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IFSMA NEWSLETTER

The Shipmasters' International Voice



Enhancing Maritime Security in
the Western Indian Ocean and
the Gulf of Aden © IMO

See page 5



Contents

Secretary General's Report	2
From the News Editor	3
The IMO Digest	3
IMO and Autonomous ships	3
Incident involving the container vessel <i>X-Press Pearl</i>	4
Western Indian Ocean and Gulf of Aden	5
100 th State joins IMO ship air pollution and emissions treaty	6
At IMO further shipping GHG emissions reduction measures adopted	7
Energy Efficiency in ports to support maritime decarbonisation	9
IMO's Day of the Seafarer	10
No kitchen nightmares at sea	11
Saving seafarers' lives	12
Hapag-Lloyd further expands its container fleet	13
Ocean Infinity selects DNV's ShipManager for innovative robotic vessels	14
Alternative fuels	15
The ScanReach wireless IoT Platform	15
Class go-ahead for LNG concept	16
A new ICS publication - Covid-19 Guidance	17
OptiLink: A digital revolution in ballast water management	18
UK MAIB Annual Report 2020 issued	19
Nigeria's Deep Blue Project	19
Shipping industry agrees action on R&D investment and trade digitisation	20
Lifeboat Hooks	21
Car carrier stability warning	22
Bauxite liquefaction risk in Guyana	23
Covid-19 pandemic effect	24
On <i>Cutty Sark</i>	24
New vessel brings FureTank to the UN 2050 climate goal	26
Oh, what an appropriate name - Wine Trader	27
Gulf of Guinea anti-piracy Declaration	29
From the IFSMA office	29

Secretary General's Report

The important event in June was the IMO Marine Environmental Protection Committee (MEPC76). This meeting was extended for an extra day to include all the subjects on the agenda. However, IMO did not succeed in this aim and several subjects were held over to the next MEPC77 scheduled for November this year. You will find a summary of the main subjects in the IMO section of this Newsletter and our report in the Members' Area of our website. For the full official report you will need to visit the IMO Documents website, if you don't already have a login then ask hq@ifsma.org to sign you up. The meeting did not proceed completely smoothly as may be seen from this *Lloyd's List* article: <https://tinyurl.com/2av6549t>

Have you ever marvelled at the skill of the magnificent Albatross that soar through the sky on air currents generated by ships. I certainly did. They are in trouble, view their story here <https://www.albatrossthefilm.com/ourstory> and here <https://www.albatrossthefilm.com> Whenever I saw an Albatross I thought of The Rime of the Ancient Mariner by Samuel Taylor Coleridge, written in 1797-98. In the poem they recount the killing of an Albatross and the curse that brings to the sailing vessel. A good introduction of the poem may be found in Wikipedia here <https://tinyurl.com/ru5bv4u8> together with links to the full poem. Here is an extract from the poem which might jog some memories:

Water, water, everywhere
And all the boards did shrink;
Water, water, everywhere,
And not a drop to drink.

We include a commentary on the Day of the Seafarer in our IMO section. We would also draw your attention to the item published on the ITF website titled "Day of the Seafarer is meaningless without vaccines and our rights restored". (See here: <https://tinyurl.com/5752jpcy>). It has sections including 'The Pandemic changed our world', 'How governments can help seafarers right now' and 'Vaccinations: the passport to restoring our rights'.

This month we have the Executive Council meeting on 9th July. We have a busy agenda which includes finalising the dates, times, and agenda for our Biennial General Assembly. This will include what support we can offer to a new member to set up a Shipmasters' Association in his own country. If you are aware of new potential members to become IFSMA Association members do not hesitate to let us know so we can make contact and see if any assistance may be required.

We have a full complement of articles for this month's IFSMA Newsletter. However, we always need more articles from members, if you have a subject that you think will be of interest to your fellow Shipmasters, do get in contact with the editor at hq@ifsma.org. For example, besides Albatross what other wildlife have you encountered at sea.

From the News Editor

We are always interested in new trades and rotations. Recent news is of two port developments from DP World. They have created a new terminal at Berbera Port, Somaliland, on the Horn of Africa. This will deliver an expanded port, an economic zone and the Berbera corridor will transform the port into a regional maritime, industrial and logistics hub. The new container terminal has capacity for 500,000 TEU a year; a second phase will increase this to 2,000,000 TEU. Depth of water here is 17m, there is a 400m quay and three ship-to-shore (STS) gantry cranes.

DP World's International Container Trans-shipment Terminal (ICTT) at Cochin, South India, recently added a new weekly Far East-West Africa-India Express service operated by Maersk Line with a fixed-weekly sailing deploying thirteen 4,500-5,000 TEU vessels. This will offer direct connectivity from West Africa to Cochin Port and thence to Far East ports. The service started with the maiden call of mv *Kmarin Azur* on 7 May.

According to DP World inclusion of this service will boost cashew, raw cotton and timber trade from Kerala and Tamil Nadu to global markets instead of transshipping at Colombo providing cost advantage and transit time reduction.

The IMO Digest

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

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IMO and Autonomous ships

Regulatory scoping exercise completed

At IMO the Maritime Safety Committee (MSC) at its 103rd session in May completed a regulatory scoping exercise to analyse relevant ship safety treaties, in order to assess how Maritime Autonomous Surface Ships (MASS) could be regulated.

Completion of the scoping exercise represents an all important first step, paving the way to focused discussions to ensure that regulation will keep pace with technological developments.

This was initiated in 2017 to determine how safe, secure and environmentally sound MASS operations might be addressed in IMO instruments.

Assessment of IMO instruments...

It is understood that the exercise involved assessing a substantial number of IMO treaty instruments under the remit of the MSC and identifying provisions which applied to MASS and prevented MASS operations; or applied to MASS and do not prevent MASS operations and require no actions; or applied to MASS and do not prevent MASS operations but may need to be amended or clarified, and/or may contain gaps; or have no application to MASS operations.

Varying degrees of autonomy were considered: crewed ship with automated processes and decision support (Degree One); remotely controlled ship with seafarers on board (Degree Two); remotely controlled ship without seafarers on board (Degree Three); and fully autonomous ship (Degree Four).

...and safety treaties

The safety treaties assessed include the SOLAS Convention and various codes made mandatory under SOLAS (Casualty Investigation, Enhanced Survey Programme (ESP), Fire Safety Systems (FSS), Fire Test Procedures (FTP), Bulk Chemical (IBC), Gas Carrier (IGC), Solid Bulk Cargoes (IMSBC), Dangerous Goods (IMDG), Carriage of Irradiated Nuclear Fuel (INF), Intact Stability, International Safety Management (ISM), Ship and Port Facility Security (ISPS), Grain, Polar, Recognized Organizations (RO)); Collision Regulations (COLREG); Load Lines Convention and 1988 Protocol; Convention on Safe Containers (CSC); STCW Convention and Code, as well as STCW-F Convention; search and rescue (1979 SAR Convention); tonnage measurement (Tonnage 1969) and the Code of Safe Practice for Cargo Stowage and Securing (CSS Code) and IMO Instruments Implementation Code (IIC Code).



Outcome of the regulatory scoping exercise was discussed and completed by the MASS Working Group which met during MSC 103.

For each provision, the exercise identified whether MASS could potentially be regulated by: equivalences as provided for by the instruments or developing interpretations; and/or amending existing instruments; and/or developing a new instrument; or none of the above as a result of the analysis.

IMO went on to report that the outcome highlights a number of high-priority issues, cutting across several instruments, that would need to be addressed at a policy level to determine future work.

Development of MASS terminology and definitions

These involve the development of MASS terminology and definitions, including an internationally agreed definition of MASS and clarifying the meaning of the term "master", "crew" or "responsible person", particularly in Degrees Three (remotely controlled ship) and Four (fully autonomous ship).

Other key issues include addressing the functional and operational requirements of the remote-control station/

centre and the possible designation of a remote operator as seafarer.



Further common potential gaps and themes identified across several safety treaties related to provisions containing manual operations and alarms on the bridge; provisions related to actions by personnel (such as firefighting, cargoes stowage and securing and maintenance); watchkeeping; implications for search and rescue; and information required to be on board for safe operation.

The way forward

The Committee noted that the best way forward to address MASS in the IMO regulatory framework could, preferably, be in a holistic manner through the development of a goal-based MASS instrument. Such an instrument could take the form of a “MASS Code”, with goal(s), functional requirements and corresponding regulations, suitable for all four degrees of autonomy, and addressing the various gaps and themes identified by the RSE.

The Committee invited Member States to submit proposals on how to achieve the best way forward to a future session of the MSC.

Outcome of the MSC's regulatory scoping exercise, as approved by the Committee, including the full analysis of treaties, can be found as an annex to the report of MSC 103 (MSC 103/21/Add.1, annex 8) and can also be found in circular MSC.1/Circ.1639 (Outcome of the Regulatory Scoping Exercise for the use of Maritime Autonomous Surface Ships (MASS)).

By the end of May IMO's Legal and Facilitation Committees were in the process of conducting regulatory scoping exercises on conventions under their purview.

Incident involving the container vessel *X-Press Pearl*

Cargo fire and sinking

On 17 June the Singapore-flagged container ship *X-Press Pearl* sank off Colombo after fire, raising concerns about a possible environmental disaster, Sri Lanka officials indicated.

X-Press Feeders, operators of the vessel confirmed on 17 June that the wreck was wholly sitting on the seabed at a depth of 21 metres. Caretaker salvors were onsite on a 24-hour watch to deal with any possible debris and report any form of a spill.

Later that day it was reported that a grey sheen was observed emanating from the vessel, and discolouration of the sea in and around the wreck remained. This had been apparent since the vessel's stern became submerged, and the remnants of the cargo in the 1486 containers that were on board were exposed to seawater.

Representatives of ITOPF and Oil Spill Response were monitoring updates from the scene and prepared to deploy in case of any reported spill.

Due to the exposed nature of the anchorage to the prevailing South Westerly Monsoon, it is likely that the wreck removal can only start after the SW monsoon subsides; caretaker services will remain on site until then. They will continue to minimise pollution and monitor the wreck's condition and report daily to experts ashore and Government agencies.

Additionally, the caretakers were to install navigational warning lights and markers on the wreck for the safety of other vessels. When conditions allow, side-scan sonar will be used to locate any sunken containers or debris in the anchorage for removal.

There were 1486 containers on the vessel when the fire started, 81 of which were Dangerous Goods Containers, including 25 tonnes of Nitric Acid. The general cargo consists of foodstuffs; vehicles, vehicle parts and auto products; building and manufacturing supplies and raw materials; HDPE and LDPE nurdles (plastics raw material) and other general cargo. All the containers were past fit for passage by stevedores at their port of origin and had been transported in accordance with all of the relevant international shipping codes. It is believed that most of the cargo that was aboard *X-Press Pearl* when the fire broke out has been incinerated.

The container containing the nitric acid was passed safe for transport by stevedores in Jebel Ali, Dubai when it was loaded en route to Malaysia. Once the leak was discovered, the crew followed all of the established procedures under the International Maritime Dangerous Goods code in dealing with the situation.

The ship underwent discharge and loading operations in both Hamad Port in Qatar and Hazira Port in India before continuing on its planned journey to Colombo. Applications had been made to both ports to offload the container that was leaking nitric acid, but the advice given

was there were no specialist facilities or expertise immediately available to deal with the leaking unit.

X-Press Pearl was carrying 297 tonnes of heavy fuel oil and 51 tonnes of marine fuel oil. The vessel is entered with the London P&I Club for valid wreck removal liabilities under the Nairobi Convention. The vessel is fully covered under internationally recognised P&I insurance and Hull and Machinery insurance.



Illustration per Sri Lanka Ports Authority ©.

X-Press Pearl is entered with the London P&I Club for valid bunker oil pollution liabilities and valid clean-up costs.

Statement by Kitack Lim, Secretary-General, IMO

On 7 June, IMO Secretary-General Kitack Lim issued the following statement:

'I express my deep concern to all impacted by the incident involving the container vessel X-Press Pearl, which caught fire whilst at anchor near Colombo, Sri Lanka in May.

'I wholeheartedly appreciate the efforts of the Sri Lankan and Indian authorities, for their successful rescue of the crew, bringing them to safety. I also thank the salvors for their efforts.

'We are closely monitoring the situation as it evolves, including reports of chemical pollution, debris coming ashore in the form of plastic pellets, and the potential for oil pollution.

'I commend the Sri Lankan and Indian authorities, including the Department of Fisheries, the Marine Environment Protection Authority, the Navy, and the Coast Guard, who are responding to the incident at sea and onshore.

'IMO is liaising with its UN partners (UNEP and OCHA) and with the South Asia Co-operative Environment Programme (SACEP), the regional organization for South Asia, with regards to possible assistance. IMO is also in communication with the Sri Lankan Ministry of Environment (MEPA) for any specific technical assistance that IMO may provide.

'I look forward to receiving the investigation report into this incident in due course.'

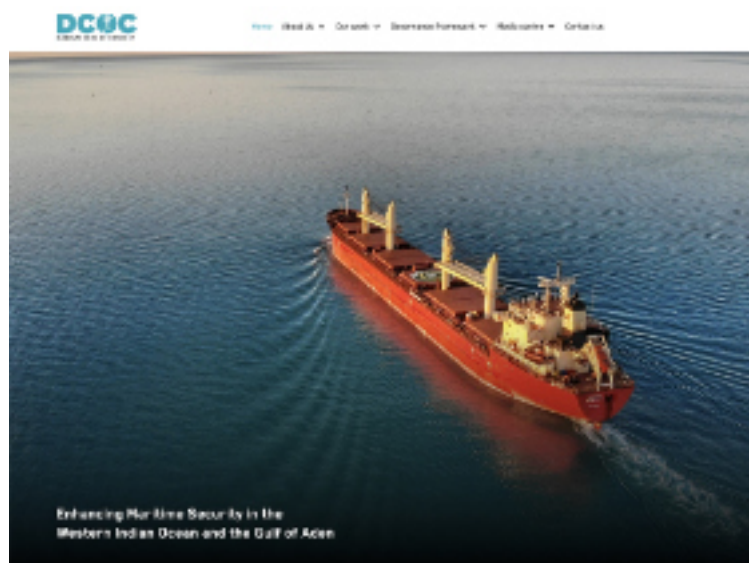
Western Indian Ocean and Gulf of Aden

Enhancing maritime security Website launched www.dcoc.org

Regional cooperation is crucial in the fight against piracy and armed robbery against ships and other illicit maritime activities. This was the message in an IMO media briefing issued on 11 June.

IMO reported that a new website here: www.dcoc.org highlights the Djibouti Code of Conduct, adopted under the auspices of IMO which has been instrumental in containing the threat of piracy in the Western Indian Ocean and the Gulf of Aden. The website is supported by IMO with the UK Government and the Djibouti Code of Conduct Trust Fund.

On the website the Secretary-General of IMO HE Kitack Lim introduces the material with: *The Djibouti Code of Conduct was adopted in 2009. Since then, the work to implement the Code has resulted in a culture of cooperation that has been most successful in containing the threat of piracy. The adoption of the Jeddah Amendment in 2017 brought in a comprehensive approach to dealing with broader threats to maritime security and the root causes, setting a strong foundation for sustainable development of the maritime sector thus ensuring sustainable economic growth, food security, employment, prosperity and stability in the West Indian Ocean and the Gulf of Aden.*



'Several accomplishments achieved over the last decade under the Code, including the establishment of a functioning network of Information Sharing Centres; a regional training coordination mechanism that has benefitted 1678 students thus far; and the enhancement of Maritime Domain Awareness. Many of the regional States have reviewed their laws to include piracy as a crime that can be punished nationally and there is now greater awareness of the need to be able to enforce national laws in the maritime domain; and a growing number of coastal maritime surveillance systems have

been implemented that are assisting the small naval and coastguard forces in the region to focus their limited resources where they are most needed and to conduct an increasing number of cooperative operations at sea.'



It is reported that expansion of the Jeddah Amendment in 2017 introduced a comprehensive approach to dealing with broader threats to maritime security and the root causes, thereby improving regional maritime security, law enforcement and governance capabilities as well as facilitating maritime sector development.

The website for sharing information on the implementation of the code of conduct has been developed to showcase achievements, ongoing work, planned activities, co-ordination of capacity building efforts and to support resources mobilisation.

Furthermore, it is reported that the platform will play a significant part in enhancing regional cooperation in countering piracy and other illicit maritime activities.

A video outlining the key aims and presenting the website can be viewed here:

<https://tinyurl.com/8pkhhvj5>

Illustrations per www.imo.org ©

100th State joins IMO ship air pollution and emissions treaty

In an IMO media briefing early in June it was learnt that Argentina had become the 100th Contracting State to the mandatory IMO regulations on cutting air pollution from shipping.

The regulations in Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL) address air pollution from ships and include energy efficiency and fuel quality requirements designed to reduce harmful emissions from shipping.

With Argentina's ratification, the regulations now apply to 96.65% of world merchant shipping by tonnage.

IMO Secretary-General Kitack Lim welcomed the latest ratification. He commented: *'The Annex VI regulations limit air pollutants from shipping and improve energy efficiency, helping to combat climate change by reducing CO₂ emissions from shipping. I am pleased that we now have 100 Contracting States and encourage others who*

have not yet done so, to become a party to this important treaty.'

'We all need to do our part to ensure the health of people and the planet and to tackle climate change. MARPOL Annex VI provides the mandatory regulatory framework to limit harmful emissions from ships.'

Secretary General Lim noted that while the majority of ships by tonnage were already covered, all States, including coastal States, could benefit from becoming a party, since they can then exercise port State control over ships flying any flag visiting their ports.

MARPOL Annex VI (Regulations for the prevention of Air Pollution from Ships) sets mandatory limits on sulphur oxide (SO_x) and nitrogen oxide (NO_x) emissions from ship's engine exhaust, it regulates on board incineration and prohibits deliberate emissions of ozone depleting substances. It includes provisions for designated emission control areas with more stringent standards for SO_x, NO_x and particulate matter.

A chapter 4 adopted in 2011 includes mandatory technical and operational energy efficiency measures aimed at reducing greenhouse gas emissions from ships, which have been extended and strengthened throughout the past decade providing the mandatory regulatory framework that codifies the levels of ambition set out in IMO's 2018 Initial GHG Strategy.

Parties to MARPOL Annex VI commit to give effect to the provisions of this Annex, it is understood.

HE Javier Esteban Figueroa, Ambassador Extraordinary and Plenipotentiary of Argentina deposited the instrument of accession with Secretary-General Lim on 8 June.



MARPOL Annex VI history

The issue of controlling air pollution from ships – in particular, noxious gases from ships' exhausts – was discussed in the early 1970s, as IMO developed what would become the 1973 MARPOL Convention. However, it was decided not to include regulations concerning air pollution at the time.

Meanwhile, air pollution was being discussed in other arenas. The 1972 UN Conference on the Human Environment in Stockholm marked the start of active international cooperation in combating acidification, or acid rain – largely caused by airborne deposits of sulphur dioxides and nitrogen oxides. Coal and oil-burning power plants were the biggest source of sulphur dioxides while nitrogen oxides came from car, truck and ship exhausts.

In 1979, the Convention on Long-range Transboundary Air Pollution was adopted by 34 governments and the European Community. This was the first international legally binding instrument to deal with problems of air pollution on a broad regional basis. Protocols were later signed on reducing sulphur emissions (1985); nitrogen oxides (1988); volatile organic compounds (1991) and further reducing sulphur emissions (1994).

In 1987 the Montreal Protocol on substances that Deplete the Ozone Layer was drawn up and adopted under the auspices of the United Nations, to cut consumption and production of ozone-depleting substances including chlorofluorocarbons (CFCs) and halons to protect the ozone layer. Protocols were adopted in 1990 and 1992.

At IMO, the Marine Environment Protection Committee (MEPC) in the mid-1980s had been reviewing the quality of fuel oils and the issue of air pollution was discussed.



In 1988, the MEPC agreed to include the issue of air pollution in its work programme. In 1991, IMO adopted Assembly Resolution A.719(17) on Prevention of Air Pollution from Ships. The Resolution called on the MEPC to prepare a new draft Annex to MARPOL on prevention of air pollution.

IMO's MARPOL Annex VI was adopted at a Conference in September 1997, through a Protocol to the MARPOL Convention, which included the new Annex.

The Conference convened by IMO adopted a number of resolutions, including an important resolution 8 on CO₂ emissions from ships. This resolution invited the MEPC to consider what CO₂ reduction strategies might be feasible in light of the relationship between CO₂ and other atmospheric and marine pollutants. The resolution also invited IMO, in cooperation with the United Nations Framework Convention on Climate Change (UNFCCC), to undertake a study of CO₂ emissions from ships for the purpose of establishing the amount and relative percentage of CO₂ emissions from ships as part of the global inventory of CO₂ emissions.

Meanwhile, the UNFCCC was adopted in December 1992, entering into force in 1994. In December 1997, the Kyoto Protocol* to the UNFCCC was adopted (it entered into force in 2005). Under the Protocol, States agreed to limit and reduce emissions of greenhouse gas emissions not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the ICAO and the IMO, respectively (Article 2, paragraph 2))

The Protocol of 1997 (MARPOL Annex VI)

The Protocol including Annex VI of MARPOL entered into force on 19 May 2005. IMO Member States immediately agreed to revise the Annex and update its requirements. This revised annex was adopted in 2008 and entered into force in 2010.

This important revision included more stringent limits on sulphur oxide emissions from ships, bringing in a global 0.50% limit from 2020 – subject to a review. The review was completed – and the date of 2020 confirmed in 2016. The IMO 2020** sulphur limit has undoubtedly contributed to a major cut in sulphur oxide emissions from ships, as ships switched to very low sulphur fuel oil or have installed exhaust gas cleaning systems to clean emissions with an on board system and meet the requirements.

In 2011, IMO adopted a new chapter on energy efficiency, bringing in mandatory requirements for ships to improve their energy efficiency – and contribute to the fight against climate change by reducing their CO₂ emissions.

The Initial IMO strategy on reduction of GHG emissions from ships was adopted in 2018.

Read more here: <https://tinyurl.com/249uw5fv>

In 2021, IMO is set to adopt further amendments to MARPOL Annex VI, to bring in mandatory requirements aimed at cutting the carbon intensity of all ships.

Read more here: <https://tinyurl.com/7ua6mvby>

*See here: <https://tinyurl.com/y4ptsfe7>

**See here: <https://tinyurl.com/r3kswj8w>

At IMO further shipping GHG emissions reduction measures adopted

IMO adopts key mandatory measures to reduce ships' carbon intensity; establishes ship rating system.

New mandatory measures to cut the carbon intensity of international shipping have been adopted by the IMO, setting shipping on a course to meet greenhouse gas reduction targets established in the 2018 Initial IMO Strategy for Reducing GHG Emissions from Ships.

IMO's Marine Environment Protection Committee (MEPC 76), meeting in a remote session from 10 to 17 June 2021, adopted amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex

VI that will require ships to reduce their greenhouse gas emissions. These amendments combine technical and operational approaches to improve the energy efficiency of ships, also providing important building blocks for future GHG reduction measures.

The new measures will require all ships to calculate their Energy Efficiency Existing Ship Index (EEXI) following technical means to improve their energy efficiency and to establish their annual operational carbon intensity indicator (CII) and CII rating. Carbon intensity links the GHG emissions to the amount of cargo carried over distance travelled.

Ships will get a rating of their energy efficiency (A, B, C, D, E – where A is the best). Administrations, port authorities and other stakeholders as appropriate, are encouraged to provide incentives to ships rated as A or B also sending out a strong signal to the market and financial sector.

A ship rated D for three consecutive years, or E, is required to submit a corrective action plan, to show how the required index (C or above) would be achieved.



IMO Secretary-General Kitack Lim said the adoption of the new measures would build on IMO's previously adopted mandatory energy efficiency measures, to lead shipping on the right path towards decarbonisation.

He commented: *'The path to decarbonization is a long, but also a common path in which we need to consider and respect each other's views. We have made a considerable amount of progress since the start of our journey.'*

'... your progress will continue to provide the benefit of experience to be able to make ambitious, and evidence-based decisions for phase 3 of the implementation of the operational measure which will be further strengthened and developed taking into account the review of the short-term measure and the latest climate science.'

The amendments to MARPOL Annex VI (adopted in a consolidated revised Annex VI) are expected to enter into force on 1 November 2022, with the requirements for EEXI and CII certification coming into effect from 1 January 2023. This means that the first annual reporting will be completed in 2023, with the first rating given in 2024.

A review clause requires the IMO to review the effectiveness of the implementation of the CII and EEXI requirements, by 1 January 2026 at the latest, and, if necessary, develop and adopt further amendments.

Impact assessment

In adopting the measure, MEPC also considered the outcomes of a comprehensive impact assessment of the measure which examined potential negative impacts on States, and agreed to keep the impacts on States of the measure under review so that any necessary adjustments can be made.

In adopting the amendments, the MEPC agreed in its resolution to undertake a lessons-learned exercise from the comprehensive impact assessment of the amendments to MARPOL Annex VI, with a view to improving the procedure for conducting future impact assessments.

Secretary-General Lim welcomed the approval and consideration of the outcome of the related comprehensive impact assessment and the decision to keep impacts of the measure under review and to initiate a lessons-learned exercise.

MARPOL Annex VI has 100 Contracting States, who between them represent 96.65% of world merchant shipping by tonnage.

The MEPC also adopted a work plan to develop mid- and long-term measures to further cut shipping's GHG emissions, in line with the Initial IMO strategy on reduction of GHG from ships

Guidelines adopted

Alongside the MARPOL amendments, the MEPC adopted related guidelines to support the implementation of the amendments. (full list below).

The guidelines include the 2021 Guidelines on the operational carbon intensity reduction factors relative to reference lines (CII Reduction factor Guidelines, G3). This includes the required reduction (Z) factor, which is set at a rate, relative to 2019, of 11% by 2026. This would be further strengthened after that date, taking into account the review of the measure and latest climate science.

Meeting the initial GHG strategy ambition

The combined technical and operational measures, referred to as short term carbon intensity measures, are in line with the ambition of the Initial IMO GHG Strategy, which aims to reduce carbon intensity of international shipping by 40% by 2030, compared to 2008.

The initial strategy sets out short- mid- and long-term measures. The measures just adopted fall into the short-term measures.

Future work

The MEPC discussed a number of submissions on how to progress the next stages of IMO's work to cut GHG emissions from ships, leading to the revision of the initial GHG strategy in 2023.

The MEPC adopted a work plan on the concrete way forward to make progress with candidate mid- and long-term measures including measures to incentivize the move away from fossil fuels to low- and zero-carbon fuels to achieve decarbonisation of international shipping.

A proposal initially considered by MEPC suggested a mandatory levy of \$100 per tonne carbon dioxide equivalent on heavy fuel oil. This proposal will be further considered at the intersessional working group meeting in the context of the adopted work plan along with other proposals for mid-term measures.

The work plan envisages three phases:

Phase I – Collation and initial consideration of proposals for measures (Spring 2021 to spring 2022);

Phase II – Assessment and selection of measures(s) to further develop (Spring 2022 to spring 2023); and

Phase III – Development of(a) measure(s) to be finalized within (an) agreed target date(s).

Mr. Lim welcomed the adoption of the work plan.

He added: *‘Concessions have been made on all sides in the interest of securing the framework we have in place. Our consideration of mid- and long-term measures will demand even more of us. I am very pleased that the Committee has agreed on a work plan to support carrying out this dimension of our work in a structured way that will keep the membership together.’*

In continuation he said: *‘Agreement on the work plan sends the signal that the Organization and its Member States are ready to further consider the current and future proposals for mid-term measures. We need to gear up work relating to the various phases of the work plan in order to give efficient and adequate consideration to concrete proposals for the reduction of greenhouse gases in keeping with our goals in the initial strategy. Let us continue to work together on the tasks you have in front of you as we continue to make progress on this common path.’*

IMRB proposal

The Committee had a non-exhaustive consideration of a proposal to establish an International Maritime Research Board, funded by a tax on oil fuel used by shipping. The discussion will resume at the Committee’s next session.

Energy Efficiency in ports to support maritime decarbonisation

According to a media briefing by IMO on 23 June the maritime industry and particularly ports are seen as part of the solution towards decarbonising the maritime sector. They can contribute towards the UN goal of achieving clean and affordable energy, panellists told a side-event on ports, held during the UN-led Ministerial-level Thematic Forums held from 21-25 June with the subject of energy action.

These forums bring together key stakeholders virtually, to mobilise actions as a major milestone on the road to the UN-led High-level Dialogue on Energy of September 2021¹.

o quote Nancy Karigithu, Principal Secretary, State Department for Maritime and Shipping in the Ministry of Transport, Infrastructure Housing and Urban Development, Kenya: *‘There is a large capacity to improve energy sustainability in port activities, operations and management. Meaningful improvement can be achieved through investment of in renewable energy, clean technological solutions, automation and through partnership, capacity building and education.’* She was speaking on 22 June at the side event on Uptake of Port Energy Efficient Technologies and Operations.



Illustration per www.imo.org ©

Government of Kenya; MTCC Africa

The event was hosted by the Government of Kenya, through the State Department for Shipping and Maritime, in collaboration with IMO – which implements the European Union-funded Global MTCCs Network (GMN); and the Maritime Technology Cooperation Centre for Africa (MTCC Africa).

MTCC Africa is part of the global GMN network, which unites four MTCCs across the globe. All MTCCs work in their regions to promote technologies and operations to improve energy efficiency in the maritime sector to support the move towards a low-carbon future.

Lydia Ngugi, Head, MTCC Africa, highlighted the MTCC’s work with ports across Africa, to undertake emission baseline studies, support the uptake of energy efficient technologies and facilitate the implementation of IMO’s mandatory energy efficiency requirements².

IMO’s Gyorgyi Gurban took the opportunity to highlight how a range of IMO-executed global projects, including the GMN Project, the GHG SMART project and GreenVoyage2050³ are supporting developing countries on the path towards decarbonisation in the maritime sector. Related initiatives are supporting information-sharing IMO-Singapore NextGEN⁴ and looking at ways to address innovation needs UNEP-IMO Innovation Forum

and to mobilize finance, particularly in developing countries, for the decarbonisation of the maritime sector (IMO-EBRD-World Bank FIN-SMART roundtable⁵).

Improved energy efficiency across the maritime sector – including ports – will support the achievement of UN Sustainable Goal 7, which, inter alia, has a target to double the global rate of improvement in energy efficiency and expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries.

¹ <https://tinyurl.com/bpkt7zkv>

² <https://tinyurl.com/4hd54avc>

³ <https://greenvoyage2050.imo.org>

⁴ <https://tinyurl.com/yxumjncd>

⁵ <https://tinyurl.com/zhka2wpa>

IMO's Day of the Seafarer

This to remind that the Theme for World Maritime Day is: A Fair Future for Seafarers.

On Day of the Seafarer 2021 IMO envisaged what a 'Fair Future for Seafarers' will look like.

The Day of the Seafarer, held on 25 June every year, draws global attention to the contribution that seafarers make to world trade.

As the world slowly moves through the pandemic, it is more important than ever not only to acknowledge the efforts that seafarers have made to keeping the supply chain open despite extremely challenging conditions, but also to ensure that the future being built is one that is fair to them. This is why IMO's 2021 Day of the Seafarer campaign chose the theme: **A Fair Future for Seafarers.**

Continued restrictions

For a second year IMO marked this day as hundreds of thousands of seafarers continue to face restrictions as a result of the Covid-19 pandemic.



Access to repatriation, shore leave and medical support all continue to be a challenge. Although there has been a significant reduction in the number of seafarers caught up in the crew change crisis, the numbers remain unacceptably high.

As key workers, seafarers should be entitled to priority vaccination and allowed to travel without restrictions. IMO continues to urge more IMO Member States to give seafarers their due and designate them as key workers.

Currently only 60 IMO Member States have designated seafarers as key workers.

IMO will continue to work with sister UN Agencies, industry and member states in support of seafarers.



Secretary-General's message

In his message on the Day of the Seafarer, IMO Secretary-General Kitack Lim said: *'Our 2021 Day of the Seafarer campaign builds on the progress to support seafarers on pandemic-related challenges. It aims to draw global attention to all areas where fairness is important. This includes a safe, secure environment on ships, reasonable working conditions, fair treatment in all situations, as well as respect for the rights of all – regardless of race, gender and religion.'*

'I am especially pleased that IMO will be amplifying the voices of seafarers themselves as they discuss what a fairer future would look like to them under the hashtag #FairFuture4Seafarers.'

'Seafarers, we are listening – and we will make sure you are heard.'

Readers are invited to see IMO Secretary-General Kitack Lim in the 2021 Day of the Seafarer video to be found here: <https://tinyurl.com/apkf3v9h>

And from the UN Secretary-General

In his message on the Day of the Seafarer, UN Secretary-General António Guterres said: *'Seafarers must be recognized as key workers who deliver an essential service, and be given access to transit and travel. Seafarers must also have equitable access to vaccines, as nobody is safe until everyone is safe...We must acknowledge that the future of world trade depends on the people who operate ships. All stakeholders must work together to ensure a fair future for seafarers.'*

IMO used this year's theme across various IMO social media platforms to ask seafarers what this fair future means to them.

Seafarer videos

Over the past ten weeks to 25 June IMO published a weekly poll and seafarer video on relevant topics ranging from training and autonomous shipping to the impact of the pandemic, the fight against climate change and diversity in maritime.

Social media

IMO has received more than 16,000 responses to the ten questions from seafarers across its Facebook, LinkedIn, Twitter and Instagram channels. The polls and the responses have reached hundreds of thousands of people.

The compiled list of all the poll questions and their answers – along with the seafarer videos – can be found on the IMO website - Day of the Seafarer 2021 page to be found here: <https://tinyurl.com/azh87be8>

It is understood that the most popular question, which received 3,000 votes, was: *'Who should be responsible for a fair future for seafarers?'* A majority 54% of respondents answered that it must be a shared responsibility between IMO/ILO and Governments; shipping companies and seafarers.

Video-poem

IMO also launched a special Day of the Seafarer 2021 video-poem by Mr Chad Christopher Jordan that is dedicated to seafarers and their hard work, which often goes unseen.

Watch the video here: <https://tinyurl.com/n555czf7>

Invitation to continue the conversation

Secretary-General Lim encouraged all stakeholders in the maritime sector to continue the conversation on and off social media, paying special attention to the voices of the seafarers themselves.

To read more see here: <https://tinyurl.com/azh87be8>

Join the campaign

Use the hashtag #FairFuture4Seafarers and join in the conversation.

Seafarers themselves can use the hashtag to voice their position on what a fairer future for seafarers includes and looks like.

Support organizations can also join in and use the hashtag to demonstrate how they support seafarers and what they hope for a fairer future.

Shipping companies and port organizations are also invited to show their appreciation for seafarers.

Seafarer's profile

The fourth seafarer's profile for the promotion of this year's World Maritime theme has been launched and is available here: <https://tinyurl.com/2jpxc8hb>

Streamed interview

Readers may also stream an interview with Chief Officer Ashwin Pillai here: <https://youtu.be/9oFJ7sBvdKs>.

In June IMO was focusing on protecting the environment. Join in the conversation and spread the word.

Previous profiles and other information related to the year's theme can be found on IMO's website here: <https://tinyurl.com/48wa4zz5>

No kitchen nightmares at sea

New ICS Training Record Book for Ships' Cooks

As we well know ships' cooks have a unique role on board a vessel and it is widely accepted that a well fed crew is essential to the effective running of a ship. Ensuring every ship has a properly trained and experienced cook on board is vital.



To support both employers and ships' cooks, the International Chamber of Shipping has produced a brand new record book to enable ships' cooks to track their career progression and communicate their expertise and

experience to employers and colleagues. It is understood that this is the first global resource to help cooks on board demonstrate competency and to record their training and experience as they develop their careers at sea.

The new *Training Record Book for Ships' Cooks* can be used by an individual to demonstrate that they have followed a structured training programme and have an understanding of the core competencies required to safely prepare nutritious and appropriate food during a voyage. It will also act as a record of their experience and career progression and can be used at any level and in any country, both on board and at maritime catering academies.

This new record book has been written based on the competence requirements of the ILO Guidelines on the training of ships' cooks, enabling evidence of competency to be recorded in all key areas identified by the ILO. It covers both practical and safety skills such as specific cooking techniques and dealing with allergies and food intolerances.



Natalie Shaw, Director of Employment Affairs for the International Chamber of Shipping commented: *'Seafarers live and work on board ship and mealtimes serve to influence attitudes regarding long periods at sea. Ships' cooks are essential to the efficient and safe running of any vessel. It is difficult to overestimate how important food and nutrition are to seafarers. Not only does good food enable the seafarer to perform duties effectively, it is also crucial to maintaining the health and morale of crews.'*

'Indeed the quality of food on board is so essential to crew welfare that it is documented in the ILO Maritime Labour Convention (MLC), which recognises how important it is to have and serve sufficient food and drinking water of appropriate quality on board by qualified and trained catering personnel.'

The *Training Record Book for Ships' Cooks* is the first global resource available to the industry and is an essential companion to the formal training undertaken by ships' cooks both on board and onshore. Ships' cooks have very varied backgrounds ranging from the professional chef on a cruise ship through to the reserve ship's cook covering the mess when the ship's cook is on shore leave, and this new record book supports those at all levels.

The *Training Record Book for Ships' Cooks* is available to purchase from ICS Publications, see here: <https://tinyurl.com/swkvdkxe>

Saving seafarers' lives

Oxygen concentrators sent to India

Hundreds of lives will be saved thanks to two new emergency projects being funded by the ITF Seafarers' Trust and delivered through two Indian-based seafarers' unions. This was announced by ITF on 24 May.

Grants

Support from the ITF Seafarers' Trust for oxygen concentrators and emergency supplies for affected seafarers and their families comes as India's health system teeters on the brink of collapse in the wake of the country's unprecedented Covid-19 outbreak. The two grants total £215,000 (\$305,085).

It is understood that the National Union of Seafarers of India (NUSI) will use its network of branches across the country to deliver the oxygen concentrators free of charge to seafarers and their families. This initiative is part of a wider union project to increase the number of ventilator beds in government hospitals.

A second grant from the ITF Seafarers' Trust will fund supplies for Indian seafarers and their families who are experiencing hardship during lockdown or in periods of quarantine. The Forward Seamen's Union of India (FSUI) will coordinate getting logistical support and essential goods to seafarers in locked down ports, as well as providing assistance to families who have lost loved ones to the virus.

To quote Katie Higginbottom, Head of the ITF Seafarers' Trust: *'Last year Indian seafarers' unions were at the forefront of getting emergency supplies and hand sanitizers to seafarers as the pandemic was just beginning.'*

'Now we are all bearing witness to the human tragedy unfolding in India with this deadly second wave, and the ITF Seafarers' Trust is proud to support unions stepping up to save as many lives as possible and reduce the hardship being faced by Indian seafarers and their families.'

General Secretary of NUSI Abdulgani Y Serang said the grant for oxygen concentrators will save lives because it helps address a chronic lack of breathing-supporting equipment in the country.

He commented: *'People all over India, including seafarers, have been trying to source oxygen cylinders or oxygen concentrators for themselves or their loved ones so that they can battle this virus at home. The hospitals, too, need more of these machines – many patients cannot get oxygen beds and lives are being lost. This grant will save hundreds of lives.'*



Credit: Jake Lester Bodegas©

Manoj Yadav, General Secretary of the FSUI was also confident that the grants would make a difference: *'Many seafarers have tested positive, and many have died. Too many. We are doing our best to provide the necessary support to seafarers' families in very challenging circumstances.'*

Indian outbreak threatens to worsen crew change crisis

Concerns are growing in the maritime industry that the health crisis in India may lead to a doubling of the number of seafarers unable to get home due to governments' Covid-related border and travel restrictions in a matter of weeks. Already several tens of thousands of seafarers are estimated to be trapped working aboard vessels beyond their initial contracts.

David Heindel, chair of the International Transport Workers' Federation (ITF) Seafarers' Section added: *'New restrictions targeting Indian seafarers will worsen the crew change crisis. We need systems that get Covid-negative and fully vaccinated seafarers onto ships to relieve crews who have been on board for far too long.'*

'Our hearts go out to our brothers and sisters in India. It's a double-blow for Indian seafarers at sea who are watching their families suffer, while they also face the prospect of many more months trapped working on board unable to get home to comfort their loved ones.'

'These substantial grants show that labour representatives are prepared to do whatever we can to reduce the impact of the virus. But the long-term solution remains universal access to vaccines for all seafarers by everyone doing their part: government, union, business; simultaneously and globally.'

'National Covid outbreaks like that being seen in India right now will continue to happen until the whole world has this virus under control, worsening the crew change crisis and risking essential supply chains. No one is safe until we are all safe.'

It is understood that key crew change hubs Singapore, Hong Kong and the United Arab Emirates have banned those with recent travel to India from entering or transiting through their ports and airports.

We are informed by ITF that Indian nationals represent one in eight seafarers of the global seafaring workforce.

Hapag-Lloyd further expands its container fleet

60,000 TEU ordered

It has been proven that the sharp increase in demand has led to a shortage of containers across the world.

Severe imbalances – such as with exports from Asia, but also owing to congestion in ports and delays in hinterland transport – are causing containers to be tied up in transit for considerably longer periods. More boxes are currently needed overall to manage the same transport volume.



For this reason, Hapag-Lloyd has once again invested in its container fleet and ordered an additional 60,000 TEU of standard containers from China. The first boxes will supplement those currently being produced and are scheduled to be delivered to Hapag-Lloyd in July and integrated into the existing fleet. The majority will be subsequently delivered in the third quarter.

Rolf Habben Jansen, CEO of Hapag-Lloyd commented: *'Demand continues to be very high, and the supply of container equipment is currently one of our industry's biggest challenges and demands our full attention.'*

'To counteract the container shortage – but, most importantly, to offer our customers a better service – we have repeatedly invested in our container fleet since the beginning of the pandemic.'

In April of this year, Hapag-Lloyd announced orders for a total of around 150,000 TEU of standard and reefer containers to be delivered over the course of 2021. The company had also invested in its container fleet at the beginning of the pandemic.

2021 Q1 results

Revenues increased in the first quarter of 2021 by around 33%, to roughly \$ 4.9 billion (approximately €4.1 billion), particularly due to a higher average freight rate, which increased by approximately 38% to reach 1,509 US\$/TEU (Q1 2020: 1,094 USD/TEU).



It is understood that due to the demand-related congestion of port and hinterland infrastructures in many places as well as to a resulting shortage of freely available ships and containers, the transport volume was slightly below the level of the same quarter of the previous year, at roughly 3.0 million TEU (Q1 2020: approximately 3.1 million TEU), or minus 2.6%.

An estimated 27% lower average bunker consumption price, which amounted to \$384 per tonne in the first three months of the 2021 financial year (Q1 2020: \$523 per tonne), had a positive impact on earnings.

About Hapag-Lloyd

With a fleet of 241 modern container ships and a total transport capacity of 1.7 million TEU, Hapag-Lloyd is one of the world's leading liner shipping companies. The company has around 13,300 employees and 395 offices in 131 countries. Hapag-Lloyd has a container capacity of approximately 2.8 million TEU – including one of the largest and most modern fleets of reefer containers.

A total of 121 liner services worldwide ensure fast and reliable connections between more than 600 ports on all the continents. Hapag-Lloyd is one of the leading operators in the Transatlantic, Middle East, Latin America and Intra-America trades.

Illustrations per www.hapag-lloyd.com ©

Ocean Infinity selects DNV's

ShipManager for innovative robotic vessels

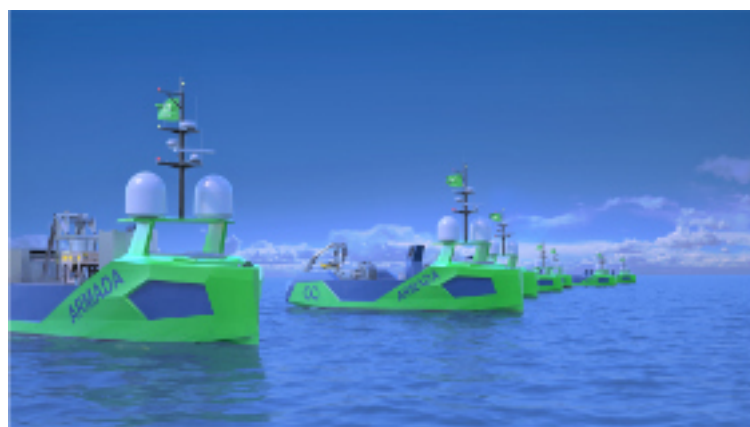
It was reported from Oslo on 1 June that Ocean Infinity, a leading marine robotics and deep sea data acquisition company, was implementing ShipManager fleet management software for 17 new robotic ships and additional autonomous underwater vehicles (AUVs).

Ocean Infinity will implement ShipManager's modules for planned maintenance, procurement and business intelligence for its advanced fleet of uncrewed, low-emission vessels for capturing ocean data.

Securing reliability

In the words of Andy Holt, Fleet Director, Ocean Infinity: *'As part of our efforts to secure the reliability of our fleet of robotic ships and AUVs, we were looking for a trusted partner that could deliver an integrated fleet management solution.'*

'We know DNV has validation in the market and ShipManager is very intuitive and user-friendly. We were also excited to see the latest developments in user experience based on modern cloud solutions. Especially ShipManager Analyzer, with its advanced reporting capabilities, really delivers what we were looking for.'



Low-emission fleet technology

It is understood that the robotic ships in Ocean Infinity's Armada fleet use low-emission fleet technology and are equipped with state-of-the-art sensors and pioneering navigational devices that allow information to be gathered from the shallowest and deepest waters, whether for exploration, mapping or searching for wreckage. The marine robots use hybrid technology, cutting CO₂ emissions. An Armada robotic vessel emits up to 90% less CO₂ than a conventional survey vessel, it is reported.

Torsten Kappel, Head of Ship Product Line, Digital Solutions at DNV, added: *'We are proud to be part of this exciting journey with Ocean Infinity. The utilization of advanced technologies, as well as the focus on decarbonization, fits perfectly with our own values at DNV.'*

The ShipManager solutions are part of DNV's maritime software portfolio for ship management and operations, installed on board approximately 7000 vessels worldwide.

ShipManager provides modules for technical management, procurement, hull integrity management, dry docking, QHSE, crewing and business intelligence.

Alternative Fuels

Impacts on maritime safety and the environment in the Baltic Sea Region

According to the Danish Maritime Authority (DMA) on 20 May Ship, Safe, Energy and Transport under the European Strategy for the Baltic Sea Region (EUSBSR, see: www.balticsea-region-strategy.eu) organised a webinar with the title: *Alternative Fuels: Impacts on Maritime Safety and the Environment in the Baltic Sea Region (BSR)*.

The way in which maritime transport transitions away from fossil fuels while also taking safety in the marine environment into account were considered. Topics were explored during the webinar with a multitude of Baltic Sea stakeholders from policy level, the industry and academia.

The Baltic Sea Region holds great potential for the collaborative establishment of an alternative fuel ecosystem. With the region's status as a sustainability front runner and centre for innovation, the BSR is well positioned to ride the wave of the green transition and lead the way in establishing clean, green, and safe shipping with the use of alternative fuels.

This digital conference, organised in collaboration by four policy areas under the EUSBSR, brought together diverse speakers from the maritime industry, public sector, and academia to discuss the opportunities and challenges of alternative fuels and their role in the green transition.

Magda Kopzcynska, Deputy Director-General at the European Commission's DG Move, delivered the keynote address. Her organisation is spearheading policy development to decarbonise shipping. The Baltic Sea Region holds great potential for the collaborative establishment of an alternative fuel ecosystem. With the region's status as a sustainability front runner and centre for innovation, the BSR is well positioned to ride the wave of the green transition and lead the way in establishing clean, green, and safe shipping with the use of alternative fuels.

The webinar of 2:52:17 duration can be found here: <https://tinyurl.com/2evvrhk9> with a one-page summary document, background notes and a zip file of the presentations.

In conclusion

In summary it was reported that new regulation is on its way. What is known as the Fit for 55 Package to be launched on 14 July is highly anticipated and needed to spur the transition to climate neutrality. It covers all sectors, with objectives related to shipping and will, it is understood, assist with the achievement of the 55% by 2030 reduction target of the EU Green Deal.

A diversity of fuels will be needed to manage many trade-offs and benefits, with no one fuel providing the best solution for shipping.

WEBINAR ON ALTERNATIVE FUELS



Safety will be an ever-greater concern. While current bunkering procedures are relatively risk free, alternative fuels bring new risks that must be addressed.

With many examples of innovation, R&D already in progress, and the willingness to cooperate across borders, the BSR is well positioned to establish safe and sustainable shipping powered by alternative fuels.

The ScanReach wireless IoT Platform

Realtime fuel data now available for ships and ashore

Jacob Grieg Eide, Chief Business Officer of ScanReach indicated in a report of early June that typical savings of around 5%, and in some cases up to 10% fuel could be achieved simply by giving the bridge team real-time fuel consumption data.

Furthermore, it was reported that this Norwegian company has developed the world's first wireless IoT platform providing needed on board wireless connectivity (OWC) in ships.

Its latest application for the technology, called ConnectFuel, has already successfully been fitted on ships where it links flow meters that clamp onto the fuel lines to displays on the bridge and onshore providing instant visual indication of fuel consumption or consumption for a selected period.

Eide commented: 'A vessel's fuel cost can account for up to 70% of its total operating cost. Feedback from the industry shows a strong belief that lack of instant fuel consumption awareness could lead to overconsumption of fuel.'

Reports indicate that until now, this has been technologically difficult or impossible to provide. It has proved extremely expensive and complicated because of cabling needed to transfer data around a ship. However, by using ScanReach's onboard steel penetrating mesh of wireless nodes it is understood that the cost reduces sharply with a return on investment claimed to be ten times better than for conventional alternatives. This was reported by ScanReach in a release of 4 June. We learn that ConnectFuel is quick to fit, with installation taking as little as one or two hours and can be achieved by ship's staff.

A forthcoming installation will be in the Arctic trawler *Olympic Prawn*, which was delivered to Olympic Seafood by Turkey's Cemre Shipyard in December 2020. As with other Olympic-owned vessels, the newbuilding already had a mesh for keeping track of personnel on board (POB) using ScanReach's ConnectPOB system and was already fitted with flow meters which now communicate via the same mesh to a bridge display. Data is also brought ashore into the new ConnectFleet application.



Growing demand for instant data

Developing ConnectFuel was prompted by a growing demand for instant fuel data, not only to monitor consumption but also to provide information for regulatory purposes, such as IMO's Fuel Oil Data Collection System and the EU's Monitoring, Reporting and Verification requirements.

Data collected will also provide valuable guidance for meeting IMO's 2030 target of reducing CO₂ emissions by 40% by that year, which will require an annual reduction in emissions – and thus fuel consumption – of about 6%, it is reported.

ConnectFuel collected data is also transferred ashore by satellite and stored in the Cloud, where shore staff can view real-time consumption rates and extract and analyse the information gathered. If more specific data is needed – such as splitting main engine and auxiliary consumption, or information from individual engines – ConnectFuel can provide that if flow meters are fitted at appropriate points in the fuel lines, we have learnt.

Classification society DNV GL reviewed existing fuel monitoring technologies, and in a report acknowledged that *'Smart data gathering, and presentation of operational data can contribute positively and reduce emissions by creating an onboard culture and awareness around energy and fuel consumption. An IoT platform which enables collection and connection of relevant operational data is suitable as a basis for forming operational targets and philosophies.'*

John Roger Nesje, CEO of ScanReach, summed up ConnectFuel's benefits as proving 'fuel awareness' on board and ashore, which might reveal, for example, that too many auxiliaries than necessary are running, or simply encourage more efficient ship handling.

Addressing this apparent lack of awareness Nesje commented the system offered: *'Could be the single most important measure to take in order to impose a potential change of the vessel's performance and the reduction in fuel consumption. If you don't know your fuel consumption it is difficult to reduce it.'*

ConnectFuel is the second Connect solution released in a series of many. During this year alone, ScanReach will use wireless platform to use, develop, and launch new devices for gas and environmental sensing, vibration, weather station and other applications.

Class go-ahead for LNG concept

Newport Shipping's retrofit for green future

An innovative liquefied natural gas (LNG) fuel tank system developed by Newport Shipping for crude tankers and bulkers has gained a key preliminary class approval to facilitate retrofits of such vessels in line with new environmental requirements to cut maritime emissions.

The approval-in-principle (AIP) from classification society DNV affirms the technical feasibility of the concept for the VLCC and Capesize vessel classes, and paves the way for it to be implemented in design work on retrofits by the UK-based ship repair and retrofitting group.

This marks a significant milestone for Newport Shipping, putting it in a position it to take a leading role in the rapidly emerging market to adapt vessel fuel systems for LNG that has seen only a few such retrofits globally to date. This was reported in early June.

In the words of Newport Shipping's managing director Lianghui Xia: *'LNG is one of the cleanest transition fuels currently available globally and can be used with minimum modifications to a ship. CO₂ emissions can be reduced by between 20% and 30% just by switching to LNG without installing any other equipment.'*

Cost benefits

As well as environmental gains, there are also significant cost benefits as LNG is much cheaper than most fuels and there is already a worldwide bunkering network in place offering this fuel at competitive prices, he pointed out.

Newport Shipping's concept is based on deck-mounted LNG tanks that can be installed without major modifications to the vessel hull, thereby reducing installation costs, as part of a retrofit solution using a dual-fuel engine that would also be suitable for future use of carbon-neutral methane such as bio-LNG.

Tank capacity, which is based on a typical ship profile and operating route, is sufficient for a single voyage prior to refuelling, we understand.

Conversion of the existing global merchant shipping fleet of around 100,000 vessels for use of alternative fuels is no longer an option, but an economic necessity for ship

owners as reducing emissions will be a rite of passage for trading in a low-carbon shipping future.



Newport Shipping's LNG retrofit concept for the Capesize vessel class.

Photo Newport Shipping ©.

Green regulations

The IMO has set a goal to halve greenhouse gas emissions from international shipping of nearly one billion tonnes per annum, and reduce carbon intensity towards 70% of 2008 levels, by 2050.

Furthermore, the new Energy Efficiency Existing Ship Index (EEXI) will require all existing cargo vessels to meet stricter class limits on emissions for annual surveys performed from 1 January 2023. In addition to global and regional regulations, there is increasing market pressure from charterers and banks for decarbonisation as a condition of cargo contracts and ship finance.

Xia believes Newport Shipping's concept offers: 'a *practical and cost-efficient solution*' to cut fleet emissions in the near term pending adoption of technologies for carbon-neutral fuels such as ammonia and hydrogen, as well as battery technology, that are still some way off commercial realisation.

He added that a long-term payment plan over five to seven years on 60% of the total cost is offered to clients for its LNG retrofit solution.

Newport Shipping, with a global network of 15 partner yards spanning international trade routes in the Atlantic and Pacific regions that offers guaranteed drydock slots and fast turnaround, is now poised to bring this LNG retrofit solution to the global shipping market.

A new ICS publication

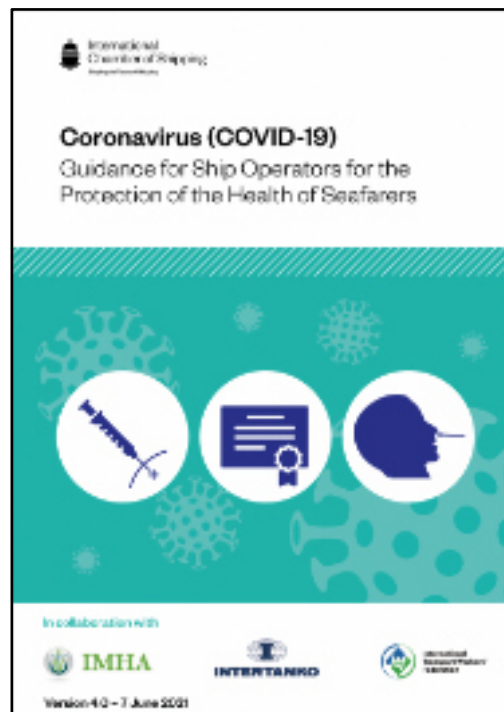
Coronavirus (Covid-19): Guidance for Ship Operators for the Protection of the Health of Seafarers

Early in June the International Chamber of Shipping (ICS) announced the publication of *Coronavirus (COVID-19) Guidance, Fourth Edition*

This Guidance has been produced by the ICS to help shipping companies and seafarers follow health advice

provided by UN agencies and others in response to the coronavirus (Covid-19) disease, which has been declared a pandemic by the World Health Organization (WHO), under the WHO International Health Regulations (IHR).

It is understood that this Guidance is for use on all types of ship and attempts to take into account the needs of both cargo and passenger ships. It is recognised that cargo ships are unlikely to have a fully trained doctor or nurse on board and that medical treatment on cargo ships will be provided by a crew member with training to Standards of Training, Certification and Watchkeeping for Seafarers (STCW) medical requirements.



This fourth edition replaces the ICS guidance published in September 2020 and should be read in conjunction with the three Covid-19 guidance documents published by ICS in 2021.

New in the Fourth Edition

The latest edition features the following:

- An updated introduction reflecting the current situation of the Covid-19 pandemic.
- A new section on myth busting advice during the Covid-19 pandemic.
- A new section on Covid-19 vaccines

Updated downloadable posters, including three new posters featuring safety guidance for ashore and on board and mental health support for seafarers; and

Two updated annexes with guidance on the use of masks and decision making for possible or confirmed Covid-19 cases on board.

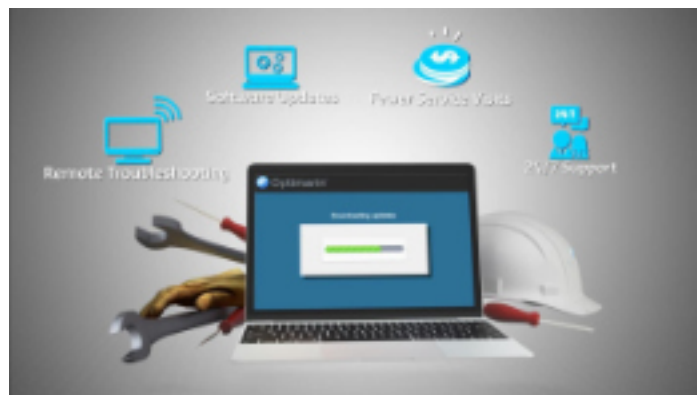
The new publication at 3MB may be downloaded **at no charge** here: <https://tinyurl.com/4uftykb9>

OptiLink: A digital revolution in ballast

Optimarin is leading the way in digitalisation of ballast water treatment with the launch of OptiLink, an innovative system for ship-to-shore data-sharing in this critical area of ship operations.

We learnt early in June that the advanced digital tool provides real-time monitoring of ballast water treatment systems (BWTS), along with automated data generation and remote connectivity, and is designed to resolve the regulatory compliance headache for ship operators as well as give improved customer support.

OptiLink also offers significant economic spin-offs, such as fuel cost savings, optimised voyage planning and reduced port turnaround times, to boost the cost-efficiency of overall fleet operations.



To quote Leiv Kallestad, chief executive of Norwegian ballast water treatment specialist Optimarin: *'The whole aspect of ballast water treatment changes from a manual operation to a system approach where the BWTS and its operations become an integral part of the vessel's functions.'*

'This means the BWTS can be managed proactively in support of reduced downtime and reduced fuel consumption, with less hassle as control over the transfer of ballast water in and out of the vessel improves greatly.'

Big picture

OptiLink connects the BWTS 'to the world' either through a vessel's own communication systems, or an external link installed on board, allowing for transfer of key operational and performance data to the OptiLink cloud. Users will subsequently be able to connect with the cloud through a secure internet connection, it is understood.

This is said to give the vessel crew instantaneous online access to key performance indicators for the BWTS – including water quality and system functionality – through a user-friendly visual interface featuring data transmitted from the ballast water control system.

For the shipowner, OptiLink will also provide the ship operator with the big picture by providing a fleet-wide overview of ballast water KPIs for each vessel and fleet. We understand this will enable interactive remote support with online software updates for troubleshooting to reduce the need for physical service work on the BWTS, resulting in cost and time savings.

In addition, continuous condition monitoring of the BWTS allows for proactive maintenance to ensure efficient operation of the system by alerting the crew to possible equipment malfunctions.

Furthermore, we learn that OptiLink can analyse big data both with respect to system performance and water quality at geographical locations where ballast water operations are ongoing.

Predictability

This provision enhances the predictability of ballast water operations to give the ship operator greater visibility so voyage planning can be optimised to reduce fuel consumption and downtime.

Another major benefit is that compliance data from the BWTS can be transmitted directly to statutory authorities, which can then provide guidance on corrective action in case of contamination so that, for example, a certificate of compliance can be obtained.



OptiLink is designed for ship-to-shore sharing of operational data for ballast water treatment systems to optimise fleet efficiency.

This certification can then be communicated to the relevant port authority so that port turnarounds are shortened as the need for lab testing of water quality and on board inspections is effectively eliminated, it is reported.

This is particularly significant as the shipping industry faces a 2024 deadline for compliance with an IMO regulation that requires all vessels to conform with a so-called D2 standard specifying the maximum volume of viable organisms in ballast water discharges.

Kallestad went on to point out that, while operators may have a compliant BWTS installed on their vessels, there still remain challenges in ensuring ballast water quality meets local standards that can create logistical difficulties and delays for fleet operations.

In conclusion he said: *Digitalisation is key to tackle the ballast water treatment compliance issue and Optimarin has developed the first digital solution of its kind that provides data transparency and predictability in this area, while integrating the BWTS into a ship's control system.'*

(UK) MAIB Annual Report 2020 issued

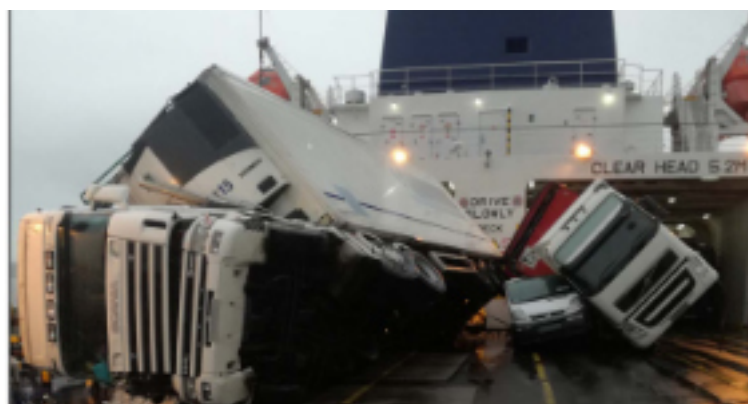
In the UK the annual report of the Marine Accident Investigation Branch (MAIB) was issued in early June and provides information on the branch's activities during 2020.

As well as a report for the year under review from the Chief Inspector of Marine Accidents, this document includes:

- An overview of accidents reported.
- A summary of investigations started.
- Details of investigation reports published.
- Responses to recommendations issued.
- Marine accident statistics.

In his introduction Captain Andrew Moll the Chief Inspector of Marine Accidents said: *'I am pleased to introduce MAIB's annual report 2020. It was another busy and successful year for the Branch improving safety at sea by our sustained output of safety investigation reports, safety digests, and safety bulletins despite lock-down conditions affecting work for much of the year. The Branch raised 1217 reports of marine accidents and incidents and commenced 19 investigations in 2020.'*

'The first lockdown saw a significant reduction in maritime activity, which was reflected in the dip in reportable accidents from March through to May. The rate of accident reporting increased later in the year but remained depressed compared against the five-year average. However, a spike in reports of leisure craft accidents over the summer (June to September) brought the total number of reportable accidents for the year up to normal levels.'



European Causeway per MAIB Report No3 / 2020
Illustration MAIB ©.

Safety issues

In 2020, the MAIB published two investigation reports into the collapse of container stacks on large container ships, both of which were transiting the North Pacific Ocean in heavy weather at the time.

Such accidents are challenging to investigate due to the multiple inter-related factors involved and that critical evidence could be lost overboard during the accident.

There have been more accidents involving large losses of containers since, the most notable being *ONE Apus*, and more general concerns about large container vessels were already being raised before *Ever Given* grounded in the Suez Canal earlier this year.

There is no doubt that accidents involving Ultra Large Container Vessels will continue to receive intense focus, but it is too early to say what common themes might emerge from accident investigations and whether these could have wider implications for the sector.

Two accidents involving Personal Watercraft (PWC) and Rigid Inflatable Boats (RIBs) show how vulnerable passengers are to injury when these craft collide or hit stationary objects while travelling at high speed. The collision between a PWC and RIB *Rib Tickler*, and the RIB *Seadogz's* collision with a navigation buoy are still under investigation, but both accidents resulted in fatalities that could have been avoided had a better lookout been kept and larger passing distances maintained.

The high level of acceptance of MAIB recommendations in 2020 (more than 90%) is good news, which validates the MAIB process of involving stakeholders in the formulation of recommendations during the final stages of the investigation.

Branch activity and development

Accident investigation continued throughout the pandemic, but it was far from business as usual. During parts of the year travel and quarantine restrictions severely curtailed the Branch's ability to attend accident sites. This resulted in heavy reliance on remote interviewing and third parties to collect physical evidence.

Like many others, MAIB staff have become adept at remote working, but the constraints of the remote environment have hindered accident investigation. Last year saw some staff retire, others take on new responsibilities, and there have been a number of new staff members joining.

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 a separate, 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.

Editor's note

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Nigeria's Deep Blue Project

On 10 June the Oil Companies International Marine Forum (OCIMF) with the Round Table of Shipowner Associations* expressed their full support for the launch of Nigeria's Deep Blue Project to stamp out piracy in the Gulf of Guinea.

That day Nigeria announced a significant investment in military and law enforcement infrastructure to secure its maritime domain as part of a stepping up of actions to address the ongoing piracy issue in the Gulf of Guinea.

Managed by the Nigerian Maritime Safety Agency (NIMASA www.nimasa.gov.ng), the multi-agency project will significantly increase maritime security in the region, an area blighted by piracy, armed robbery, and other maritime crimes.

It is understood that a central command and control centre based in Lagos will oversee a network of integrated assets including two special mission vessels, two special mission long-range aircraft, 17 fast-response vessels capable of speeds of 50 knots, three helicopters, and four airborne drones, providing round the clock, day-in, day-out cover for the region.

These assets complement the Yaoundé ICC structure offering real capability to both Nigeria and the region.

It is the hope of the industry organisations that Deep Blue, coordinated with other navies and programmes through the mechanism of the GOG – Maritime Collaboration Forum/SHADE, will seriously impact on the ability of pirate groups to prey on merchant shipping.



Patrol boats of the Nigerian Navy. The Nigerian Navy is a branch of the Nigerian Armed Forces. It is among the largest navies on the African continent, consisting of several thousand personnel, including those of the Coast Guard.

Photo per www.navy.mil.ng The Nigerian Navy ©

Guy Platten, ICS Secretary General commented: *'The Deep Blue Project can be a game-changer in the fight against piracy in the Gulf of Guinea, and we congratulate Nigeria in launching the project despite the significant difficulties presented by Covid-19.'*

'We look forward to continuing our close cooperation with NIMASA and the Nigerian Navy to realise our shared vision of a region free from the threat of piracy and armed robbery.'

David Loosley, BIMCO Secretary General, added: *'Deep Blue becoming operational represents a significant opportunity to expand law and order at sea in cooperation*

with international forces in the area. We look forward to seeing Nigeria make the best of these assets to the benefit of Nigeria, its citizens and economy, and of course the seafarers from all over the world going about their daily business in the Gulf of Guinea.'

Katharina Stanzel, Managing Director of INTERTANKO, said: *'INTERTANKO believes that the launch of the Deep Blue Project is a tangible demonstration that the tide has turned against the scourge of piracy.'*

'This project has the potential to greatly contribute to seafarers being once again able to carry out their duties without fear for their safety.'

'We thank the Nigerian authorities for recognising the issue and putting these measures in place – all within the constraints of the ongoing Covid-19 situation.'

Kostas Gkonis, Secretary General of INTERCARGO, reflected: *'Along with our sincere congratulations to the Nigerian authorities on the launch of this important initiative, on behalf of the dry bulk shipping sector, we very much anticipate that the Deep Blue Project will make a significant impact in reducing piracy and armed robbery, protecting seafarers, ships, and the essential trade that serves the peoples of countries in the region.'*

In conclusion Robert Drysdale, Managing Director of OCIMF, stated: *'The launch of the Deep Blue Project marks a milestone of delivering state of the art, multi-faceted, maritime capability.'*

'It presents a great opportunity to protect seafarers and the maritime domain. The collaborative approach by all stakeholders to deliver Deep Blue is commendable and proves what can be achieved when all work together.'

'OCIMF congratulates Nigerian authorities and welcomes this historical moment, Deep Blue will benefit, Nigeria, the region and all those who trade in the Gulf of Guinea waters'

*BIMCO, INTERCARGO, the ICS and INTERTANKO.

Shipping industry agrees action on R&D investment and trade digitisation

As world leaders met in Cornwall, England, for the G7 over 11-13 June, the first ever meeting of the equivalent maritime bodies, titled M7, took place on 9 June and organised by the UK Chamber of Shipping.

Delegates from the ship owner associations of the G7, plus those from Australia, India, South Africa and South Korea, were joined by the Secretary General of the International Chamber of Shipping, Chief Executive and Secretary General of BIMCO and a representative from European Community Shipowners' Association (ECSA).

Developing technologies; R&D decarbonisation fund

There was universal agreement that more investment is needed from governments and industry to develop the technologies for a cleaner and greener shipping industry and that the G7 governments should be urged to back the

shipping industry's proposed \$5bn R&D decarbonisation fund.

Digital documentation

Delegates also agreed that more work was needed to help develop digital documentation to facilitate an increase in global trade as the world recovers from Covid-19.

The crew change crisis was discussed, and the extraordinary work seafarers have done over the past 15 months supporting global trade under extremely challenging conditions was noted. The meeting called for governments of the G7 to follow the lead of the United States, Canada and other countries in prioritising vaccinations for seafarers.

UK Chamber of Shipping President and Chair of the meeting, John Denholm said:

'Meeting for the first time, the M7 brought together the ship owning organisations of the G7, the UK, Canada, France, Germany, Italy, Japan, and the United States as well as those invited to the G7 event from Australia, India, South Africa and South Korea. The meeting discussed improving trade through digital documentation and the need for governments and industry to invest more in green research and development projects and the important role that seafarers were playing in keeping trade flowing through the Covid pandemic.'

'The meeting noted the magnificent job that their seafarers had been doing through the pandemic and urged governments to make vaccines available to seafarers. It also fully supported the need to decarbonise and agreed that if the industry is to meet its goal of zero carbon emissions by 2050, large-scale investment in research and development is necessary as without this we simply will not have the technologies needed for the greener, cleaner shipping industry that we all want.'

About the M7

The M7 is a new forum for the national ship owning associations of the G7 members and the meeting of 9 June on Microsoft Teams was chaired by John Denholm, President of the UK Chamber of Shipping, representing the Host Nation.

Delegates of the inaugural meeting were: Armateurs de France – Jean-Emmanuel Sauvé, President; Canadian Chamber of Marine Commerce – Paul Topping, Director, Regulatory and Environmental Affairs; Chamber of Shipping of America – Kathy Metcalf, President; CONFITARMA – Mario Mattioli, Chairman; Japanese Shipowners' Association – Shunichi Arisaka, General Manager; UK Chamber of Shipping – Bob Sanguinetti, Chief Executive Officer; German Shipowners' Association – Ralf Nagel, Chief Executive Officer; India Shipowners' Association – Anil Devli, Chief Executive Officer; Korea Shipowners' Association – Bongiee JOH, Managing Director; Maritime Industry Australia – Teresa Lloyd, Chief Executive Officer; South African Association of Ship Operators and Agents – Peter Besnard, Chief Executive Officer; BIMCO – David Loosley, Secretary General and CEO; International Chamber of Shipping – Guy Platten, Secretary General and ECSA – Luisa Puccio, Director Shipping & Trade Policy.

Lifeboat hooks

Failure or accidental release can be fatal

The first step to prevent an accidental release of the lifeboat hooks is to identify the potential failure points of the mechanism.

According to the online publication *ALERT* issued by GARD* early in June lifeboats are designed to save lives, but over the years there have been many serious casualties that have occurred during drills, routine maintenance operations and inspections of davit suspended boats fitted with on-load release hooks. These accidents have also resulted in seafarers losing confidence in the lifeboat launching systems.

Causes of lifeboat accidents

The GARD *ALERT* document indicated that lifeboat accidents have a variety of causes. Some of the more frequently occurring ones are:

- Failure of the on-load release mechanism.
- Inadvertent or accidental operation of the on-load release mechanism.
- Inadequate maintenance of the lifeboat and its launching equipment
- Sometimes the item to be maintained might not be readily accessible due to its location.
- Lack of familiarity with lifeboats and the on-load release mechanism.
- Unclear operating instructions of the on-load release/resetting mechanism.
- Faulty design.

Broadly speaking the above causes each fall into one of the following three categories:

1. Lack of familiarity.
2. Procedural inadequacy.
3. Faulty design.

As for the faulty design, non-compliant hook mechanisms should have been replaced by now, as the deadline for their replacement was 1 July 2019.



Illustration per www.gard.no ©

Furthermore, the GARD guide emphasised that to address operators' lack of familiarity with the mechanism and procedural inadequacy, more needs to be done.

Having a crew that is fully familiar with the lifeboat hook system and the potential failure points would be the starting point. For this the crew should carefully read through the instructions provided in the manufacturer's manual on items such as inspection, maintenance and operation, and if need be, seek clarification directly from the maker.

In addition IMO's guidelines on safety during abandon ship drills (MSC.1/Circ.1578) should be incorporated in the safety management procedures.

More advice

More advice on lifeboats and other topics from GARD is available in GARD publications to be found here: www.gard.no/web/frontpage

Loss prevention poster – Lifeboats are not there to take lives.

A 20-year anniversary - The loss of lives in lifeboats with on-load release hook.

Replacing lifeboat on-load release and retrieval systems – reminder.

Case study: Lifeboat safety drills and maintenance.

Presentations from the Gard Academy Conference on Lifeboat Hooks.

*About GARD

For over 100 years, GARD has focussed on providing the maritime industries with insurance products that offer financial protection and practical assistance when disaster strikes.

Gard is a ship owner-controlled provider of P&I, marine and energy insurance products, with over 550 staff in 13 offices around the world.

The direct insurance entities within the Gard group; are: Gard P. & I. (Bermuda) Ltd; Assuranceforeningen Gard – gjensidig; Gard Marine & Energy Limited and Gard Marine & Energy Insurance (Europe) AS.

Car carrier stability warning

Cargo weight distribution variance

That is the advice given by GARD as part of an online notice issued on 3 June (See www.gard.no). It continued by indicating that in the past there have been serious incidents where the car carriers have capsized as a result of inadequate stability. More concerning was the fact that the vessel's crew were also caught unaware. It has more to do with the way shore side staff carry out cargo planning and execution than the role of the vessel's crew, who play little or no part in the task.

Car carriers operate to a tight schedule with quick port rotations, schedules different to other vessel segments such as tankers and bulk carriers, where the cargo planning is done on board.

It was reported in the GARD paper that with car carriers shore side staff have no involvement with ship's staff and

that the latter's role, and typically that of the Chief Officer, is limited to ensuring that the vessel can achieve adequate stability based on the proposed pre-stowage plan, and this is achieved by ballasting.

Ultimately responsibility for safety of the vessel may rest with the Master, however in reality there may be several impediments to the Master to exercising his responsibility and, in GARD's view this needs to be addressed by both owners and operators.



Illustration per www.gard.no ©

The challenge

It is seen that the biggest challenge is that the stowage location and/or weight of the cargo actually loaded on board could differ significantly from the pre-stow plan and these changes might not be communicated to the ship's crew in time before departure from port.

Either the crew are not given a copy of the final stowage plan or if provided then there may not be enough time for the crew to check and ensure that vessel has adequate stability. The result is that the ship departs with inadequate stability, i.e with a small or negative metacentric height (GM).

Recommendations

In the GARD online advice the following recommendations were made:

- Operators should ensure that the weights of the vehicles mentioned in the stow plans are not estimates. Accurate weight declaration of the cargo should be prioritized prior to loading.
- Vessel operators should have a procedure in place to advise the vessel if there are changes to the preliminary or pre-stow cargo plan. Responsibility for communicating this would typically rest with the person in charge of tallying the cargo (that is to say the plan clerk, checker or supervisor), usually appointed by the operator.
- After the cargo operations are complete, ship's crew should be given a copy of the final stow plan with accurate weight of the cargo and stowage locations. The final departure stability condition should be calculated using the final stow plan.
- The vessel should not unmoor until the final stability calculations are complete. If this is not done, the crew should be empowered to delay the departure.
- Any concerns should be communicated to both the vessel operator and the ship owner or ISM manager and rectifications made prior to unmooring operations.

Bauxite liquefaction risk in Guyana

According to an advisory notice issued on 16 June by GARD (www.gard.no) a Gard Member recently experienced an incident of cargo failure involving Bauxite loaded in Guyana. The cargo was declared as Group C in the shipper's declaration. The vessel arrived at the port of discharge in the US with one cargo hold showing significant liquefaction.

This bauxite cargo was showing serious signs of instability when loaded at Linden, Guyana. When the vessel arrived at the discharge port in North America, the cargo in one hold had flattened into a fluid state. The cargo consisted of fine particles and showed significant signs of high moisture content. The cargo was described as cement grade bauxite, which is a fine grained washed by-product used in cement production.

As Gard reported in January 2021*, following the tragic 2015 loss of the *Bulk Jupiter* and 18 of her crew, IMO acknowledged that bauxite cargoes may suffer instability due to an elevated moisture content. As such, the IMSBC Code individual schedule for bauxite was recently revised and the revised schedule entered into force on 1 January 2021. The individual schedule for bauxite now includes a Group A category for bauxite fines meant for fine-particulate cargoes liable to liquefy or experience dynamic separation.

The cargo in this case was declared as Group C despite apparently consisting of primarily sand sized particles with a high proportion of silt and clay size fractions. The declaration also listed a Transportable Moisture Limit (TML) of 10%. The TML for Bauxite Fines (using the Modified Proctor/Fagerberg test procedure) is calculated as the critical water content at either 80% or 70% saturation, subject to determining the point at which a material is approaching full saturation, known as the optimum moisture point (OMC). There is no flow moisture point (FMP) determination using this TML test method.

Any cargo that has an inherent propensity to retain moisture and reach a point of saturation will demonstrate an FMP/TML if tested correctly. These cargoes can, by definition, flow like a viscous fluid and should be classified as a Group A cargo. No testing certificates were provided in the recent Guyana case, it is understood.

Local conditions

According to the advisory note, Gard's local correspondent Cariconsult has advised that there are no independent testing facilities for moisture content and no Competent Authority in the region with the requisite skills to assess the suitability of a cargo for safe shipment, which makes independent confirmation by ship's interests difficult and time-consuming. Therefore "can tests" are frequently performed as a check test prior to and during loading. It is critical to remember that can tests cannot confirm if a cargo is safe; they can only give an indication that a cargo may be unsafe and additional laboratory testing is required before the cargo is accepted for loading.

Gard has been advised by materials experts Roxburgh that fine particulate bauxite, when approaching the point

of saturation, will have a natural tendency to retain water. As such, a can test that does not expel water is unlikely to raise any concerns for a ship's Master, even when the cargo is potentially dangerously unsafe.

Seasonal rains in Guyana have only made the situation more precarious. Guyana has traditionally had two well-defined rainy seasons in December/January and again in May/June. These seasons have become less predictable recently, and this year the country has had almost continuous rainfall since December 2020. The rain showers are frequent and usually very heavy, and come with little warning, giving crews insufficient time to respond with the closing of hatch covers. Bulk carriers with chain-pull hatch covers are not recommended to trade during the rainy season.



Recommendations

Ship owners are advised to consider the following when loading bauxite in Guyana:

- Bauxite that is primarily a fine-particulate composition (appearance similar to a silty sand) should be assumed to be Group A unless proven otherwise by independent testing and reflected as such in the cargo declaration.
- Group A cargoes must be accompanied by a TML and moisture content test certificate that should reference the specific IMSBC Code test method and/or ISO standard employed.
- Moisture content must be tested within seven days of loading or any time there is a change in moisture condition such as rain.
- Sampling and testing for moisture content must be representative of the cargo as a whole and declared as an average of the cargo. Any variability in the composition of the cargo, finer and/or wetter portions for example, should be sampled and tested for moisture content separately and clearly documented on the Shipper's Declaration on a hold-by-hold basis.
- Any anomalies in the cargo declarations and test certificates should be questioned and brought to the attention of the Club. Red flags include fine particles cargo declared as Group C, Group C cargo with a TML listed, and moisture certificates dated more than seven days before loading.
- The cargo should not be loaded during rain and hatch covers should be closed during rain waiting periods if

partially loaded

- Certain bauxites, such as the low grade washed by-product fines in Guyana, retain moisture remarkably well when increasingly saturated. This means that when a can test is performed on moist material there may be no free moisture visible. This is not a sign the cargo is safe to load.

Gard encourages its Members to have a low threshold for contacting the Club if they are fixed or are considering fixing a bauxite cargo from Guyana, and alert the Club if there are any signs of misdeclaration, fine grained or overly wet cargo. Owners should use caution and be familiar with the IMSBC Code requirements and loss prevention materials.

For more information

Gard Loss Prevention material on bauxite can be found on the Gard website here: <https://tinyurl.com/459t5tje>

*See here: <https://tinyurl.com/zkn2exbk>

Covid-19 pandemic effect

EU ship traffic falls by 10% in 2020

- **Ship traffic decreased overall during 2020, with the cruise industry particularly affected**
- **Imports into the EU from non-EU countries declined by 12.2% over the same period**
- **Share of goods transported by sea in 2020 increased slightly at global level**

According to a statement from the European Maritime Safety Agency (EMSA) on 15 June nearly one in five ships worldwide sails under a European Union (EU) Member State flag, and the EU accounts for approximately one fifth of all global maritime trade.

However, during 2020, overall EU maritime traffic dropped by 10.2% as a result of the COVID-19 pandemic, it is reported.

A statistical overview performed by EMSA reveals cruise ship traffic was the most heavily impacted, with an 86% drop in traffic compared to 2019. However, journeys by vessels such as bulk carriers, chemical tankers, container ships and oil tankers only decreased by approximately 5%.

In addition, EU seaborne trade dropped by 9.3% in 2020, a larger decrease than the global average of 3.6%, and equivalent to a loss of approximately 226 million tonnes of trade handled by EU ports.

Based on a review of Customs data, the most significant decline in maritime trade volumes was in imports into the EU from non-EU countries, which fell by 12.2% in 2020.

Shipping trade between EU Member States was also affected by the pandemic, decreasing by 7.1%.

Sea-borne exports from the EU to non-EU states experienced a lower decrease of 4.3%.

However, the share of all world trade carried by sea in 2020 increased by three percentage points to 88%, as the effects of the pandemic had a greater impact on other modes of transport such as air, road and rail.

The EU Commissioner for Transport, Adina Vălean commented: *'Covid-19 has caused profound disruptions for Europe's shippers, charterers, ship owners, crews, onshore staff and ports, as well as our broader trading patterns and supply chains.'*

'As we focus our efforts on building back better post-pandemic, it is essential for us to have a full picture of the crisis' impact on strategic industries such as shipping so as to guide our policies and lay the foundations for a full and sustainable recovery.'

The Executive Director of EMSA, Maja Markovčić Kostelac, added: *'Maritime transport has proved its resilience throughout the course of the pandemic, keeping vital supply lines open while the world went into lockdown.'*

'Our report shows for the first time the impact that the COVID-19 crisis has had on maritime transport in the EU, and we hope it will inform efforts and decisions at policy level to ensure a full recovery for this vital sector.'

EMSA's report is based on a comprehensive review of available data, including trade volumes and type, cargo freights, maritime traffic data and other shipping indicators.

On Cutty Sark

News has been received from the Royal Museums Greenwich that a new Nannie figurehead has been installed on the famous tea clipper ship, *Cutty Sark*.

In the perilous life of a ship at sea, figureheads were seen as lucky charms: they represented the spirit of the ship, protecting the crew from harsh seas and helping to guide them safely home.



The new Nannie figurehead fitted on the famous tea clipper, Cutty Sark.

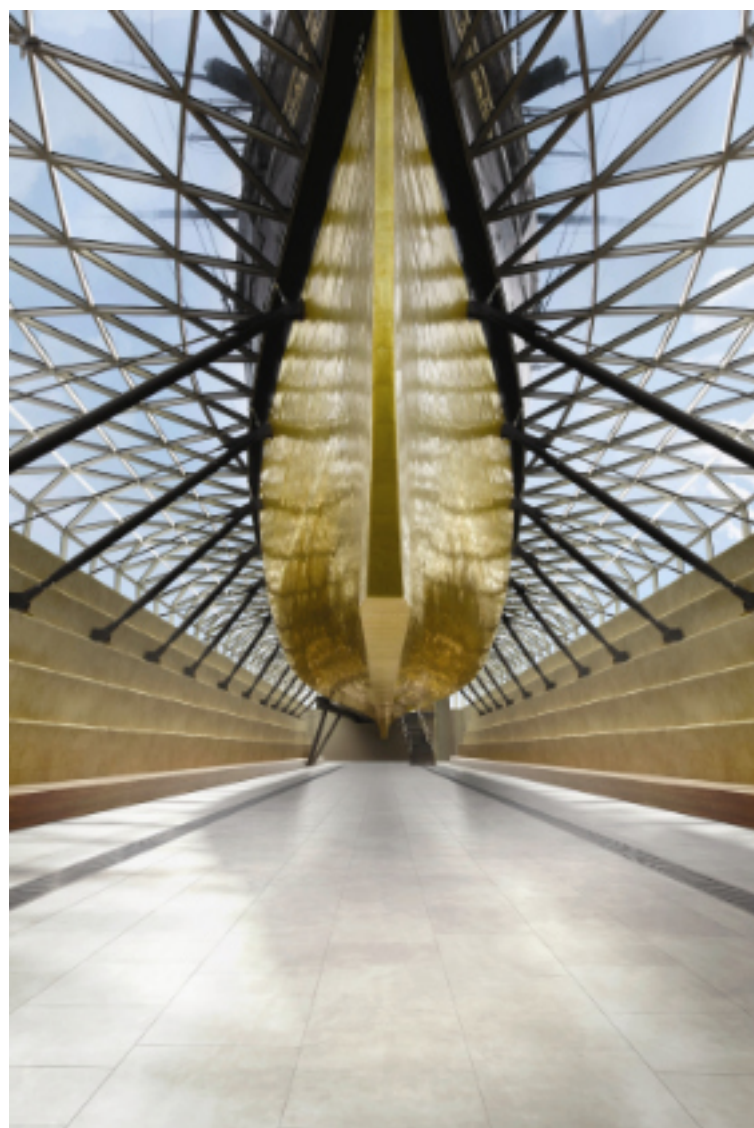
Photo: National Maritime Museum ©.

Rabbie Burns and Nannie

Nannie the figurehead is one of the most recognisable parts of *Cutty Sark*. The name 'Nannie' comes from Tam

O'Shanter, a poem by Robert Burns. The poem also was the inspiration for the name of the ship, *Cutty Sark*. The poem tells the story of Tam the farmer, who encounters a group of witches in Alloway Kirk – including the beautiful witch Nannie. Nannie is scantily clad, dressed only in a 'cutty sark' - an archaic Scottish name for a short nightdress.

Anyone who passes by the ship can see her angry stare and the horse's tail hanging from her hand. In the poem, the witches chase Tam after he calls out to them during a dance. He makes his escape on his horse Meg, but just as he reaches safety Nannie grabs the tail of his horse and pulls it clean off. Therefore, *Cutty Sark's* figurehead is holding a horse's tail.



Cutty Sark sheathed as part of the 2012 restoration.
Photo: National Maritime Museum ©.

The original figurehead, created by the legendary ship's carver Frederick Hellyer, was damaged in a storm in the late 19th century. A new figurehead was installed in 1957 but this figurehead has now also suffered environmental damage and rot. Last year a new figurehead was commissioned, aiming to reflect the beauty of the original ship designs and celebrate the art of ship's carving.

The iconic, historic sailing ship and fastest of her time is now an award-winning visitor attraction in Greenwich, SE London. She was launched on 22 November 1869 and her first revenue-earning voyage was on 16 February 1870. On that first voyage, *Cutty Sark* carried, according to a

commentator at the time: 'large amounts of wine, spirits and beer' and sailed from Shanghai loaded with 1.3 million pounds weight of tea.

A rich history

Cutty Sark is a survivor and has a rich history, full of stories and close quarter situations from the time she was laid down in Dumbarton to her arrival in the London riverside borough of Greenwich where she is preserved today. *Cutty Sark* survived storms during which she lost her rudder on two occasions. There was sale to Portuguese owners, a dismasting in the First World War and reflagging to the Red Ensign in 1922. Then followed a long lay-up and conversion as training ship becoming part of the Thames Nautical Training School at Greenhithe on the London River as a sister of HMS *Worcester*. In 1953 she was handed over to trustees for conversion and display in a purpose-built dry-dock. There was a terrible fire in 2007. Fortunately in the year before that fire, the majority of *Cutty Sark's* original fabric had been removed. While devastating, the fire was nowhere near as destructive as it might have been. Over 90% of the ship's hull structure that is seen today is original to 1869.



Cutty Sark at Falmouth where the ship was laid up in 1922, restored and prepared for her training role on the Thames in 1938.

Photo: National Maritime Museum ©.

Her fine lines – a considerable part of her appeal – are defined by her frames which form part of the vessel's composite construction. This was a shipbuilding technique of which she is an exceptional example and incorporated wooden planking over a wrought iron frame.

Cutty Sark is now displayed in a way that gives access never before possible, visitors may walk beneath the keel. She was reopened by HM The Queen in 2012.

The restoration

The preservation project involved treating *Cutty Sark*'s ironwork and using special paint systems to prevent further decay. Additionally, there has been consolidation of her hull timbers and replacement of props and shores in order to support the hull evenly in her dry dock. Keel, main deck and sheathing were all replaced. To further preserve her, a glass roof was built at the waterline so that everything below was protected from the weather.

Cutty Sark is located in Cutty Sark Gardens a short walk away from Cutty Sark Docklands Light Railway (DLR) station and within walking distance of Royal Museums Greenwich's other sites, the National Maritime Museum, the Queen's House and Royal Observatory Greenwich.

She stands in her dry-dock as a gateway to Greenwich and is a key asset to both the World Heritage Site and the Royal Borough of Greenwich. As a tea clipper, she is tangible evidence of the importance of tea in 19th century trade and cultural life.

Rear Admiral Roy Clare was Director of the National Maritime Museum from 2000 to 2007 and in an interview commented: "*Cutty Sark is the epitome of our maritime history and indelibly associated in the public mind with the seafaring dimension of Britain's former Empire. She is one of London's most internationally famous icons...*"

Commemorating the seafarers of the age of sail

At the stern end of the dry dock in which *Cutty Sark* lies in Greenwich there are three plaques commemorating the sailing ship era, the benefactors who preserve the ship and the British Merchant Navy.

One plaque reads:

Here to commemorate an era the *Cutty Sark* has been preserved as a tribute to the ships and men of the Merchant Navy in the days of sail. They mark our passage as a race of men. Earth will not see such ships as these again.

The centre stone was laid on 3rd June 1954 by HRH The Duke of Edinburgh, Patron of the *Cutty Sark* Preservation Society and acknowledges the generous public subscriptions from all over the world which enabled the berth to be constructed on land made available by the London County Council.

The third plaque reads:

In memory of those whose service in the Merchant Navy helped to enlarge the livelihood of Britain and protect the Freedom of the British Commonwealth of Nations.

Editor's note:

Illustrations in this article have been kindly provided by the National Maritime Museum Greenwich ©.

New vessel brings Furetank to the UN 2050 climate goal

When Furetank's new vessel *Fure Viten* (pictured *Furetank*©) leaves the shipyard, it is best in class globally when it comes to the UN climate goals for shipping. Thanks to gas propulsion and a unique combination of fuel-saving solutions, it reaches a very low EEDI value of 4.65. This means that Furetank's new vessel series already meets the emission targets for 2050.

Furetank reported on 22 June that *Fure Viten* left the Yangzhou shipyard: a 17,999 dwt tanker with a cargo capacity of 20,300 cubic metres. It is a milestone for Swedish Furetank Rederi AB, but also an international flagship event concerning environment and climate.

IMO regulates emissions from new vessels through the EEDI energy efficiency design index, where a lower value means fewer emissions. Today, the requirement for a vessel the size of *Fure Viten* is to reach below 9.37 points, but *Fure Viten* reached a value as low as 4.65 points: the best result achieved in the size segment so far, it was reported.

Lars Höglund, CEO of Furetank commented: '*We will operate the ships we build now for the coming 20 years, so we have put a lot of effort into investigating what is the best possible technology that we can invest in today. Climate change is a reality and we believe that politicians mean what they say. Thus, if we are to survive as a shipping company in the future, we must do our absolute best to reduce our climate and environmental impact.*'

All systems energy-optimized

Fure Viten is the latest vessel in a series of eight vessels so far, out of which Furetank owns four and commercially operates all. The series is designed by Furetank and FKAB Marine Design in collaboration with Wärtsilä, with the aim of reducing fuel consumption as much as possible. Throughout the design and construction process, energy efficiency has been increased and the EEDI value improved.

Höglund added: '*We have developed ships since the 1980s and used our entire experience to optimise every detail. There is not a single system that we haven't improved. This combination of interacting, energy-saving technical solutions is unique.*'

For example, batteries help reduce the use of auxiliary engines, a ducted propeller increases thrust and reduces power requirement, an improved hull shape minimizes drag, and the main engine and shaft generator use variable frequency to increase propeller efficiency and reduce fuel consumption.

Gas propulsion brings great benefits

The eight dual fuel vessels will be operated with LBG (liquefied biogas) or LNG (liquefied natural gas). Gas propulsion provides major climate, environmental and health benefits compared to oil. In combination with the technical optimisations, emissions of climate-affecting carbon dioxide have been reduced by 55% compared to

older vessels and eutrophic nitrogen oxide (NOx) by 86%. Emissions of acidifying sulphur oxide (SOx) and hazardous particles (PM) are known to be completely eliminated.

In conclusion Höglund added: *'The next step will be to operate the ships completely without fossil fuels. We are in the process of securing the supply of larger quantities of biogas within a year or so, through an exclusive agreement with a supplier. My view is that in 2030 we will run these vessels largely on LBG with zero fossil emissions.'*



First in Europe with full shore power

Fure Viten and preceding sister vessel *Fure Vinga* are the first tankers in Europe fully equipped to operate the energy-demanding cargo pumps with 6.6 kV high voltage shore power. This will reduce emissions even further as soon as ports offer the opportunity.

The method is being developed in collaboration with the ports of Gothenburg and Rotterdam, currently in the process of developing the full capacity power connection required to operate the pumps. An important effort, as the emissions in port can account for up to 20% of total emissions from a tanker, in an environment that is often even more sensitive to pollution and noise than the sea.

Reaches UN target for 2050

With the delivery of *Fure Viten*, the average carbon dioxide emissions from Furetank's intermediate fleet have been decreased by 50% compared to 2008. Already today the vessel series fulfils its part of the IMO's total emission target for the world fleet: to halve emissions up to year 2050.

Fure Viten, technical details

Deadweight: 17,999 tons
Load capacity: 20,300 cubic metres
Tanks: 12
Design: Furetank & FKAB Marine Design
Shipyard: China Merchants Jinling Shipyard Dingheng Co Ltd.
Commercial manager: Furetank Chartering within the Gothia Tanker Alliance
Flag: Sweden
Ice class: 1A
Fuels: Dual fuel, LBG / LNG
EEDI value: 4.65

Ship film diary

Readers wishing to join *Fure Viten*'s maiden voyage are invited to follow the ship diary where after time spent in quarantine in a Beijing hotel the crew report on the delivery voyage from the shipyard in China to Europe: <https://tinyurl.com/426tvumf>

About Furetank

Furetank, based on Donsö in the Gothenburg archipelago, is a Swedish, family-owned shipping company active in tanker shipping since the early 1950s. Furetank operates nine owned vessels and is a founding member of the Gothia Tanker Alliance, a market platform for small and intermediate product tankers, operating 40 vessels in European waters. We are not a giant but a leader – continuously striving to adopt green solutions for environment and climate.

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Oh, what an appropriate name – Wine Trader

Story by Jay Gates. Pictures by Dockrat

On 16 June at 1800 the small chemical tanker *Wine Trader* (IMO 8808707) arrived at Cape Town from Douala in Cameroon, and went directly to anchor.

There is no surprise that a tanker initially goes to anchor, as the Tanker Berths at Cape Town have been extremely busy of late, and most tankers go to anchor to await the next available berth to become available.



Wine Trader arriving in port at Cape Town from Douala in the Cameroon.

On 19 June at 1600 *Wine Trader* left the Table Bay anchorage and proceeded not to the tanker berths, but straight to C berth in the Duncan Dock.

As Lewis Carroll's Alice in Wonderland did say, 'curiouser and curiouser'. It is only when you digest her name that things start to make some sense as to why she is in Cape Town, and why she has gone to the fruit terminal.



The reefer vessel Wine Trader is manoeuvring towards taking a berth in Cape Town's Duncan Dock.

It is an interesting fact that South Africa exports more wine in bulk, than it does in bottles. In fact, bulk wine exports account for around two thirds, or just over 65%, of total exported volume. This accounts for between 420 and 450 million litres of wine per annum, which is about 50% of total wine production in South Africa. With the United Kingdom being the largest export market, and also the fastest growing export market, with 23% of all bulk wine exports heading for the UK, or around 83 million litres of wine.



Now alongside at C Berth, Wine Trader will soon commence taking on her cargo of bulk wine.

So it no surprise that *Wine Trader* arrived in Cape Town to load a cargo 28.5 million litres of bulk Wine Spirit, of three different cultivars, coming from the Olifants River wine region, and led by the Klawer Wine Cellars, near Vredendal. The loading will be from bulk wine road tankers, of which a fleet of 50 of them are each expected to make three round trips, or a total of 150 tankers, required to load the wine cargo into the vessel.

About Wine Trader

Built in 1989 by Verolme Scheepswerf at Heusden in Holland, *Wine Trader*, was lengthened to 118 metres in length in 1998, and her deadweight increased from 5,098 tons to her present 6,259 tons. She is powered by a single Wärtsilä 9R32D 9 cylinder 4 stroke main engine providing 4,589 bhp (3,375 kW) to give her a service speed of 15 knots. She has a total of 20 cargo tanks, with a cargo carrying capacity of 6,384 m3.



Tanker lorries dedicated to handling this kind of cargo – 50 of them – will begin a shuttle service from the estates to the dockside – the equivalent of 150 round trips.

Owned and operated by Sicilnavi Srl, and managed by Sicilship Srl, both of Palermo in Italy, *Wine Trader* is not on her first voyage to South Africa as she made a previous voyage from Varna in Bulgaria, and Palermo in Sicily, to Durban, arriving on 4 March 2018 and proceeded to number 4 berth at the Island View Terminal.

On 1 November 2010, *Wine Trader* suffered a serious engine room fire when alongside at the Petroleum Dock at Maasluis in Holland. One of her generators caught fire, and the ensuing fire raged for over two hours before it was brought under control. The local emergency services provided two special marine firefighting teams, and the port authority provided four firefighting boats to assist in the operation to put out the fire.

Editor's note:

This item was first published on 21 June in www.africaports.co.za and appears here by kind permission of the Editor, Africa Ports & Ships, the author Jay Gates and the photographer Dockrat.

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Gulf of Guinea anti-piracy Declaration

MHSS signs

It was reported on 24 June that Mental Health Support Solutions (MHSS) had committed to helping suppress piracy in West African waters and to aiding seafarers caught in pirate attacks by signing the Gulf of Guinea Declaration.

The company, which provides round the clock, year in year out professional mental health support and guidance across the maritime sector, is one of more than 120 businesses, organisations and flag states to sign the declaration since its launch in May 2021.

BIMCO – the world's largest shipping association – introduced the declaration, which calls for states around the globe to assist in cutting the number of pirate attacks by at least 80% by 2023. The Gulf of Guinea accounted for 95% of all seafarers (135) kidnapped from ships by pirates in 2020.

In a statement, BIMCO said it might only take two small frigates with helicopters and one maritime patrol aircraft to suppress piracy in the region. It also called for international states to *'provide the necessary assets on a rotation basis'* and for African states to assist with logistics and prosecuting arrested pirates.

Christian Ayerst, CEO of MHSS, said signing the declaration was a commitment to helping crew members suffering from stress, anxiety and other mental health conditions following a pirate attack. He stated: *We fully support the Gulf of Guinea Declaration and are proud to be involved.*

'It is so important that the people at the centre of these terrible events are properly cared for by professionals as well as their friends and families. MHSS will do anything it can to support anyone affected by piracy at sea.'

Ayerst added that MHSS was launching a rapid response programme to support shipping companies and individuals affected by piracy. *'We will reach out to organisations impacted by these challenges. After introducing ourselves, we will invite them for a free call to discuss what they've gone through, talk about the after-effects they may experience and provide high-level guidance on the measures they can take to deal with any psychological issues.'*

Piracy can have a severe impact on seafarers' mental health both during and after the ordeal, according to Charles Watkins, Managing Director and Clinical Psychologist at MHSS.

He commented further: *'The plundering, hijacking or detention of a ship always has a devastating and lasting impression on all the people involved. Kidnapped crew returning safely are often in need of psychological first aid, but the crew left behind on the vessel must be given the same level of care.'*

About Mental Health Support Solutions (MHSS)

With a deep and comprehensive understanding of the maritime industry, the MHSS qualified team of psychologists are here to professionally support and provide solutions to individuals and companies alike.

To be effective, and prevent further possible harm, advice and support must be provided by professional and qualified practitioners. Adopting a proactive, tailored and holistic approach, MHSS professional teams have supported some of the largest international vessel owners, managers and operators worldwide, as well as countless individual crew members and employees.

For more information about MHSS and its services readers are invited to see here:

<https://www.mentalhealth-support.com>

From the IFSMA office

Repatriation for a Captain who died on his vessel

An unusual situation has arisen which would not normally cause a problem, however the Covid-19 pandemic has changed that.

Our Romanian Association are supporting Captain Dan Sandu's family in trying to arrange for the repatriation of Captain Sandu from his vessel *MV Vantage Wave* under the Liberian flag.



Despite some nations declaring seafarers as key workers the situation can still be very difficult for seafarers. There are several cases we have heard about where seafarers have died on board in service, including another Captain on the *MV Ital Libera*.

Be assured that efforts are underway to solve this problem.

IFSMA Newsletters

As mentioned in the Secretary General's Report on page 2 we always need articles from members that would be of interest to your fellow Shipmasters. We are happy to adjust the English as necessary.

Other than more articles needed from members, have we got the content right? What subjects would you like to see more of or less of? Do let us know to hq@ifsma.org.