO World Maritime Day theme 2022 **Technologies for Greener Shipping**, with a special emphasis on inclusive innovation for decarbonisation of the maritime sector.

World Maritime Day Parallel Event in South Africa

Durban welcomed delegates to the event under the theme:

New technologies for greener shipping

The World Maritime Day Parallel Event (WMDPE) was held in Durban from 12 to 14 October 2022

In his opening speech, IMO Secretary-General Kitack Lim said: 'After a two-year pause in parallel events due to the pandemic, it is an enormous pleasure to be able to welcome you all here to Durban for the 2022 World Maritime Day Parallel Event. The Parallel Event was instituted to provide an opportunity to take the World Maritime theme on the road and it is undoubtedly one of the most important maritime events, worldwide.'

Secretary-General Lim highlighted the need for innovation and inclusivity as shipping voyages to a decarbonised future, in which digitalisation and automation will play a key role.

He added: 'Innovation is fundamental to the maritime industry's successful energy transition. It requires new technologies, renewable alternative fuels and infrastructure to support low- and zero-carbon shipping, along with new financial solutions to support all those practical aspects.

We also need innovative teams working together, created through research and development partnerships. These should involve both public and private sector because we need all hands-on-deck to ensure these initiatives succeed. This needs to be done in the most inclusive way possible as we address capacity-building, technology and infrastructure to bring on board developing countries, in particular least developed countries (LDCs) and Small Island Developing States (SIDS) in the energy transition.



'No one should be left behind. Digitalisation and automation can be counted amongst the technologies that will help us on the voyage towards cleaner, greener and more efficient shipping but this does not mean that we ignore the human element.'

Welcoming high-level delegates from across the globe, the Honourable Fikile Mbalula, Transport Minister, South Africa, commented: 'The theme for this year's World Maritime Day Parallel Event 'New technologies for greener shipping', calls for the global family of nations to take action on decarbonisation of shipping and ports through the use of zero or low carbon technologies, fuels and infrastructure.

'The ultimate goal is to contribute to the reduction of greenhouse gas emission across the globe for sustainable development. The big question we must answer is: How do we get to the future that is sustainable, which facilitates global seaborne trade from all corners of the globe?'

He highlighted his: 'Appreciation and applaud stakeholders, including the oil and bunker industry, manufacturers, academia, and shipping industry in general, for all your efforts and initiatives aimed at using research and innovation for the development of greener technologies as the pathway to the decarbonisation of this important industry.'

Noting the potential for countries to be part of the transition to cleaner fuels, he added in conclusion: 'We believe that the abundance of renewable energy potential can accelerate the development of greener technologies and alternative fuels in order to meet the demand of supplying bunker to ships at our ports.'

Panel sessions

The Panel session covered: World perspective on greener shipping – decarbonisation; Collaboration and capacity building; Digitalisation for safer and efficient shipping; and Oceans and the blue economy.

Ministerial round table

IMO Secretary-General Lim hosted a ministerial round table on the sidelines of the event.

Closing ceremony

During the closing ceremony on 14 October, the World Maritime Day flag was handed over to the World Maritime Day Parallel Event host for 2023, the Islamic Republic of Iran.

Dumping of sewage sludge at sea to be prohibited worldwide

Amendment to treaty on dumping of waste at sea will remove sewage sludge from list of wastes which may be given dumping permit

Parties to the treaties which regulate the dumping of wastes at sea have adopted an amendment to ensure that the dumping of sewage sludge at sea would be prohibited worldwide. The was reported by the IMO media service on 10 October.

The amendment to the London Protocol will remove sewage sludge from the list of permissible wastes – wastes which may be considered for dumping at sea.

The amendment was adopted by the 44th Consultative Meeting of Contracting Parties to the London Convention and the 17th Meeting of Contracting Parties to the London Protocol (LC 44/LP 17), which met at the international Maritime Organization (IMO) Headquarters from 3-7 October. IMO is the Secretariat for both treaties.

The amendment will enter into force for each Contracting Party immediately on notification of its acceptance, or 100 days after the date of the adoption if that is later.

Sewage sludge is a waste that has been considered for dumping at sea under both the London Convention and London Protocol.

Decades ago, a substantial volumes of sewage sludge was permitted to be dumped at sea. However, the London Convention and Protocol parties previously commissioned a world-wide review of current practices of managing or dumping sewage sludge at sea. The last meeting concluded that the practice had declined considerably over recent decades, that it was already prohibited under many regional conventions and through domestic legislation, and that alternatives existed for the use of the sewage sludge.



The Contracting Parties agreed that there was sufficient evidence and justification for amending Annex 1 of the London Protocol to remove sewage sludge from the list of permissible wastes. The proposal to amend the treaty was submitted by the Republic of Korea and Mexico.

Under the London Protocol all dumping is prohibited, except for possibly acceptable wastes on the so-called reverse list (Annex 1).

The list of materials which may be considered for dumping at sea will now include: dredged material (the bulk of material given permits); fish wastes; inert, inorganic geological material; specific bulky items; vessels and platforms or other manmade structures at sea; organic material of natural origin; and carbon dioxide streams from carbon dioxide capture processes.

Marine geoengineering techniques identified for further evaluation

The meeting agreed a statement on marine geoengineering.

Readers are invited to read more on this topic here: <u>https://tinyurl.com/mwdp25nd</u>

Fifty years of the London Convention

This year, 2022, IMO is marking 50 years since the adoption of the London Convention. The adoption of the Convention was a major achievement, which, along with the 1972 United Nations Conference on the Environment in Stockholm, constituted the first steps to truly put the

environment at centre stage and take responsibility for the harm humans have done to the ocean.

The purpose of the London Convention is to control all sources of marine pollution and prevent pollution of the sea through regulation of dumping into the sea of waste materials.

A so-called black- and grey-list approach is applied for wastes, which can be considered for disposal at sea according to the hazard they present to the environment.

For the black-list items dumping is prohibited. Dumping of the grey-listed materials requires a special permit from a designated national authority under strict control and provided certain conditions are met. All other materials or substances can be dumped after a general permit has been issued.

The purpose of the Protocol is similar to that of the Convention, but the Protocol is more restrictive: application of a precautionary approach is included as a general obligation and a reverse list approach is adopted, which implies that all dumping is prohibited unless explicitly permitted.

The London Protocol entered into force on 24 March 2006. The London Protocol has 53 Parties to the Protocol.

To learn more on the London Convention Protocol readers are invited to see here: <u>https://tinyurl.com/yjm8evj4</u>

Conference – Protecting the Ocean – Moving forward at 50: London Convention & Stockholm Declaration

IMO and the World Maritime University (WMU) held a joint academic conference from 10 to 13 October to discuss ocean and climate related topics under the framework of the London Convention and Stockholm Declaration's 50th anniversaries.

The intent was to help raise awareness and discuss ocean- and climate-related topics under the framework of the London Convention and Stockholm Declaration's 50th anniversaries with the objective to achieve new research insights and establish impactful actions.

IMO, the WMU – Sasakawa Global Ocean Institute (GOI), and The Nippon Foundation were the primary cosponsors of the conference.

A summary of the conference is available here: <u>https://tinyurl.com/7v6chz3e</u>

Marine geoengineering techniques

Potential impacts

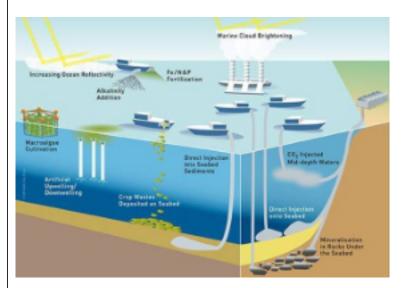
Parties to the treaties which regulate the dumping of wastes at sea have adopted a statement identifying the need to carefully evaluate marine geoengineering techniques, which may have potential for mitigating the

effects of climate change but may have adverse impacts on the marine environment.

The statement identifies four techniques which need priority evaluation, involving either carbon dioxide removal (CDR) or solar radiation modification (SRM).

Further, the statement was adopted by the 44th Consultative Meeting of Contracting Parties to the London Convention and the 17th Meeting of Contracting Parties to the London Protocol (LC 44/LP 17), which met at the IMO HQ from 3 to 7 October.

It was reported by IMO media service that the statement noted that marine geoengineering should not be considered as a substitute for measures to reduce carbon dioxide emissions, there are investigations into the potential for marine geoengineering to mitigate the effects of climate change with multiple interests driving urgency for deployment.



The artist's impression: Marine Cloud Brightening. Parties to the treaties which regulate the dumping of wastes at sea have adopted a statement identifying the need to carefully evaluate marine geoengineering techniques, which may have potential for mitigating the effects of climate change but may have adverse impacts on the marine environment.

The statement recognises the growing interest into marine geoengineering techniques and their potential to cause pollution or other adverse effects on the marine environment.

Four techniques

The London Protocol /London Convention parties identified four techniques for priority evaluation:

- Enhancing ocean alkalinity (CDR).
- Macroalgae cultivation and other biomass for sequestration including artificial upwelling (CDR).
- Marine cloud brightening (SRM).
- Microbubbles/reflective particles/material (SRM).

In 2008 Parties to the LP and LC adopted a resolution (LC-LP.1 (2008)), which states that ocean fertilization activities fall within the purview of the LC/LP and that ocean

fertilization activities other than legitimate scientific research should not be allowed.

A further resolution (LC-LP.2 (2010)) on the Assessment Framework for Scientific Research involving Ocean Fertilization, that proposed research projects should be assessed to determine if they qualify as legitimate scientific research.

Together, these resolutions apply to all LC Contracting Parties and continue to apply to LP Contracting Parties, pending the entry into force of the 2013 amendment to the London Protocol. The 2013 amendment will, when in force create a legally binding regime providing a science-based, global, transparent and effective regulatory and control mechanism for marine geoengineering. The amendment enables the future regulation of marine geoengineering techniques that fall within the scope of the London Protocol and have the potential to cause widespread, long-lasting or severe impacts on the marine environment.

GESAMP report

A 2019 report published by the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) provides an overview of a wide range of marine geoengineering techniques. To read more see here: <u>https://tinyurl.com/2ztzv6mb</u>

Climate change briefing

To read more on the LC/LP and Climate Change see here: <u>https://tinyurl.com/mryyjtkf</u>

E-learning course on biofouling management

As we well know biofouling management is crucial in order to minimize introductions of invasive aquatic species via ships' hulls. To support awareness and boost capacity in developing countries in particular, a new e-learning course on ships' biofouling management was launched on 18 October.

It is understood that this course provides a detailed introduction to multiple aspects related to ships' biofouling, its role as a vector for the introduction of invasive aquatic species and the management solutions and technologies that are available. The course includes materials, videos, animations, quizzes, a roleplay exercise, and a test. A digital certificate is awarded on successful completion.

GEF-UNDP-IMO GloFouling Partnerships

The course has been developed under the framework of the GEF-UNDP-IMO GloFouling Partnerships' project, which assist developing countries in the implementation of the IMO Biofouling Guidelines to minimize introductions of invasive aquatic species via ships' hulls.

Until 31 December 2022, the course will be available only for participants in the twelve GloFouling Partnerships beneficiary countries. From January 2023 the course will be open to all by self-enrolment. For more information on

this approach readers are invited to see here: <u>https://lms.imo.org/moodle310/</u>

The IMO E-learning course on biofouling management course is part of the IMO e-learning portal, also known as Learning Management System (LMS), created to increase the capacity of Member States to effectively implement IMO instruments.



WMU support

The e-learning course on ships' biofouling management is one of three World Maritime University (WMU)-IMO elearning courses developed with the support of the IMO's Integrated Technical Cooperation Programme (ITCP).

Improving Casualty investigation in Guinea Conakry

Under IMO conventions, the flag State has a duty to investigate any casualty which occurs on, or to, any of its ships (subject to the provisions of relevant conventions) and to report its findings to IMO through the Global Integrated Shipping Information System (GISIS) platform.

It was reported on 21 October that had IMO organised the first in-person national training on casualty investigation in partnership with the government of Guinea since the outbreak of Covid-19. The tuition took place from 10 to 21 October.

Objective

The objective of the training was to enhance, strengthen and harmonize the efforts of IMO Member States in developing their marine casualty investigation capabilities, as a part of a comprehensive and global programme of action to improve the rate of investigation and reporting of marine casualties and incidents.

Two external consultants and one IMO officer conducted the high-level, two weeks of training.

The role of the investigator

Twenty-two participants from maritime administrations and the relevant industry of Guinea who took part in the workshop were taken through the key elements of the role of marine casualty investigator. This embraced understanding of the notion of marine casualty, a country's responsibilities together with the set-up of the investigation. It was extended to implementing mandatory standards, identifying risks, the human elements, analysis, preparing and reporting incidents.



Following evaluation of the training and feedback received from lecturers and participants, further improvements will be made to the existing programme materials on marine casualty investigation for enhanced delivery of future training.

Somalia and enhancement of maritime security

Enabling Somalia to develop a legal framework to enhance maritime security IMO is assisting the Federal Government of Somalia (FGS) and regional authorities to put in place the required legal framework that gives full and complete effect to IMO instruments dealing with maritime security, during a five-day national workshop held from 23 to 27 October in Mogadishu.

This is part of the EU-funded Regional Programme for Maritime Security in the Red Sea Area¹.

Under this Programme, IMO assists participating countries: Djibouti, Eritrea, Ethiopia, Somalia, Sudan and Yemen, to enhance maritime security and safety in the Red Sea Area, in line with the 2050 Africa Integrated Maritime Strategy.

This Strategy was developed to address Africa's maritime challenges for sustainable development and competitiveness. Similar workshops are planned for all countries involved in the project, with one already having taken place in Ethiopia. The workshop also familiarized stakeholders with the content of IMO circular MSC.1/Circ.1525, *Guidance on the development of maritime security legislation*², so as to draft national legislation to bring into effect the relevant maritime security measures (SOLAS Chapter XI-2 and the ISPS Code³). These are designed to provide a comprehensive mandatory security regime for international shipping.

The workshop was hosted by the Somalia Maritime Administration and brings together 19 participants from Somalia's Ministry of Ports and Marine Transport, Ministry of Foreign Affairs, Ministry of Justice, and Ministry of Fisheries and Marine Resources.

The workshop was opened by Mr Saddam Mohamud Abdi, Somalia's Deputy Minister of Ports and Marine Transport, Mr Chris Reynolds, Head of Mission for the European Union Capacity Building Mission in Somalia (EUCAP Somalia), and IMO's Mr Kiruja Micheni.

¹<u>https://tinyurl.com/mrxz2sv6</u>

² <u>https://tinyurl.com/bdfbbh75</u>

³<u>https://tinyurl.com/266u8c9x</u>

1 November 2022, new carbon rules

Entry into force of carbon intensity rules

IMO Secretary-General reflects

Amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI entered into force on 1 November 2022.

Developed under the framework of the Initial IMO Strategy on Reduction of GHG Emissions from Ships agreed in 2018, these technical and operational amendments require ships to improve their energy efficiency in the short term and thereby reduce their greenhouse gas emissions.

EEXI

From 1 January 2023 it will be mandatory for all ships to calculate their attained Energy Efficiency Existing Ship Index (EEXI) to measure their energy efficiency and to initiate the collection of data for the reporting of their annual operational carbon intensity indicator (CII) and CII rating.

Developed under the framework of the Initial IMO Strategy on Reduction of GHG Emissions from Ships agreed in 2018, these technical and operational amendments require ships to improve their energy efficiency in the short term and thereby reduce their greenhouse gas emissions.

Mandatory w.e.f. 01.01.23

From 1 January 2023 it will be mandatory for all ships to calculate their attained Energy Efficiency Existing Ship Index (EEXI) to measure their energy efficiency and to initiate the collection of data for the reporting of their

annual operational carbon intensity indicator (CII) and CII rating.

IMO Secretary-General Kitack Lim said: 'The short-term GHG reduction measures, adopted in 2021, form a comprehensive set of amendments to MARPOL Annex VI, which provide important building blocks for IMO's future mid-term greenhouse gas reduction measures.



Amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI enter into force on 1 November 2022.

'Decarbonsing international shipping is a priority issue for IMO and we are all committed to acting together in revising our initial strategy and enhancing our ambition. These latest amendments build on energy-efficiency measures which were first adopted in 2011 and strengthened since - the CII and EEXI measures represent the next stage in our work to meet the targets set in the Initial IMO GHG Strategy.'

In conclusion he said: 'IMO Member States are currently actively engaged in the process of revising the Initial IMO Strategy on Reduction of GHG Emissions from Ships with a view to adoption of a revised Strategy in mid-2023. Member States are also engaged in developing a basket of candidate mid-term measures, including technical and economic elements, that will set global shipping on an ambitious path to phasing out GHG emissions towards the middle of this century. We are, in tandem, working to support Member States in their implementation of measures and to ensure that no one is left behind in this transition towards a decarbonized future for shipping.'

To recap

The amendments to MARPOL Annex VI have been in force since 1 November 2022. The requirements for EEXI and CII certification come into effect on 1 January 2023. This means that the first annual reporting will be completed in 2023, with initial CII ratings given in 2024.

Readers are invited to learn more, including to see FAQ, here: <u>https://tinyurl.com/tu2a22t5</u>

The UK MAIB Safety Digest

Lessons from Marine Accident Reports

2 / 2022

In the UK the Marine Accident Investigation Branch (MAIB) examines and investigates all types of marine accidents to or on board UK vessels worldwide, and other vessels in UK territorial waters.

Located in offices in Southampton, the MAIB is an independent branch within the Department for Transport (DfT). The head of the MAIB, the Chief Inspector of Marine Accidents, reports directly to the Secretary of State for Transport.

From time to time we publish in *Newsletter* reports of MAIB investigations and particularly recommendations made and safety flyers issued.

Biannual Safety Digest

Twice each year a Safety Digest is issued drawing the attention of the marine

community to some of the lessons arising from investigations into recent accidents and incidents. The Digest contains information that has been determined up to the time of issue.

This information is published to inform the merchant and fishing industries, the recreational craft community and the public of the general circumstances of marine accidents and to draw out the lessons to be learned.

The sole purpose of the Safety Digest is to prevent similar accidents happening again. The content must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

Articles within the Digest do not assign fault or blame nor do they determine liability. The lessons often extend beyond the events of the incidents themselves to ensure the maximum value can be achieved.

A new 64-page collection of cases (volume 2 of 2022) detailing accidents involving vessels from the merchant, fishing and recreational sectors is now available to download here: <u>https://tinyurl.com/3bb6syda</u>

Within the Safety Digest there are collections of anonymous articles involving vessels from the merchant, fishing and small craft sectors which draw the attention of the marine community to lessons arising from a variety of accidents. Each section is prefaced by an expert in each of the three sectors.

USCGC Healy at the North Pole

On 30 September the US Coast Guard Cutter *Healy* reached the North Pole Friday after traversing the frozen Arctic Ocean, marking only the second time a US ship has reached the location unaccompanied, the first being *Healy* in 2015.

Healy, a medium icebreaker, and crew departed Dutch Harbor, Alaska, on 4 September beginning their passage to reach latitude 90 degrees north. The cutter and crew supported oceanographic research in collaboration with National Science Foundation-funded scientists throughout their transit to the North Pole.

This is the third time *Healy* has travelled to the North Pole since commissioning in 1999.



In the words of Captain Kenneth Boda, CO of *Healy*: '*The crew of Healy is proud to reach the North Pole*.

'This his rare opportunity is a highlight of our Coast Guard careers. We are honoured to demonstrate Arctic operational capability and facilitate the study of this strategically important and rapidly changing region.'

Healy is currently on a months-long, multi-mission deployment to conduct oceanographic research at the furthest reaches of the northern latitudes. The 420-foot icebreaker is the largest ship in the Coast Guard and is capable of breaking through four-and-half feet of ice at a continuous speed of three knots.

Home port Seattle

With home port of Seattle *Healy*, which departed there on 11 July, currently has thirty-four scientists and technicians from multiple universities and institutions aboard, and nearly 100 active duty crew members.

During the cutter's first Arctic leg of the patrol throughout July and August, *Healy* steamed into the Beaufort and Chukchi Seas, going as far north as 78 degrees. As a part of the Office of Naval Research's Arctic Mobile Observing System program, *Healy* deployed underwater sensors, sea gliders and acoustic buoys to study Arctic hydrodynamics in the marginal and pack ice zones.

In addition to enabling Arctic science, *Healy* also supported US national security objectives for the Arctic region by projecting a persistent ice-capable US presence in US Arctic waters, and patrolling themaritime border with Russia.

Synoptic Arctic Survey conducted

On their second Arctic mission of the summer, while transiting to the North Pole, *Healy* embarked a team of researchers as a part of the Synoptic Arctic Survey (SAS). SAS is an international collaborative research programme focused on using specially equipped research vessels from around the world to gather data throughout the Arctic across multiple scientific disciplines. Dr Carin Ashjian, from the Woods Hole Oceanographic Institution in Massachusetts, is currently serving alongside Dr Jackie Grebmeier as co-chief Scientists onboard *Healy* with support from the National Science Foundation.



'We are excited to reach the Pole,' said Ashjian speaking on behalf of the embarked science party. She continued: *'We have little information from the ocean and seafloor at the top of the world so what we collect here is very valuable. It also fills in data from a region, the western Central Arctic, which was not sampled by other ships in the SAS. Our joint efforts with the Healy crew are producing important science results.'*

After deploying a series of scientific equipment to collect valuable data at the North Pole, crew members and the science team were granted ice liberty. During this time, they enjoyed taking pictures and posing with a "North Pole" that had been erected on the ice. Healy also used the unique setting to advance two crewmembers and conduct a cutterman ceremony for three crewmembers who each recently achieved the career milestone of five years of sea service.

Port Of Dover receives first reefer breakbulk call to the UK in 20 years

Dover's weekly melon call commences

It has been reported that the Port of Dover's cargo terminal has received the first reefer breakbulk call to the UK in almost 20 years.

Greensea NV's *Green Honduras* called to the Port in September with the first of many shipments of melons to the UK market via Dover. The Port of Dover, Seaholm Logistics Ltd and Greensea NV have agreed a weekly vessel call to the Port, delivering in excess of 1,000 pallets of melons each week for the duration of the 2022/23 melon season. Brazilian melon growers, Agricola Famosa SA, will supply a range of melons, including yellow melons, watermelons and honeydew melons. All melons will be stored onsite in the Port of Dover's state-of-the-art perishable warehouse before distribution to retailers and service delivery partners across the UK.



Alison Hall, Head of Business Development at the Port of Dover said: 'Dover's market share of perishable freight has gone from strength to strength since the opening of our state-of-the-art cargo terminal in 2019. This new weekly service will deliver a significant number of pallets of melons each week to the UK market and solidifies the Port's position as market leading specialists in the handling of perishable cargo.'



Tim Dybala, Operations, at Greensea Chartering NV, said: 'Greensea NV is delighted to deliver this weekly service of melons to the Port of Dover. This is the first reefer breakbulk vessel call carrying perishable freight to the UK in the past 20 years, with containerised freight previously taking precedence, and we're incredibly proud of this achievement.

'We are also pleased to be working with the Port of Dover, which has a team of renowned perishable experts and a purpose-built cargo terminal that offers zero ship deviation by operating at a strategic location next to the world's busiest shipping lane.' Speaking on behalf of Agricola Famosa S.A, Carlo Porro, commented: 'As an end-to-end melon grower and supplier to the UK market, Agricola Famosa is thrilled to have secured and started this breakbulk reefer service to the UK to continue the trade of melons from our fields in Brazil, to consumers within the UK, from Port Fortaleza to the Port of Dover.'



Agricola Famosa SA has produced a video on the passage journey of their melons from Brazil to Vigo, Rotterdam and Dover. This can be viewed here: <u>https://tinyurl.com/yz94zc7d</u>

About the port of Dover

The Port of Dover is the UK's busiest international ferry port, handling more lorries than all other UK ports put together through an unrivalled and fluid operation capable of facilitating 120 ferry movements and 110 miles of freight per day. £144bn worth of UK trade and 33% of all trade with the EU is handled by the Port of Dover.



Dover is also the UK's second busiest cruise port, has a marina and property business primed to benefit from a new waterfront and a busy cargo business handling fresh produce, containers, project cargo, general cargo and grain operating from a state-of-the-art terminal.

The Port of Dover holds ambitious net zero targets, placing it at the vanguard of decarbonisation within the UK ports industry.

SEA WORLD's needs for Carbon Intensity Index

METIS AI-based analytics

Machine Learning and AI are providing ship operators Sea World Management and Trading Inc. (SEA WORLD) and Sea Globe Management and Trading Inc. (SEA GLOBE) with a direct monitoring and reporting route to CII compliance, in a significant new extension to cloud-based data gathering and analytics capabilities from METIS Cyberspace Technology.

Not forgetting the CII

From 1 January 2023, the IMO requires all vessels of 5,000 gt and above to derive their CII (the Carbon Intensity Index), using a formula applied under SEEMP III – the UN agency's third Ship Energy Efficiency Management Plan scheme. The CII evaluates vessel efficiency in terms of grams of CO₂ emitted per cargo capacity and nautical mile, with IMO developing performance categories spanning a highly desirable 'A' to an unacceptable 'E'.

Building on its existing cloud platform infrastructure, METIS is applying its advanced data gathering and analytics tools to serve the realities of CII implementation. Athens-based SEA WORLD and SEA GLOBE are applying METIS predictive analytics and CII evaluation across a fleet of 19 of their wet tankers.

Drawing on a CO₂ monitoring system sampling emissions more than once every 30 seconds, METIS uses a ship's known characteristics, including its machinery performance, fuel oil consumption, fouling, cargo weights and exposure to weather, to derive its CII rating.



Sea Galaxy - one of the SEA WORLD tankers which will use METIS analytics tools to handle the realities of the CII scheme.

Captain Michael Reppas, Managing Director of SEA WORLD commented: 'It is critical that our investments in new technologies reflect our quality-assured management systems and services.

'We are therefore proactive in putting in place the monitoring and analytics to deliver accuracy, transparency and predictive capability on lower carbon shipping.'

Serafeim Katsikas, CTO at METIS Cybertechnology, said that the new CII rating regime offered an example of how managing data analytics at the individual ship level best helped owners to meet their efficiency and decarbonisation goals.

He reflected: 'AI and Machine Learning create a straightforward pathway to derive the carbon intensity rating, but can also be useful for operational guidance to benchmark a voyage plan against CII.

'In addition, should a ship fall short of its desired rating, analytics can identify the impact of different options for CII improvement - such as auxiliary system adjustments, speed reduction, hull cleaning, alternative fuels or carboncapture.'

A.P. Moller - Maersk

Continuing a green transformation

On order six more large container vessels

On 5 October it was announced from Copenhagen by A.P. Moller – Maersk (Maersk) that it has ordered a further six large ocean-going vessels that can sail on green methanol.

It is understood that the six vessels will be built by Hyundai Heavy Industries (HHI) and have a nominal capacity of approximately 17,000 TEU. These new vessels will replace existing capacity in the Maersk fleet.

To quote Henriette Hallberg Thygesen, CEO of Fleet & Strategic Brands at Maersk: 'Our customers are looking to us to decarbonise their supply chains, and these six vessels able to operate on green methanol will further accelerate the efforts to offer our customers climate neutral transport.

'Global action is needed in this decade in order to meet the Paris Agreement's goal of limiting global warming to a 1.5°C temperature rise.'

Maersk has set a net-zero emissions target for 2040 across the entire business and has also set tangible near-term targets for 2030 to ensure significant progress.

This includes a 50% reduction in emissions per transported container in the Maersk Ocean fleet compared to 2020 and a principle of only ordering newbuilt vessels that can be operated on green fuels.

Nineteen green methanol vessels on order

With the order, Maersk has in total order of 19 vessels with dual-fuel engines able to operate on green methanol.

Palle Laursen, Chief Fleet & Technical Officer at Maersk reflected: 'Green methanol is the best scalable green fuel solution for this decade, and we are excited to see several other shipowners choosing this path. It adds further momentum to the rapid scaling of availability needed to bring down the premium on green methanol and accelerate the evolution of climate neutral shipping.'

Benchmarked against conventional fuel capabilities, additional capital expenditure (CAPEX) for the methanol dual-fuel capability is in the range of 8-12%, which is an improvement compared to when Maersk ordered eight vessels with the same technology last year, it has been reported.



A P Moller – Maersk©

The six 17,000 TEU vessels are all to be delivered in 2025 and will sail under the flag of Denmark. They all come as part of Maersk's ongoing fleet renewal programme and their capacity will replace an equal amount of capacity reaching end-of-life and leaving the Maersk managed fleet. When all 19 vessels on order are deployed and have replaced older vessels, they will generate annual CO_2 emissions savings of around 2.3 million tonnes.



A P Moller – Maersk©

Maersk further reiterates its strategy of maintaining a fleet capacity at a maximum of 4.3 million TEU, as a combination of Maersk managed and time-chartered vessels.

The six vessels ordered will come with dual-fuel engines able to operate on green methanol and will save about 800,000 tonnes of CO₂ emissions annually.

The VIKING HydroPen™

CMA CGM Group order

VIKING Life-Saving Equipment has secured a major order for its unique container fire-fighting tool HydroPen[™], following a decision by the CMA CGM Group, a global player in sea, land, air and logistics to adopt the device across its entire fleet. This was reported by VIKING on 5 October.

In 2020, CMA CGM ordered HydroPen[™] sets to equip its larger containerships. The latest order means that CMA CGM will use the system on over 270 ships.

Increasingly, the benefits of HydroPen[™] as a firefighting tool have been recognized by owners operating container vessels of various sizes. The equipment was recently ordered for the first time by a marine salvage customer, for deployment as a response kit to container ship fires.



HydroPen™

Where conventional methods use boundary cooling to dowse fires from outside the container, HydroPen[™] is attached to the deck hose as a combined drill and spray unit which penetrates the door of the box before extinguishing the fire at source. Working on or below deck, HydroPen[™] is put into position by a crew member using a telescopic device to fight fires from a distance at any level, with the drilling action driven by pressure in the hose.

It is understood that users need minimal training, while HydroPen[™] is equally compatible for use with water, foam, or carbon dioxide.

Training included

In addition to unprompted endorsements from marine insurers, HydroPen[™] recently won TT Club's Innovation in Safety Award. Judges expressed themselves particularly impressed by VIKING's associated online training which is also part of the HydroPen[™] solution acquired by the CMA CGM Group.

owered by VIKING Safety Academy, the digital package enables the crew train with the system onboard and eliminates the need for land-based training.

Dorte Moeskjaer Hansen, VIKING Vice President Sales Regions, said that by adding the training package: 'CMA CGM wanted to make sure that its crew got the best possible prerequisites for successfully deploying the HydroPen[™] system in a critical situation.



HvdroPen™

'Even the most careful and safety conscious of owners and operators are more at risk of container fires today than ever before, fires discovered at an early stage can be extinguished quickly and easily if the right tools are available in the hands of well-trained crew.'

Since its launch in 2019, HydroPen[™] has become the preferred extinguishing device for containers among a growing constituency of well-known container lines. The system has already seen action multiple times, successfully extinguishing container fires.

Klaipeda, Lithuania

Huge potential of offshore wind

It was reported on 10 October that the Lithuanian port city of Klaipeda aims to maximise its strategic location and vibrant resource base to become a key hub for the nascent offshore wind industry in the Baltic.

In August the Marienborg Declaration was signed and saw heads of government and energy ministers from Lithuania, Estonia, Latvia, Finland, Denmark, Sweden, Poland and Germany commit to closer collaboration in developing new offshore wind volumes in the Baltic Sea, which has estimated wind potential totalling 85-95 GW.

Ensuring energy security

With its strong maritime base, talent pool and innovation sector, Klaipeda's ambition is to establish itself as a regional hub for an industry that is taking off amid the current energy crisis.

The Lithuanian government earlier announced the location for a 700 MW wind park off the coast that could potentially cover 25% of the country's entire power regardless of future changes in politicians.

demand. The tender process is set to take place in early 2023 with a view to construction completion by 2030.

Various projects elsewhere in the Baltic are currently being evaluated alongside the now in-development Baltic Power project offshore Poland, which with total capacity of 1.2GW is expected to power over 1.5 million homes from 2026.

With wind farms set to play a key role not only in reinforcing energy security and affordability, but also in combating air pollution, huge opportunities exist for the Klaipeda's established manufacturers and suppliers, as well as its startup ecosystem, to build and entrench local competence.

Bold collaboration required

Hannah Mary Goodlad, Head of Baltic Sea Area Development at Equinor, speaking during a panel session on renewable energy at the Klaipeda Manifesto Blue Economy Conference 2022, stressed the need for local stakeholders to engage in: '...bold collaboration across borders towards 2030' to achieve the city's ambition.

Romana Hartke, Senior Business Development Manager at Aker Offshore Wind, emphasised Klaipeda's already strong foundation: its strategic location, good hinterland infrastructure and short distances to all Baltic markets.

She flagged up the Port of Mukran in Sassnitz, Germany, which has positioned itself as a base port for wind installation and service operations, as a good example to follow.

FSRU Independence a great showcase

Hartke added that the LNG FSRU (floating storage and regasification unit) Independence, which has been up and running in Klaipeda since 2014, is: 'a great showcase for international investors who recognize that Klaipeda is willing to go the whole way in developing as an offshore wind hub, as it has done in LNG.'

Installing the symbolically named FSRU was an extremely prescient decision given Russia's cutting off gas supplies to Europe. In doing so, Lithuania was the first country in Europe to unchain itself from Putin's 'gas needle'. Locally based oil and gas terminal operator Klaipldos Nafta (KN) is set to acquire the unit by the end of 2024 when its current lease terminates. The long-term LNG import solution contributes to reliable electricity supply not only for Lithuania, but also for consumers in Latvia, Estonia and Finland.

The panelists' call to move swiftly from messaging to action was echoed by the Mayor of Klaipeda, Vytautas Grubliauskas, who flagged up the city's Klaipeda 2030 Economic Development Strategy and Action Plan as one of its greatest strengths.

He said: 'But we have to live our strategy. We must plan and coordinate concrete activities to maintain our direction

Funds for decarbonisation

Marius Vascega, Head of the European Commission's Representation in Vilnius, stressed that offshore wind is a crucial element in reaching the EU's Green Deal decarbonisation goals, and that funds now coming on stream as part of the Next Generation EU Covid-19 recovery fund will help to support viable solutions.



Illustration per: https://portofklaipeda.lt/

Dalius Krinickas, advisor to Lithuania's prime minister, highlighted Vilnius's recent breakthrough package to remove all procedural barriers to assess and install renewables projects and secure the required investments, while Erling Rimestad, state secretary at the Norwegian Ministry of Foreign Affairs, added that financing avenues also exist through the EEA and Norway Grants programme.

Strategic partnerships

As well as renewable energy, the Klaipeda Manifesto conference addressed other key Blue Economy topics including EU and national Blue-Green Economic Policy, Investment, Digitalisation and Maritime tech, Cyber Security, Maritime Startups and Seafood Trade and Production.

Virginijus Sinkevicius, European Commissioner for the Environment, Ocean and Fisheries, said that in the wake of Russia's invasion of Ukraine: '*It is more important than ever that we keep building links between our countries and across our region. That will help us stand together in the face of this new reality and move closer to our vision of a sustainable Blue Economy driven by innovation and green and digital transformation.*'

Elijus Čivilis, a former vice-minister of the Ministry of Economy and Innovation and current General Manager of national investment promotion agency Invest Lithuania, added that speaker participation from Norwegian and local stakeholders provided: '...very good perspectives from different angles.'

Norwegian Ambassador Ole T Horpestad commented: 'With Klaipeda Manifesto we have created a new brand that we want to develop further to promote knowledge exchange and solutions for shared blue growth.'

Diana Manko, Head of Investment and Business at city development agency Klaipeda ID concluded with: 'We

believe Klaipeda Manifesto will become the signature event for the city, and we have already started planning for the 2023 event. Despite the current turbulent situation, there is a lot of optimism.'

Port of Antwerp's Europa Terminal

Boskalis and partners in renewal scheme

It was reported from Boskalis HQ in Papendrecht on 10 October that the company together with partners Artes Roegiers, Artes Depret and Herbosch-Kiere, will renew the Europa Terminal in Antwerp for client Port of Antwerp-Bruges. This will ensure that the port can continue to receive the largest container ships and increase capacity by a third.

The work, which officially commenced on 7 October will take nine years and will be carried out in three phases, taking maximum account of nature and the environment. The project carries a total value of €335 million, it was reported.

Global container congestion calls for more efficient space for handling containers for larger ships. For this reason, the current draft of ships that can moor at the quay wall of the Europa Terminal will be deepened from 13.5 metres to the maximum draft of approximately 16 metres.



Photo: Royal Boskalis Westminster NV ©.

As the renewal requires extensive maritime works and to keep the terminal operational, the project will be executed in three phases, spread over nine years.

The current quay wall will be broken down and replaced by a new wall of 1,200 metres. A cofferdam will ensure that no parts of the old quay wall enter the Scheldt and will protect the works from passing ships and the tide. The three phases have been carefully planned based on the expected shipping traffic in the coming years.

Royal Boskalis Westminster NV is a leading global services provider operating in the dredging, maritime infrastructure and services sectors. The company provides creative and innovative all-round effort to infrastructural challenges in the maritime, coastal and delta regions of the world. With core activities such as coastal defence, riverbank protection and land reclamation Boskalis is able to provide adaptive and mitigating methods to combat the effects of climate change, extreme weather and rising sea levels.

On board with technology

By Michael Grey, IFSMA Honorary Member

It was World Maritime Day last week (last week of September), not that anyone outside our intimate circle of shipping friends would have noticed, such is the way that this vital industry has disappeared over most peoples' horizons. The IMO Secretary General said some interesting things about technology and its place in the maritime world, but also pointed out that technological change needs to take those affected along with it.

This was amplified by Captain Kuba Szymanski of InterManager, who emphasised that everyone needs to keep seafarers in mind when implementing digital solutions and new ways of working at sea. You can't just impose change, he inferred, but have to keep in mind the need to maintain safety, provide proper training and ensure that operating procedures don't become redundant.

We probably need these reminders when everyone is frantically researching new fuels, amazing advances in artificial intelligence, communication breakthroughs and the headlong rush towards "net zero". Scarcely a day goes by without some triumphant announcement of a technological breakthrough which "could" (this is the operative word) revolutionise fuel economy, sustainability, cargo handling, speed up the whole logistic infrastructure, automate everything and reduce operating costs substantially. It is also worth noting that most of these huge advances tend to be future projections, rather than actual achievements.

One shouldn't be too sceptical – my wife says it is unattractive – but on my notice board at eye level as I write, there is a verse written by Ronald Hopwood which tells the reader – "In an age of swift invention it is frequently believed/ That the pressure of a button is as good as work achieved/But the optimist inventor should remember if he can,/Though the instrument be perfect, there are limits to the man." There is a timelessness about this appeal for humility, which, although it still pops up from time to time, (a few years ago I saw it pinned up on the bridge of a very sophisticated new ship), was in fact written in 1913.

The IMO Secretary General and Captain Szymanski are spot on when they urge "optimist inventors" to make sure that they are bringing important people like seafarers into their developments. Because the fact is that invariably they are thought of only at the last minute, if at all, before some product or development is launched upon the market. I never forget an event to commemorate the entry into service of one of the world's fastest cargo ships (which obviously dates it), when some wild-eyed scientist was explaining to an audience of shippers and potential customers that an amazing new device would instruct the master about when he ought to slow down in heavy weather.

During this oration, I was watching the master's face and afterwards I sidled up to him and asked him about the use of this device. He assured me that he had no intention of ever using it, as he thought his experience in many years

crossing the winter North Atlantic provided rather better indicators than a "box of tricks", which had been inflicted upon him, the workings of which he found completely incomprehensible.

Today, of course, his attitude would be heavily criticised, as masters of ships at sea will be in receipt of all sorts of information, data, instruction and advice 24/7. But there is still this worrying gulf between those who are developing equipment, regulations, protocols, systems, who remain in isolation from those who will eventually be affected by their developments. And you can reasonably argue that if this division could be narrowed in some way, by bringing the operators into the loop at an early stage, everyone would benefit, with better equipment or systems, and operators more attuned to the overall objectives.

We still have a singularly unhelpful mindset which sees new equipment that involves quite radical changes installed and the operators just told to "get on with it", with people trying to train themselves with inadequate manuals or using what they managed to pick up from the installation engineer. I recall a friend who ran a containership in the Atlantic arriving back from leave to take his ship to sea that night to discover that the entire navigational outfit had been changed in his absence, without a word of consultation.

There is a wonderful episode recounted by the authors of "Notable points in the design history of the Doxford opposed piston marine oil engine" (A great book, despite its formidable title), about one of the first installations in which the engine could be controlled from the bridge. The master and the chief engineer, both quite elderly and neither of whom had been party to this leap forward in engineering, were deeply suspicious of the development and agreed between them to change the new system back to the tried and trusted manual operation., telling nobody ashore. This worked perfectly, but problems arose when after their final voyage, the manufacturers had to be called in to change the system back to bridge control.

And you can think of so many developments in recent years, in which operators have been told to "just get on with" what experts have installed in their ships.

How much better if they had been involved rather earlier.

Editor's note

Michael Grey is former editor of Lloyd's List.

This article first appeared in *The Maritime Advocate* Issue 814 of 7 October 2022. And appears here by kind permission of the author and editor.

Canadian and US Coast Guards exercise Arctic capabilities

The crews of US Coast Guard Cutter *Stratton* and Canadian Coast Guard vessel *Sir Wilfrid Laurier* conducted a search-and-rescue exercise on 12 October near Point Hope, Alaska.

This exercise commenced with *Stratton* deploying a small, unmanned craft to act as a vessel in distress and simulated a distress call, voiced by Petty Officer Third Class Isabel Acevedo-Garcia. The Canadian Coast Guard's *Sir Wilfrid Laurier* answered the call and notified the US Coast Guard District 17 Command Center of the simulated vessel in distress.

The Canadian Coast Guard ship then launched their small boat and *Stratton* directed their Scan Eagle aerial drone to locate the craft. Displaying exceptional bilateral coordination, operations specialists aboard *Stratton* directed the Canadian small boat toward the distressed vessel while watching a live feed from the overhead drone. The small boat located, recovered, and returned the distressed vessel to *Stratton*'s crew.



The crews of Coast Guard Cutter Stratton and Canadian coast guard ship Sir Wilfrid Laurier conducted a search and rescue exercise near Point Hope, Alaska, on 12 October. Seen here boat work.

Illustration per USCG USCG ©.

In the words of Captain Stephen Adler, CO of *Stratton: 'Exercises such as this help strengthen our international partnerships and increase our emergency response effectiveness in the remote region.*

'We are grateful to our Canadian partners. The Arctic makes for a challenging environment and we look forward to any training opportunities to ensure that we are ready to assist and coordinate should a situation arise.'

The US Coast Guard is the nation's leader in Arctic surface operations and coordinates with international partners through joint exercises and professional exchanges to maintain a safe and prosperous Arctic region.

Cutter *Stratton* is a 418-foot national security cutter (NSC) capable of extended, worldwide deployment in support of homeland security and defence missions. NSCs routinely conduct operations from South America to the Arctic, where their unmatched combination of range, speed, and ability to operate in extreme weather provides the mission flexibility necessary to conduct vital strategic missions.

Bringing Ukrainian grain to the world

The role of the Black Sea Initiative

For a moment let us reflect on the remarks of HE António Guterres,

United Nations Secretary-General, on the signing of the Black Sea Grain Initiative in Istanbul in July 2022 when he said:

Today, there is a beacon on the Black Sea. A beacon of hope – a beacon of possibility – a beacon of relief -- in a world that needs it more than ever.

I want to recognize and thank all those who helped make *it happen.*

To our hosts, President Erdoğan and the government of Türkiye:

Your facilitation and persistence have been essential through every step of this process. (...) Thank you very much.

To the representatives of the Russian Federation and Ukraine: You have overcome obstacles and put aside differences to pave the way for an initiative that will serve the common interests of all.

Crisis Response Group

The Global Crisis Response Group convened by the UN Secretary-General played an important role, focusing the world's attention on the food insecurity crisis, providing analysis and calling on the international community to avert the worst cost-of-living crisis in a generation and its devastating impact on billions of people.

Black Sea Grain Initiative offers hope, shows power of trade

An UNCTAD report* published on 20 October shows how the Black Sea Grain Initiative signed in July 2022 to resume exports of Ukrainian grain via the Black Sea amid the ongoing war has offered hope and shown the power of trade in times of crisis.

The report underlines why it is critical to renew the initiative next month.

Thanks to the initiative, port activity in Ukraine is picking up and large shipments of grain are reaching world markets. As of 19 October, the total tonnage of grain and other foodstuffs exported through the initiative had reached almost 8 million metric tons.

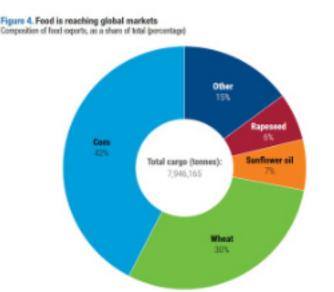
'UN-led Initiative has helped to stabilize and subsequently lower global food prices and move precious grain from one of the world's breadbaskets to the tables of those in need,' the report stated. The Food Price Index published by the UN Food and Agriculture Organization (FAO) has shown that the prices of global food staples have declined in recent months – by about 8.6% in July, 1.9% in August and 1.1% in September.

With the initiative ending in November and its renewal uncertain, the prices of some commodities, such as wheat and maize, are rising again, the report warned.

It is understood that without the initiative, there is little hope for providing food security, especially in developing and least developed countries.

Increasing port activity

As the war erupted in Ukraine, the world watched as valuable grain corridors were closed off. Weekly ship departures from Ukrainian ports plummeted.



Wheat is a pillar of food security, and it is mostly going to developing countries

Share of exports of wheat to country groups by development status.

There was a marginal recovery in subsequent weeks but port departures remained considerably below their 2021 levels. After the signing of the UN-led initiative, there was a gradual rise in ship departures.

In mid-October shipments were still about 40% to 50% below the pre-war period, the trend was in the right direction.

Grain gates reopened

The initiative reopened the grain gates of Ukraine to the world, and particularly to developing countries.

Maize and wheat account for more than 70% of the nearly 8 million tons of grain that have left Ukrainian ports under the initiative. Nearly 20% of the wheat exports have gone to least developed countries (LDCs) with vulnerable populations.

The initiative doubled the amount of wheat shipped to LDCs between August and September – about half a million tons.

But wheat exports to LDCs between January and September 2022 totalled less than 1 million tons. This implies an export gap of 1.2 million tons with respect to 2021. More needs to be done to match previous levels of exports.

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

A TRADE HOPE

THE ROLE OF THE BLACK SEA GRAIN INITIATIVE IN BRINGING UKRAINIAN GRAIN TO THE WORLD



Pushing down food prices

The initiative has helped to make grain more available and eased pressure on food prices. This has in turn helped to improve global access to food, particularly for the poorest and most vulnerable.

The prospect of the initiative and the reopening of the Black Sea ports helped to push down historically high market prices.

Prices are said to be rising again amid mounting concerns about whether the initiative will be renewed, and the threat of further disruptions to trade in the Black Sea and the closure of grain corridors.

UNCTAD Secretary-General Rebeca Grynspan commented: 'In a context where trade is very uncertain, signals matter very much. When there is no clarity, no one knows what is going to happen, and speculation and hoarding take over.'

Wheat and maize prices are still at historically high levels. This weighs on the affordability of basic foods and poses a risk to food security globally. This is one more reason why the renewal of the UN-led initiative is important for developing countries.



© FAO/Genya Savilov | A truck unloads corn grain at a processing factory in Ukraine.

Acknowledgements

This report would not have been possible without the essential contributions of the Joint Coordination Centre for the Black Sea Grain Initiative, comprising senior representatives from Ukraine, the Russian Federation, Türkiye and the United Nations, which ensures the safe maritime transport of grain and other foodstuffs from three key Ukrainian ports in the Black Sea to the rest of the world.

*See here: A TRADE HOPE. THE ROLE OF THE BLACK SEA GRAIN INITIATIVE IN BRINGING UKRAINIAN GRAIN TO THE WORLD. Published on 20 October 2022. The 14-page document may be found here: https://unctad.org/a-trade-hope

US Coast Guard AtoN mission to Puerto Rico

It was reported from San Juan, Puerto Rico, on 18 October that the US Coast Guard Cutter *Willow* completed its scheduled aids to navigation service mission around Puerto Rico port and navigable waterways two days before, on 16 October.



US Coast Guard photos. USCG ©

During the eight-day mission, cutter *Willow* crewmembers serviced 23 aids to navigation and performed eight buoy hull reliefs (change overs from old to new) around island ports and navigable waters in Arecibo, Culebra, Guanica, Guayanilla, Ponce, San Juan, Tallaboa, and Vieques.

After the Coast Guard reopened all the ports in Puerto Rico following Hurricane Fiona, the cutter *Willow* moved up its itinerary to provide scheduled maintenance around the island and further inspect the status of the aids to navigation in the most affected areas from the hurricane.

In the words of Commander Erin H Chlum, CO of *Willow*: 'The crew and I were happy to be back in Puerto Rico, our second homeport, servicing aids to navigation to facilitate the movement of commerce into Puerto Rico and supporting safe navigation around the island.

'We were especially grateful for the opportunity to work in areas affected by Hurricane Fiona to ensure necessary resources, fuel and supplies can reach the island and people in need.'

Cutter *Willow* is responsible for the maintenance of 246 aids to navigation throughout the Coast Guard's Seventh District, ranging from South Carolina to the Caribbean, including Puerto Rico and the US Virgin Islands as well as Guantanamo Bay and Haiti.

Coast Guard Cutter *Willow* is a 225-foot sea going buoy tender homeported in Charleston, South Carolina.

From WISTA International

The Diversity Handbook

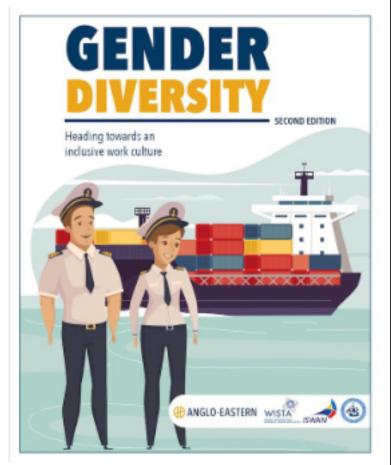
An in-depth survey in the maritime industry revealed shocking figures in gender-based discrimination against women, onboard harassment and bullying.

WISTA International, Anglo Eastern, International Seafarers Welfare and Assistance Network (ISWAN) and International Chamber of Shipping (ICS) conducted a public online survey designed to examine how female seafarers perceived discrimination and how it manifested onboard based on their personal experiences.

The complete findings from the survey and recommendations are published in *The Diversity Handbook*, launched at the WISTA International conference in Geneva on 26 October.

Studies involved 1128 women seafarers from 78 countries. Of these 60% of women reported encountering gender-based discrimination onboard, 66% of the respondents concurred that their male employees had turned to harassing and intimidating female co-workers. Furthermore, 25% reported that in the shipping sector, physical and sexual harassment is common, occurring on board and involving intrusions on their privacy

According to WISTA the first handbook on gender diversity's launch in January 2018 received an impressive response to its survey. The recent publication issued also initiated by Sanjam Sahi Gupta, Founder of WISTA India and a WISTA International Executive Committee member from 2014-2021 – was completed by 1128 women from 78 countries. Of those in the survey The Philippines (399 responders) had the largest proportion, followed by the United States (98), the United Kingdom (57), South Africa (51), Brazil (47), India (41), Peru (36), Columbia (35) and Indonesia (35).



Front Cover of the Gender Diversity Report 2nd Edition 2022

The majority of respondents, approximately 90%, work on cruise ships, with the remainder employed on cargo ships, gas and oil tankers, container ships (of more than 8000 TEU capacity), general cargo/geared vessels, chemical tankers, bulk carriers and tugs.

Furthermore, the survey also made it possible to collect data on company harassment and bullying policies, company and industry hotlines and the effect of the pandemic on women's experiences at sea and provided insights into how businesses may operate in the sector to promote gender diversity and dispel prejudice.

Presence of Discrimination Onboard

The majority of respondents -60% - reported encountering gender-based discrimination onboard, while just 40% of respondents said there was no such discrimination.

A figure of 34% of the respondents acknowledged feeling alienated or neglected due to their gender, while 29% of the respondents had encountered harassment and bullying on board. A resounding 66% of the women seafarers concur that their male employees had turned to harassing and intimidating female co-workers.

Offensive approaches via several media

It is understood that 13% of the surveyed seafarers have mentioned that they have been offensively approached via different media, while a majority 70% of these women seafarers claim that it was their male colleagues who perpetrated such offensive harassment onboard.



Elpi Petraki, President WISTA International.

Onboard harassment with personal questions and other ways of intruding on privacy

WISTA's study indicated that 25% of the respondents admitted to having encountered onboard harassment, including being approached with personal questions, overly familiar remarks or being invited to meet in the cabin on a private basis. This indicates a widespread issue with onboard harassment when the victim is subjected to numerous threats. Statistics show that the vast majority of those engaging in such crimes are male seafarers (88%), while other instances (11%) involve both men and women co-workers, and only about 1% involve women.

Uncomfortable persuasion, indecent remarks and body shaming

In the shipping sector, physical and sexual harassment is common. According to 25% of respondents, it occurred on board and involved intrusions on their privacy, such as uncomfortable persuasion, inappropriate remarks and body shaming. Once more, an overwhelming 90% of those involved were male co-workers, while 8% were male and female and only 2% were female seafarers.

Harassment and bullying policy

A figure of 97% of respondents agreed that their company had a harassment and bullying policy, though nearly 60% of the respondents acknowledged having experienced harassment. Therefore, organisations must ensure that their Company Harassment Policies are extensively publicised to increase their visibility, level of awareness, and stringent on-the-ground enforcement. Statistics showed that 80% of female seafarers reported that their immediate superiors had spoken with them about the company's anti-harassment policy. Again, it is important to note that 60% of these acknowledged experiencing harassment while on board and admitted that they were unsure of what to do in such circumstances.

Incidence of reporting discriminatory behaviour

Although 73% of the respondents felt comfortable escalating their concerns to their senior officers, only 13% reported such incidents to their superiors, while only 7% were satisfied with the outcomes. 59% of all the respondents have faced gender-based discrimination, while 66% felt ignored.

Regarding helplines, only 13% of respondents reported the harassment they had experienced. It was reported that the efficiency of these helplines, their availability at all times and how the concerns of the seafarers are addressed at the source must all be seriously addressed.

As for the opportunities for training, although 82% of women seafarers agreed that they had received instruction on adapting to the ship's environment, this percentage has to be far higher, given how vital adaptability to the ship's environment is.



Sanjam Sahi Gupta, Founder of WISTA India and co-chair of the WISTA International Diversity Committee.

Sanjam Sahi Gupta, Founder of WISTA India and co-chair of the WISTA International Diversity Committee, declared: 'There is an urgent need to create a more diverse, inclusive and equitable maritime community, with women seafarers deserving a respectful and safe working environment.

'The recent report revealed unacceptable figures with women facing gender discrimination, harassment and bullying on the sea. The shipping sector is at risk due to a lack of new talent.

'Over the next decade, there will likely be an even greater need for qualified seafarers. One of the best and most effective strategies to stop the growing disparity is adopting gender-inclusive policies within a safe work culture.'

Despina Panayiotou Theodosiou, President of WISTA International, stated:

WISTA International, through its diversity committee, is working hard to highlight the need for the maritime sector to move from equality to equity.

'This is an essential distinction because equity ensures everyone has a fair opportunity to make the most of their lives and talents according to their circumstances.

'This should apply the same at sea as on land. These figures should be a wake-up call to the maritime sector and we will continue at every opportunity to raise the issues and bring about change.'

Campaigns by IMO, ITF and ICS and others

Ongoing campaigns from organisations, including IMO, ITF and ICS, could make a real difference in attempting to improve through in-depth research into the issue and by consistently engaging with employers and reputable maritime universities.

It is WISTA's view that campaigns should promote the recruitment of more women seafarers while ensuring that women who are accepted on board will have conducive, safe and inclusive working environments.

About WISTA International

The Women's International Shipping and Trading Association (WISTA International), <u>www.wistainternational.com</u> was formed in 1974 as a global organisation connecting female executives and decision-makers worldwide.

WISTA International incorporates 56 National WISTA Association (NWA), representing more than 3,800 female professionals from all maritime industry sectors. NWAs provide in-country and regional networking, business and skill-building opportunities, corporate visibility, and also facilitate relationships within the industry.

WISTA works toward the following:

- Minimising the existing gender leadership gap in the maritime, trading and logistics sectors.
- Building a community among its members, facilitating the exchange of contacts, information, and experiences.
- Promoting the creation of business relationships among its members.
- Facilitating the professional development of its members.
- Providing liaison with other related institutions and organisations worldwide.

To obtain a copy of this publication readers are invited to see here: <u>https://tinyurl.com/4kjttfdu</u>

Climate plans remain insufficient

More ambitious action needed

The UN Climate Change Conference COP 27 will take place in Sharm el-Sheikh, Egypt, from 6 to 18 November this year

https://unfccc.int/cop27

On 26 October the UN issued *Climate Change News* and indicated that a new report from UN Climate Change shows countries are bending the curve of global greenhouse gas emissions downward but underlines that these efforts remain insufficient to limit global temperature rise to 1.5 degrees Celsius by the end of the century.

According to the report, the combined climate pledges of 193 Parties under the Paris Agreement could put the world on track for around 2.5 degrees Celsius of warming by the end of the century.

Current commitments

The report of 26 October also showed current commitments will increase emissions by 10.6% by 2030, compared to 2010 levels. This is an improvement over last year's assessment¹, which found countries were on a path to increase emissions by 13.7% by 2030, compared to 2010 levels.

Last year's analysis showed projected emissions would continue to increase beyond 2030. However, this year's analysis shows that while emissions are no longer increasing after 2030, they are still not demonstrating the rapid downward trend science says is necessary this decade.

UN IPCC

The UN's Intergovernmental Panel on Climate Change's 2018 report indicated that CO_2 emissions needed to be cut 45% by 2030, compared to 2010 levels. The latest science² from the IPCC released earlier this year uses 2019 as a baseline, indicating that GHG emissions need to be cut 43% by 2030. This is critical to meeting the Paris Agreement goal of limiting temperature rise to 1.5 degrees Celsius by the end of this century and avoiding the worst impacts of climate change, including more frequent and severe droughts, heatwaves and rainfall.

In the words of Simon Stiell, Executive Secretary of UN Climate Change: '*The downward trend in emissions expected by 2030 shows that nations have made some progress this year.*

'But the science is clear and so are our climate goals under the Paris Agreement. We are still nowhere near the scale and pace of emission reductions required to put us on track toward a 1.5 degrees Celsius world. To keep this goal alive, national governments need to strengthen their climate action plans now and implement them in the next eight years.'

Climate Action Plans

UN Climate Change analysed the climate action plans – known as nationally determined contributions (NDCs) – of 193 Parties to the Paris Agreement, including 24 updated or new NDCs submitted after the UN Climate Change Conference in Glasgow (COP 26) up until 23 September this year. Taken together, the plans cover 94.9% of total global greenhouse gas emissions in 2019.

Stiell added: 'At the UN Climate Change Conference in Glasgow last year, all countries agreed to revisit and strengthen their climate plans.

'The fact that only 24 new or updated climate plans were submitted since COP 26 is disappointing. Government decisions and actions must reflect the level of urgency, the gravity of the threats we are facing, and the shortness of the time we have remaining to avoid the devastating consequences of runaway climate change.'

Critical update

This is UN Climate Change's second such report, providing a critical update to last year's inaugural NDC synthesis report. While the overall findings of the report are stark, there are glimmers of hope.

Most of the Parties that submitted new or updated NDCs have strengthened their commitment to reducing or limiting greenhouse gas emissions by 2025 and/or 2030, demonstrating increased ambition in addressing climate change.

A second UN Climate Change report on long-term lowemission development strategies, also released on 26 October, looked at countries' plans to transition to net-zero emissions by or around mid-century. The report indicated that these countries' greenhouse gas emissions could be roughly 68% lower in 2050 than in 2019, if all the long-term strategies are fully implemented on time.

Current long-term strategies (representing 62 Parties to the Paris Agreement) account for 83% of the world's GDP, 47% of global population in 2019, and around 69% of total energy consumption in 2019. This is a strong signal that the world is starting to aim for net-zero emissions.

The report notes, however, that many net-zero targets remain uncertain and postpone into the future critical action that needs to take place now. Ambitious climate action before 2030 is urgently needed to achieve the longterm goals of the Paris Agreement.

Call on governments

With the UN Climate Change Conference (COP 27) just around the corner, Stiell called on governments to revisit their climate plans and make them stronger in order to close the gap between where emissions are heading and where science indicates they should be this decade.

Stiell concluded by saying: 'COP 27 is the moment where global leaders can regain momentum on climate change, make the necessary pivot from negotiations to implementation and get moving on the massive transformation that must take place throughout all sectors of society to address the climate emergency.'

Furthermore, Stiell has urged national governments to come to COP 27 to show how they will put the Paris Agreement to work in their home countries through legislation, policies and programs, as well as how they will cooperate and provide support for implementation. He is also called for nations to make progress at COP 27 in four priority areas: mitigation, adaptation, loss and damage, and finance.

Sameh Shoukry, Egyptian Minister of Foreign Affairs and COP27 President-Designate commented: 'COP27 will be the world's watershed moment on climate action.

'The report from UN Climate Change and before that from the IPCC are a timely reminder for all of us. Raising ambition and urgent implementation is indispensable for addressing the climate crisis. This includes cutting and removing emissions faster and at wider scope of economic sectors, to protect us from more severe adverse climate impacts and devastating loss and damage.'

Shoukry added: 'The synthesis report is a testimony to the fact that we are off-track on achieving the Paris Climate Goal and keeping the 1.5 degrees within reach.

'This is a sobering moment, and we are in a race against time. Several of those who are expected to do more, are far from doing enough, and the consequences of this is affecting lives and livelihoods across the globe.

'I am conscious that it is and should be a continuum of action until 2030 then 2050, however, these alarming findings merit a transformative response at COP27.'

COP 26 President Alok Sharma MP (from the UK) reflected: It is critical that we do everything within our means to keep 1.5C in reach, as we promised in the Glasgow Climate Pact. These reports show that although we have made some progress - and every fraction of a degree counts - much more is needed urgently. We need the major emitters to step up and increase ambition ahead of COP27.'

¹See here: <u>https://tinyurl.com/3jx3ms5h</u>

² <u>https://tinyurl.com/4ued9ztm</u>

ICS and the global CO, reduction fund

A Fund and Reward system

Coming ahead of COP 27

With HQ in London the International Chamber of Shipping (ICS), which represents 80% of the world's merchant fleet, has announced proposals to accelerate the maritime sector's transition to net zero by financially rewarding ships and energy producers that invest in low/net zero emission fuels.

In a paper to IMO reported on 25 October ICS proposed a 'Fund and Reward' system to catalyse the adoption of

alternative fuels, which currently cost at least two or three times more than conventional marine fuel.

The ICS Fund and Reward (F&R) proposal combines elements of various recent GHG reduction proposals from a number of governments, plus a flat rate contribution system previously proposed by ICS and INTERCARGO, and ideas recently put forward for a global IMO measure by the 27 Member Staes of the European Union, otherwise known as the EU 27.

ICS's chairman, Emanuele Grimaldi, added: 'With the ICS Fund and Reward proposal, IMO member states have a new but very short window of opportunity to put in place a global economic measure which can kick-start the development and production of alternative fuels for shipping.



'To achieve net zero mid-century, these new fuels must start to become available in significant quantities on a commercial basis no later than about 2030.'

Grimaldi continued: 'Compromise is always difficult but, in any negotiation, having a proposal like this can enable everyone to come together. I hope this proposal will act as a bridge between the climate ambitions of both developed and developing countries so that no part of the global shipping industry will be left behind.'

Mandatory flat rate contribution per ship

The reward rate would be calculated based on CO_2 emissions prevented and funded by way of a mandatory flat rate contribution from ships per tonne of CO_2 emitted. The industry body said that the Fund and Reward system could be established by 2024, if governments can agree on the regulatory framework at the IMO.

Proposed International Maritime Sustainability Fund

ICS proposes that contributions from the global fleet be gathered in an International Maritime Sustainability Fund. Such a fund, the body said, could raise billions of dollars annually, which would then be committed both to narrowing the price gap, globally, between existing high carbon marine fuels and alternative fuels, as well as supporting much needed investment in developing nations for the production of new marine fuels and bunkering infrastructure.

The fund would reward ships according to annual reporting of the CO_2 emissions prevented by the use of eligible alternative fuels. For example, a ship powered by ammonia (among many other alternative fuels including methanol, hydrogen, sustainable biofuels and synthetic fuels) could receive a cost saving of more than US\$1.5 million annually.

Pre-COP 27 proposal

Coming ahead of COP 27, this new industry proposal is relevant in the context of the total CO_2 emissions from international shipping – regarded as a 'hard to abate' sector – which account for between 2% and 3% of the world economy's total greenhouse gas emissions.

ICS Secretary General, Guy Platten, commented: 'We must narrow the significant price gap of new, very expensive, alternative fuels to accelerate their production and take-up, so that we reach a take-off point by 2030 on our pathway to net zero by 2050. But it is crucial that our industry also supports maritime greenhouse gas reduction efforts in developing countries.

'This fund has the potential to go beyond the traditional reach of the IMO, boosting investment for the fuel production and bunkering infrastructure in ports worldwide that will be vital for our global industry to decarbonise completely.'

Alternative fuels gain

The ICS proposal aims to ensure that at least 5% of the energy used by the world fleet in 2030 is produced from alternative fuels. This would deliver against Mission Innovation's 2022 Action Plan for zero-emission shipping and would represent the equivalent of approximately 15 million tonnes of new fuels annually by the end of the decade, a significant advance from a current figure of almost zero.

Impact assessment undertaken

A detailed impact assessment undertaken for ICS by Clarkson's Research has identified that a financial contribution of up to approximately US\$100 per tonne of

CO₂ emitted would not cause disproportionately negative impacts on the economies of states. However, ICS believes that contributions could initially be set much lower and then be subject to a five-year review as increasing quantities of new fuels become available.

The quantum of the contribution by ships is of great importance to developing countries whose support will be required to get the regulatory framework adopted, the architecture for which is based on the industry's previous proposals for an IMO R&D Fund.

Discussion pre-IMO MEPC

The ICS proposal for a Fund and Reward (F&R) measure, will be discussed in December 2022 after COP 27 and ahead of the next IMO Marine Environment Protection Committee in London.

More on the ICS Fund

The ICS Fund and Reward (F&R) proposal combines elements of various recent GHG reduction proposals from the government of Japan, the governments of Argentina, Brazil, China, South Africa and UAE, from the governments of the Marshall Islands and the Solomon Islands, plus a flat rate contribution system previously proposed by ICS and INTERCARGO and ideas recently put forward for a global IMO measure by the EU 27.

Mission Innovation's Action Plan for The Zero-Emission Shipping Mission, of September 2022, is supported by the governments of Denmark, France, Ghana, Norway, India, Morocco, Republic of Korea, Singapore, the UK, and the US.

For more on this programme readers are invited to see here: <u>https://tinyurl.com/2jcf5avm</u>

UNESCO Setting a global ambition for the Ocean We Want

The UN Climate Change Conference COP 27 will take place in Sharm el-Sheikh, Egypt, from 6 to 18 November this year

https://unfccc.int/cop27

According to news from UNESCO the Ocean Decade will host a series of events at COP27 that will focus on the need and methods for diverse actors to collectively work across the science – policy – society interface to ensure that ocean science leads to tangible and sustainable climate action.

Specific themes

It has been reported that specific themes to be addressed through the Ocean Decade events include:

- (i) climate action in Africa;
- (ii) resilience including the role of nature-based solutions;
- (iii) financing for ocean science for climate action, and
- (iv) communicating ocean science for climate action.

All events will align with the priorities of the Egyptian Presidency of COP27 related to adaptation, mitigation, financing and collaboration, and the key messages of the Ocean Climate Dialogue held in June 2022.

Events will showcase existing Decade Actions working at the global, regional and national levels, and engage representatives of key Decade structures including the Ocean Decade Alliance and Decade Advisory Board.

UNESCO has indicated that the Ocean Decade is honoured to be a partner of the first ever Ocean Pavilion at a UNFCCC COP and a programming partner of the Ocean x Climate Summit that will be held on 11 November during COP27.



To see the full programming of the Ocean Pavilion readers are invited to see here: <u>https://oceanpavillion-cop.org</u>

By way of example we introduce here three topics to be presented

The Ocean Decade Africa Roadmap

An event on 8 November. It is understood that this will amplify the visibility of the Ocean Decade Africa Roadmap that has been produced during a multi-year participatory process with hundreds of stakeholders across the continent.

The Roadmap identifies nine priority actions for ocean science in Africa and discusses the resources, capacity and partnerships needed to ensure its successful implementation. This hour-long event will focus on raising visibility of the importance of the Ocean Decade in Africa. It will explore innovative solutions in the context the Roadmap to ensure that ocean science can be effectively generated and used for climate action.

At COP 27 this event is being organized in partnership with the Egyptian National Institute of Oceanography and Fisheries, NIOF <u>https://niof-eg.com/#m-10-2022</u>

Coastal and marine ecosystems: Africa

Later the same day delegates will learn that healthy coastal and marine ecosystems have a vital role to play in climate mitigation and adaptation, particularly in vulnerable regions across Africa and Small Island Developing States (SIDS).

When used in conjunction with other resilience solutions, sustainable restoration and management of marine and ocean ecosystems will allow them to contribute to resilience objectives, and also generate significant social, ecological and economic co-benefits. This event will look at the factors hindering the ability of ecosystems to fully play their role in climate adaptation and mitigation. It will explore the role of multi-partner initiatives and frameworks to address these gaps at different scales.

This event is being organized in partnership with The Research Council of Norway <u>https://www.forskningsradet.no/en/</u> and UNEP <u>https://www.unep.org/</u>

The needs of Africa

Another event of relevance to Africa and SIDS will be held on 12 November. A key focus of COP27 will be on tangible actions, partnerships and initiatives – including financing – to implement the commitments made by parties to the UNFCCC with a specific focus on the needs of Africa and Small Island Developing States.

This event, organized in partnership with the Mohammed VI Foundation for Environmental Protection https://fm6e.org/en/, will explore the challenges faced in financing and supporting ocean science for climate action, with a focus on Africa. Examples and experience in innovative and diverse financing and resource mobilisation approaches that could be adapted for implementation by diverse partners in Africa in the context of the Ocean Decade will be presented.

For more information, readers are invited to contact:

The Ocean Decade Team

oceandecade@unesco.org

Readers are advised that Registration is required for participation in some events.

The peaks and troughs of container utilisation

This article first appeared in TT Talk in October 2022 and is reproduced here with kind permission of TT Club

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Container operators have enjoyed a buoyant period with high levels of equipment utilisation through the last couple of years. Increased demand has, of course, been accompanied by issues arising from congestion and supply chain bottlenecks, presenting challenges in repositioning empties to be packed.

Increased demand has resulted in numerous operational challenges. Apart from the established phenomenon of 'street turns', by which units may only irregularly cycle through depots, high demand may have reduced the opportunity for routine and preventative maintenance. Furthermore, there may be reluctance on the part of shippers/packers to reject the presented unit on the basis

of minor damage for fear of long waiting times for a replacement.



One way container operators have risen to the demand has been to build or lease more units. Now, it is being widely suggested that equilibrium has largely been restored, such that imbalances of equipment are less pronounced, reducing the strain on supply chains. Furthermore, peak e-commerce demands appear to have been reached and now may be in decline for the timebeing (possibly related to broader economic and geopolitical narratives).

This leads some to predict that the combination of older equipment having been kept in service and new containers produced at record levels could now lead to a period, for the first time in a number of years, where the available container fleet outweighs demand for its use. What then?

While it might be expected that any equipment kept in service beyond its natural economic life cycle through the pandemic period will now be retired, there may still be stock that remains stagnant for longer periods in depots, container yards or terminals.

Opportunity or risk?

A period of slowing demand would naturally provide opportunity to review service and maintenance regimes, not just in relation to regulatory requirements. A more proactive approach to maintenance and repair may now be possible, perhaps even considering piloting emerging technologies, such as from ConexBird (<u>https://</u> <u>conexbird.com/</u>), to understand better the performance metrics of your container fleet and take more informed decisions.

A more pro-active approach to maintenance and repair may now be possible.

Equally, opportunities will emerge to reposition some equipment to take advantage of known or anticipated demand. This may require detailed assessment of where supply chains have changed, since historic demand of course could well be different post-pandemic.

Where demand remains low for an extended period, secondary container markets (often seeking to re-purpose

for imaginative uses) will benefit from greater availability, potentially at more competitive rates.

Some operators may seek to upgrade existing units in the context of introducing 'smart' containers more extensively into their fleets, taking advantage of a range of 'Internet of Things' technologies to improve both safety and security. Any slowing trade demand may similarly provide opportunity to accelerate such initiatives.

Assuming that this can be well managed in a competitive marketplace, it could be argued that the global supply chain could accrue benefits from a reduced, but generally newer, fleet of containers at their disposal. Apart from possibly reducing cargo damage claims, fewer rejections and repositioning requirements, and a generally more efficient operation, may result in lower operational costs for all.

Conversely, in a world where supply subsequently exceeds demand, might idle equipment have gone unrepaired? While downtime presents opportunity in terms of time to undertake repairs, tight cost control would be inevitable. Should there be lower demand for equipment, it might be tempting to delay all but essential repairs. This in itself may not be problematic while the equipment is not in use. However, unpredictable peak demands are likely to continue to be experienced and it would be prudent to ensure that equipment is kept in sound operable condition.

While the pandemic challenges related to maintaining regulatory inspection regimes have dissipated, these are generally broad-brush and concerns have been raised as to how proactive government agencies have been. Where equipment is unlikely to be required for an extended period, it remains possible that lesser rigour will be applied relating to routine inspections and maintenance until demand returns.

A number of Beneficial Cargo Owners sought to circumvent supply chain disruptions during the last two years by purchasing their own containers (becoming 'shipper owned containers'). As the market normalises, such trends may not remain economically viable. While giving greater flexibility during the disruptions of the last two years, it is likely that the direct and indirect efficiencies (including M&R and regulatory requirements) offered through the use of the carrier global fleet will return. There remains a risk that, in seeking cost containment, lower levels of maintenance might be undertaken in this shipper owned market.

A further concern arising from over-supply of units might be that depots, container yards and terminals become unmanageably congested with empty units. Through the pandemic and since then, the management of peaks and the imbalance of available equipment has been acute. In a market where demand falls, under-utilisation of the global fleet risks accentuating these same challenges. Empty container yard capacity may be exceeded, resulting in less controlled facilities and storage being in the wrong geographic areas in relation to shipper demand.

Concluding thought

The global supply chain has proved itself to be highly resilient in a variety of ways and there have been many learning points from experience through the COVID-19 pandemic. However, it would be prudent to ensure that operators consider these risks as the world transitions to demand that may less buoyant, less predictable and possibly more regional. Maintaining safe and sound units will make most operational sense in the long term.

If any reader would further information, or has any comments, they are invited to contact TT Club by e-mail here: <u>riskmanagement@ttclub.com</u>

At the same time readers are invited to forward the article to others who it is felt would be interested.

¹ Where a unit is moved directly from the location it has been unpacked to the location the next shipment will be packed.

World's first zero-emission cruise ship

Northern Xplorer to build

DNV as class partner

It was reported on 31 October that DNV will be responsible for newbuilding supervision and classification of Northern Xplorer (NX)'s inaugural vessel scheduled for delivery by 2026. The classification society will collaborate with Norwegian flag and technology providers on the enhancement of rules and standards for safe operation of hydrogen-powered passenger ships.

Northern Xplorer CEO Rolf André Sandvik commented: 'I am very pleased DNV is joining us on this project given their competence and insight as a leading classification society.

'Their experience in developing new rules and standards for hybrid and fully electric vessels is unrivalled and makes them the best partner to have as we continue on our mission to build a hydrogen-fuelled cruise ship,

'Safety and quality are our top priorities. DNV's participation will assure the integrity of our operations both for investors and future passengers.'



Paal Johansen, Senior Vice President & Global Cruise Ship Director, DNV Maritime, explained: 'We are looking forward to working with the NX team and the shipbuilder. 'Their zero-emission cruise concept represents a new paradigm for the industry that we are proud to be part of bringing out into the world. Future-oriented collaborative projects like this are extremely important to accelerate decarbonisation not only for the cruise sector, but for the maritime industry as a whole.'

Engagement of class society

DNV will be engaged during construction and commissioning to verify that its design and structures are fully in compliance with flag and international mandatory requirements, as the basis for obtaining and retaining all necessary certificates for safe operations. This engagement also includes plan approval of all the ship's main drawings, as well as hull, machinery, vessel systems and equipment installations.

Quotations evaluated

Having carefully evaluated quotations from shipbuilders both in Europe and Asia, NX signed a letter of intent for the construction of its first vessel with Portuguese shipbuilder West Sea during the SMM trade fair in Hamburg in September.

Fully electric propulsion

Designed by naval architects Multi Maritime AS in Førde, Norway, the 250-passenger ship features ABB's fully electric propulsion system, including the battery and hydrogen fuel-cell technology that will enable to it to sail emissions-free in the Norwegian fjords and further afield as the green shift takes root.

World's first CO, carriers

ABB to maximize fuel efficiency

Carbon capture project

ABB reported on 31 October that it had been selected to deliver the shaft generator system with permanent magnet technology for the first dedicated CO_2 -storage vessels ever to be built. The vessels will be constructed by the Chinese shipbuilder Dalian Shipbuilding Industry Company (DSIC).

Due for delivery in 2024, the two vessels will support the Northern Lights carbon capture and storage (CCS) project by transporting greenhouse gas from industrial emitters to an onshore terminal in Øygarden, Norway. From there, the CO_2 will be delivered by pipeline to dedicated reservoirs 2,600 metres under the seabed in the North Sea for permanent storage. Each of the 130-metre loa ships will be able to carry up to 7,500 cubic metres of liquefied CO_2 in purpose-built pressurised cargo tanks.

It is understood that ABB's permanent magnet shaft generator system will increase the fuel efficiency of these vessels, reducing emissions as a result. Combining this technology with variable speed engines allows harvesting power for all onboard systems through the rotating force of the shaft, significantly improving performance compared to a traditional setup with fixed speed engines.



The two vessels will support the Northern Lights carbon capture and storage (CCS) project by transporting greenhouse gas from the industrial emitters to an onshore terminal in Øygarden, Norway.

Image credit: Northern Lights.

Remote terminal operation

In June 2022 ABB announced that it will also deliver the main electrical, automation and safety systems for the Northern Lights project, enabling the remote operation of the terminal and ensuring that the facility runs at optimum efficiency. ABB's permanent magnet shaft generator system further supports the project's ethos by offering enhanced vessel fuel economy and reduced emissions.

A Dalian Shipbuilding Industry Company spokesperson commented: 'We look forward to collaborating with ABB on this landmark project, and ensuring that these innovative ships are also distinguished by operational excellence.

'As a longstanding partner of ABB, we are delighted to offer shipping companies the efficiencies, ease of installation and space savings enabled by permanent magnet shaft generator systems.'

Joint venture

Northern Lights, a joint venture between Equinor, Shell and Total, is the first CCS project to develop an open and flexible infrastructure to store CO_2 from industries across Europe.

The first phase of the project is due to be completed mid-2024 and will have the capacity to permanently store up to 1.5 million tons of CO_2 per year, with the ambition to expand to over five million tons annually in a second phase.

Shipping, a flexible solution

CCS plays an important role in meeting global climate and energy goals. Today, CCS facilities around the world have the capacity to capture more than 40 million tons of CO_2 from power and industrial facilities¹. While the transport of trapped CO_2 to permanent storage locations by pipeline is already deployed at large scale, it can present a challenge when the point of capture is further removed from a storage facility. Ships offers a flexible solution for longdistance CO_2 transportation. Rune Braastad, Global Business Line Manager, Marine Systems at ABB Marine & Ports, commented: 'Addressing the world's energy challenges requires a constant push for innovation, and we are proud to make a difference with our leading technology. Transporting captured emissions by ships will be key to the success of the Northern Lights project, paving the way for further developments to help accelerate decarbonization in heavy industry sectors.'

Flexibility

ABB's permanent magnet shaft generator system is driven by the main engine, enabling increased efficiencies for vessels with fewer or smaller generator sets and minimizing both capital and operating costs. In addition, ABB's solution has a smaller weight and installation footprint compared to a conventional solution, as well as high reliability and redundancy to enable over 99% uptime, and built-in safety features to help protect crew and equipment. The system's customisable design and interface make it suitable for any vessel type.

ABB's scope of supply also covers full engineering and commissioning services. In addition, the vessels will have access to the ABB Ability[™] Marine Remote Diagnostic System for continuous equipment monitoring, optimized machinery and planned-maintenance activities, and reduced maintenance costs.

¹ <u>https://www.iea.org/reports/about-ccus</u>

EMSA publications

We have been informed of two maritime safety publications published by the Lisbon-based European Maritime Safety Agency. They are reported here:

SAFETY ANALYSIS OF EMCIP DATA: ANALYSIS OF NAVIGATION ACCIDENTS. V1.0. September 2022

A safety analysis of the European Marine Casualty Information Platform (EMCIP) data issued last month focuses on navigation accidents (i.e. collisions, groundings and contacts), given their visibility and relevance in the context of maritime safety.

In particular, a significant amount of occurrences involving navigation accidents have been reported in EMCIP, covering around 28% of the overall dataset.

The EMSA methodology has been applied to detect potential safety issues reported in the system, focusing on the human element. Analysis considered different types of vessels such as passenger ships, cargo ships and service ships.

This document offers a high-level overview of the safety issues reported in the system between 2011 and 2021 and considers remedial actions suggested to prevent similar occurrences in future, either safety recommendations (SR) proposed by an Accident Investigative Body (AIB), or autonomously taken by the relevant parties.

EMSA's documents are as follows:

A full analysis of the factors contributing to accidents

and incidents involving navigation accidents, including key statistics, and;

• A more compact summary report with a focus on the key findings of the analysis.

SAFETY ANALYSIS OF EMCIP DATA: ANALYSIS OF MARINE CASUALTIES AND INCIDENTS INVOLVING CONTAINER VESSELS. V1.0. September 2020

This safety analysis of the European Marine Casualty Information Platform (EMCIP) data is produced in a context where container vessels have gained increasing visibility and relevance in international trade.

More than 90% of the world non-bulk cargo carried by sea makes use of containers. Consequently, container vessels have become an increasingly important part of the global logistics value chain. The analysis offers a high-level overview of the safety issues reported in the system between 2011 and 2019 and considers the remedial actions suggested to prevent similar occurrences in future, either safety recommendations (SR) proposed by an Accident Investigative Body (AIB), or autonomously taken by the relevant parties.

EMSA documents provided include:

- A full analysis of the factors contributing to accidents and incidents involving container vessel, including key statistics, and;
- A more compact summary report presenting specific safety issues with a potential horizontal impact on the transport mode at stake.

Available to download

Both	EMSA	publications	are	available	here:	
https://tinyurl.com/yckwx6t6						

Thirty years on

By Michael Grey, IFSMA Honorary Member

It was thirty years ago that a particularly thoughtful Lloyd's underwriter Jonathan Jones became concerned at the number of shipping casualties which were being attributed to human error. It was also a period where the number of cadets entering the UK shipping industry was at a low level, which boded ill for future sea skills and the obvious consequences for marine safety. Additionally, he considered the wider implications of the shortage, thinking of the number of careers in the maritime infrastructure ashore which drew on the experience of former seafarers. From where, some years down the line, would this vital experience be found?

From this evident need, identified by Jonathan Jones, the Lloyd's Officer Cadet Scholarship scheme emerged. It was designed to train the officers of tomorrow, funded by the Lloyd's market, which of course would itself have been exposed to all these marine casualties. The scheme, as designed thus became something of a virtuous circle. It was to eventually become associated with Maritime London and it was as the Maritime London Officer Cadet Scholarship scheme it celebrated its 30th birthday in London recently. More than 100 officer cadets have been enabled to qualify as certificated officers under the

scheme and some have, as anticipated, moved into shore side careers in a wide range of maritime fields, some now at senior levels.

Speaking at the event, which was attended by a number of former cadets and sponsors of the scheme, the MLOCS Chairman Tony Vlasto spoke of the ongoing need for competent officers as the importance of shipping remains crucial. There was a current seafarer shortage of some 26,000, putting safe ship operation at risk and good quality training was as important as ever. It was also a fact that training costs money, which many people entering the profession just don't have, so sponsorship helps to "plug the gap" and enable them to have the life-changing experience offered by a sea career. He also noted that the sponsors of the scheme support their own industry, help to create safer seas and in doing so enhance their ESG credentials.

The Chairman also thanked sponsors Chris Adams, Carisbrooke Shipping, Chiltern Maritime/Viking Group, the Maria Tsakos Charitable Foundation, Reed Smith, The North P&I and the Company of Watermen and Lightermen and their clerk Julie Lithgow.

A number of former cadets at the event spoke warmly of their experiences. Fiona Scrimgeour, currently BP Shipping's Operations Lead, Marine Production & Operations – North Sea Region suggested that her cadetship, which also facilitated her First-Class Honours degree in Merchant Ship Operations and Officer of the Watch certificate was a huge draw. The things she learned in her initial sea experience; the people skills and life experiences were, she said, the best introduction to working life she could have had.

Rob Crees who is currently senior vice-president/Counsel of the World Fuel Services Corporation spoke of the many advantages his sea experience gives him; mariners, he said "think outside the box", think on their feet and solve problems. He was grateful for the broad experience on multiple vessel types provided during his cadetship. One of the very first cadets - he was actually the third to be sponsored, Rob Crees qualified with combined deck and engineer certificated and sailed as a deck officer in the offshore oil and gas sector, before reading law at university. He has since been a lawyer in private practice and counsel in two International Group P&I Clubs, spending the past decade in an investment bank and shipping and energy trading roles, he emphasises the huge value of seagoing experience and the credibility it provides.

As a slightly more mature entrant, Fiona Rush was grateful for the flexibility of the MLOCS in granting her a scholarship. Now working as an operations manager with Frontline oil tankers, her career, which began with service on nine different types of vessel, saw her win a safety award and, while serving with Shell, working in South Korea on a new build, which was to become the world's largest LNG carrier.

Currently serving at sea as Second Officer on a P&O Cruise ship in the Carnival Fleet, Joe Douglas qualified in 2018, following three years sponsored by Maritime London member JLT, in which he served in the Irish Lights tender Granuaile, Windstar's Wind Surf and several Carnival ships. After he qualified and time spent with Stena and Windstar, he has opted for cruise ships and currently serves aboard P&O's Britannia. With his Chief Mate certificate behind him, he looks forward to gaining his Masters in due course.

There is no denying that becoming established in a maritime industry career, where training places are limited and costs can be high can be something of a challenge. But the MLOCS, along with Chiltern Marine has provided a pathway to the achievement of such ambitions. Last word to Fiona Scrimgeour; "there isn't a day that goes by where I don't reference some part of my cadetship, be that trading salty yarns, problem solving with colleagues, speaking with my own children or engaging with today's cadets on board ships that I am chartering".

Editor's note

Michael Grey is former editor of *Lloyd's List*.

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ITF and COP27

Transition transport Governments must match workers' ambitions

A three-point demand

Governments the world over must give the climate crisis the highest priority and ensure they protect workers during the turmoil it will cause, a new briefing from the International Transport Workers' Federation (ITF) stated on 4 November two days before COP 27 was due to commence at Sharm el-Sheikh, Egypt on 6 November.

Workers with climate ambitions

Transport is responsible for 15% of all greenhouse gases and at COP27, trade unions will demand a worker-led just transition to a new world where transport is carbon neutral and where workers and their livelihoods are protected.



COP27: Climate justice, worker justice detailed the ITF's demands for government and employers ahead of the COP27 United Nations meeting on climate change which began in Sharm el-Sheikh, Egypt, on 6 November.

The briefing outlined how sustainable investment in transport can have huge benefits for a national economies and transport workers. For example, modelling by the ITF

and C40* shows that investing in public transport in Johannesburg, South Africa, would create 54,000 jobs directly and another 73,100 indirect jobs.

This year alone, people in transport have worked through the floods in Pakistan, where a third of the country was under water. Europe's hottest summer in 500 years saw transport workers face extreme heat, while severe storms brought chaos to the Philippines and the United States.

ITF demands at COP27

1. Raise climate ambition

Governments, business and transport unions must work together to decarbonise transport to keep the 1.5°C goal alive, and to play our part in reducing emissions by 45% by 2030 and reaching zero carbon by 2050.

To get there transport must fast track the energy transition with sustainable aviation fuels, hydrogen, alternative fuels and electrification.

2. Deliver on climate finance and close the resilience gap

Fulfil the \$100 billion pledge, ramp up investment in sustainable transport infrastructure and services, and secure finance for loss and damage to transport infrastructure, and improve conditions for workers.

Governments must step up and fund adaptation plans to build climate resilient transport systems and worker conditions fit for future climate realities.

3. Commit to just transition plans in every transport sector

Make transport a public good though government action and democratic control with good union jobs and just transition. Just transition standards must be included in new agreements on climate finance.

Public ownership of key transport infrastructure: urban transport, rail, aviation should be a central part of transport plans.

* A global network of mayors taking urgent action to confront the climate crisis and create a future where everyone can throve.

For more see here: <u>https://www.C40.org</u>

From the IFSMA Office

You will have seen from the Secretary General's Report on page 2 that it has indeed been a busy month. The IMO Maritime Safety Committee meeting has encouraged seven members to support iFSMA by attending.

November is gearing up to be very busy too. The Secretary General will be travelling to Greece at the invitation of the World Maritime University to attend the final event of the SAFEMODE project which we have been involved with. We hope to report on this next month.

There is also a demand to visit members to explain the Shipmaster and Chief Engineer Insurance Policy which is generating much interest. We hope to have further good news on this soon.