

Number 54, July 2022

# IFSMA

## NEWSLETTER

The Shipmasters' International Voice



*NOAA research vessels are required to  
deploy workboats with scientific crew  
in variable sea states.*

*See page 17*



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Readers are reminded that the opinions expressed in the IFSMA Newsletter are those of the author and not necessarily in accord with IFSMA policy.

## Secretary General's Report

This has been a very busy month for the Secretariat with three weeks of IMO Virtual meetings of the Marine Environment and Protection Committee and the Navigation, Communications and Search and Rescue Sub-Committee. Whilst these meetings are now a hybrid variety where face to face contact is starting to happen again at the IMO, the meeting itself is still virtual with us all participating on our own computers.

Throughout July, IMO will be trialling a new hybrid system which it is hoped will permit us to have a normal meeting at the IMO with those unable to attend to join in virtually on a large screen and take part as normal. If the trial is successful, it is expected this will be brought into operation in September. This would allow full daytime meetings and then start dealing with some real International Work.

We also were able to hold a virtual Executive Council Meeting where it was decided to give the approval to a new Shipmasters' Legal Protection Insurance Scheme, exclusive to IFSMA Members, which we have been working on with a broker and an underwriter based at Lloyd's of London for several years. This hard work has now reached fruition and I will be publishing this to our eligible members who have access to UK insurance schemes at the end of this month. I am very excited by this and will let you know as soon as the policy and process by EXCO has been agreed.

I hope you find the articles we spend so much time putting together useful, but it would be good if we could get more input from our shipmasters at sea. Please write in and let us know what is going on out there.

With fair winds and a following sea.

Jim Scorer

## From the News Editor

At the 13<sup>th</sup> IALA General Assembly of 2018 it was decided to establish the World Marine Aids to Navigation Day (World Marine AtoN Day) on 1 July each year.



This considered that the date commemorated the creation of IALA in 1957. The principal objective of the day is to promote greater awareness of IALA and its work by bringing to the attention of the wider public the role of



marine aids to navigation and the significance of IALA's technical work in enhancing the safety of navigation worldwide.

The Bulgarian Ports Infrastructure Company hosted the main event for World MATON Day 2022 on 1 July with a series of events at the International Conference Centre in the port city of Burgas coupled with a visit to St Anastasia Lighthouse and Museum.



In Chile the marine aids to navigation service organised a webinar for Spanish speaking countries that day and parallel events were reported as planned around the globe with a share of photographs of marine aids to navigation facilitated throughout the day through social media. In the US Coast Guard staff past and present were reminded of their Service's role in navigational safety and environmental protection.

An historical film of the origins of lighthouses in Bulgarian waters, *Light in Infinity* is available here: <http://www.bgports.bg/en/videos?p=2>

Here will be found a series of photographs showing products by Almarin of Spain, IALA Industrial Member and manufacturer of aids to navigation.

We at IFSMA raise a glass to the worldwide membership of IALA and to those who design, implement and maintain their aids to navigation.

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## The IMO Digest

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

Illustrations per [www.imo.org](http://www.imo.org) ©

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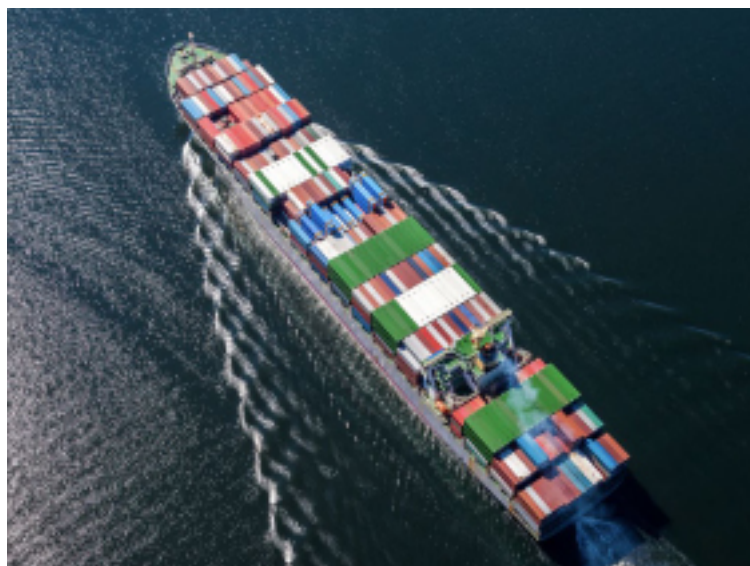
## Lowering containership emissions through Just In Time arrivals

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Just In Time (JIT) arrivals allow ships to optimise speed during their voyage to arrive in port when berth, fairway and nautical services are available.

Containerships can reduce fuel consumption and resulting carbon dioxide emissions by 14% on a per voyage basis using JIT arrival, according to a new study<sup>1</sup>, commissioned by the IMO-Norway GreenVoyage2050's Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA).

JIT is an important tool that can contribute to a ship attaining its required carbon intensity indicator (CII) and associated CII rating in accordance with IMO's short-term GHG reduction measure, which will enter into force later this year.



JIT can be taken up, together with other operational measures, in the enhanced Ship Energy Efficiency Management Plan (SEEMP) which will play a central role in the implementation of IMO's recent energy efficiency measures.

This latest study, undertaken by MarineTraffic and Energy and Environmental Research Associates (EERA), explores the global implementation of JIT in the container sector. Using AIS data from the calendar year 2019 (pre-pandemic), the impact of JIT on fuel consumption and emissions was assessed by optimizing all voyages in three scenarios:

1. Over the entire voyage,
2. Over the last 24 hours, and
3. Over the last 12 hours.

The results show that while optimizing speed over the entire duration of a voyage offers the greatest saving opportunity (displaying a mean fuel saving per voyage of 14.16%), there were benefits in all scenarios with savings of 5.90% (24 hours scenario) and 4.23% (12 hours scenario), respectively. This indicates that implementing JIT over the last 12 hours of a voyage can already greatly contribute to fuels and emissions savings.

To quote Captain Andreas M van der Wurff, Port Optimisation Manager at A P Moller-Maersk and Chair of the Low Carbon GIA Ship-Port Interface workstream: *'In fighting climate change, global shipping has a steep mountain to climb, and we need to pull all levers to deliver in line with the Paris Agreement. The study underlines that while we work to accelerate and scale the availability of the future green fuels, in the short-term significant emissions reductions can be achieved by bringing vessels, terminals and ports together to exchange standardized data and facilitate Just In Time arrivals.'*

The Low Carbon GIA is a public-private partnership with the aim to develop innovative solutions to address common barriers to decarbonizing the shipping sector. It has been actively exploring the concept of JIT through

various research projects and several industry stakeholder roundtables. In 2020, it published the *Just In Time Arrival Guide – Potential Barriers and Solutions*<sup>2</sup>, providing guidance to stakeholders towards the implementation of JIT Arrivals.

The Low Carbon GIA was established in 2017 under the framework of the GEF-UNDP-IMO GloMEEP Project and now continues to operate under the framework of IMO-Norway GreenVoyage2050 Project.

<sup>1</sup> <https://tinyurl.com/y4cyyj49>

<sup>2</sup> <https://tinyurl.com/yt34373k>

## IMO-Norway GreenVoyage2050 project extended

The IMO-Norway GreenVoyage2050 project, which provides support to developing countries to reduce Greenhouse Gas (GHG) emissions from ships, has been extended to December 2023. Phase I of the project was scheduled to end on 19 May 2022 but was granted an extension by the Government of Norway in response to the challenges posed by the Covid-19 pandemic. This was reported by IMO early in June.

Sveinung Oftedal, Specialist Director of the Norwegian Ministry of Climate and Environment and Chair of the IMO Intersessional Working Group on Reduction of GHG Emissions from Ships commented: *‘Developing countries have been particularly impacted by a series of events such as the global pandemic, catastrophic incidents caused by climate change, and increasing food prices.*



*‘In such difficult times, with extensive struggle to resolve these urgent crises, it is also important to avoid limiting developing countries’ ability to rise to the ongoing challenge to develop climate-resilient shipping.*

*‘The extension of the IMO-Norway GreenVoyage2050 project to the end of 2023 will ensure that these countries receive the necessary support and resources to make progress towards meeting their emission reduction targets.’*

Jose Matheickal Chief of IMO’s Department of Partnerships and Projects added: *‘I am so pleased that Norway has approved the extension of the project to the end of 2023, giving us additional time to ensure that developing countries are continued to be supported in the maritime decarbonisation transition.*

*‘As recent discussions at MEPC demonstrate, this is a complex undertaking, but one that is necessary and gathering substantial momentum. The timely support from Norway will allow us to build on the significant progress already made and incorporate relevant advances in knowledge, technology and strategy, propelling GreenVoyage2050 further.’*

## Help to SIDS

The GreenVoyage2050 project, launched in May 2019, helps developing countries, including several Small Island Developing States (SIDS) meet their commitments to relevant climate change and energy efficiency goals for international shipping. These include implementation of the Initial IMO GHG Strategy, which aims to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008.

## Priorities

The project is working with twelve pilot countries from five high priority regions (Asia, Africa, Black Sea / Caspian Sea, Latin America and Pacific).

Current focus is on providing support for the creation of policy frameworks and National Action Plans (NAPs) to address GHG emissions from ships. It is reported that the project is working with partnering countries on the adoption of green technologies through the identification, development and implementation of pilot projects. The intention is that work in the pilot countries will spur action throughout the respective regions.

## Global Industry Alliance

GreenVoyage2050 also hosts the Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA), which brings together leading ship owners and operators, classification societies, engine and technology builders and suppliers, big data providers, oil companies and ports. The Low Carbon GIA offers a platform for stakeholders to collectively identify and develop innovative solutions to address common barriers to the uptake and implementation of energy efficiency technologies, operational best practices and alternative low- and zero-carbon fuels.

## Twelve countries participating

The countries participating in Phase I of the GreenVoyage2050 project are: Azerbaijan, Belize, China, Cook Islands, Ecuador, Georgia, India, Kenya, Malaysia, Solomon Islands, South Africa, and Sri Lanka.



## Eastern and Southern Africa

### Women's opportunities in the Maritime Sector

The Association for Women in the Maritime Sector in Eastern and Southern Africa region (WOMESA) celebrated the IMO International Day for Women in Maritime in the margins of its tenth annual conference and workshop in Kisumu County, Kenya held from 25-27 May. The event reported by the IMO media service in the last week of May concerned Women in Maritime: Opportunities and Milestones Achieved and took stock of WOMESA's activities since its establishment by IMO in 2007.

#### Mentorship and targeted programmes

This conference provided the opportunity for 70 delegates from 16 member countries of the association in Eastern and Southern Africa, cutting across the ports and shipping sectors, to examine the challenges and opportunities available to women in the region in maritime, including at leadership levels. Participants emphasised the need for mentorship and targeted programmes to encourage the younger generations to take up maritime professions.

#### UN Office Nairobi

Mr Xiaojie Zhang, Director Technical Cooperation Division took the opportunity to pay courtesy visits to Mr James Macharia, Kenyan Cabinet Secretary for Transport, as host government of IMO Regional Presence Office, and Mrs. Zainab Hawa Bangura, Director-General of the United Nations Office in Nairobi (UNON).



Under IMO's auspices, eight Women in Maritime Associations (WIMAs) have been established in Africa, Arab States, Asia, the Caribbean, Latin America and the Pacific, covering some 152 countries and dependent territories and some 500 participants.

Access to these regional maritime associations for women provides members with a platform to discuss a number of issues, not just about gender, but also technical issues. These associations go some way to bridging the gap in narrowing some of the institutional barriers facing women who enter the maritime industry.

To read more readers are invited to see here: <https://tinyurl.com/yjcshvef>

## IMO MEPC 6-10 June 2022

### Cutting ships' GHG emissions - working towards revised strategy

From 6 to 10 June the 78<sup>th</sup> session of the IMO Marine Environment Protection Committee, MEPC 78, was held at IMO HQ in London.

IMO's Marine Environment Protection Committee has reiterated its commitment to review and strengthen the IMO Initial Strategy on the reduction of GHG emissions from shipping, with a view to adopting a revised strategy in mid-2023.

MEPC 78 made further progress with the discussions towards the revision of the Initial GHG Strategy, as initiated during the last session (MEPC 77). The revision will take into account the commitment to strengthen the levels of ambition of the Initial Strategy and the needs of developing States, in particular small island developing States (SIDS) and least developed countries (LDCs).

Further work will continue in an intersessional GHG working group (ISWG-GHG 13) before the next session (MEPC 79, 12-16 December 2022) and further sessions of the working group, including two meetings of intersessional GHG working group are planned prior to MEPC 80 in order to keep up the momentum.

### Developing a basket of mid-term GHG reduction measures

The MEPC noted the progress made by the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 12) in advancing towards the further development of a 'basket of candidate mid-term measures' – integrating various technical elements (for example, a GHG fuel standard and/or enhancement of IMO's carbon intensity measures) and carbon pricing elements (for example, a market-based measure).

The MEPC noted the need for additional information on the proposed mid-term measures. It encouraged proponents of measures to work together inter-sessionally with a view to exploring how different elements of these proposals could be combined in the context of a basket of mid-term GHG reduction measures. Member States and international organizations were invited to submit new documents to a future session of ISWG-GHG, including refined proposals to that purpose.

The intersessional working group (ISWG-GHG 13) will further consider the proposed measures.

### Guidelines adopted to support short-term measure

The MEPC adopted a series of guidelines to support the implementation of the short-term measure to reduce ships' carbon intensity in accordance with the timelines set out in the Initial IMO GHG Strategy. The short-term measure enters into force on 1 November 2022 and introduces the

Energy Efficiency Existing Ship Index (EEXI); the annual operational carbon intensity indicator (CII) rating and an enhanced Ship Energy Efficiency Management Plan (SEEMP). The guidelines include those relating to method of calculation of the EEXI, the revised SEEMP and possible correction factors for CII.

The MEPC also approved draft amendments to appendix IX of MARPOL Annex VI on the reporting of EEXI and CII values to the IMO Data Collection System (DCS). The Committee further agreed to include a new workstream on further revision of the IMO DCS in the agenda of ISWG-GHG 13.



Meanwhile, the intersessional working group (ISWG-GHG 13) is also instructed to complete the lessons-learned exercise of the comprehensive impact assessment of the short-term measure, and in particular finalize the review of the Procedure for assessing impacts on States of candidate measures (MEPC.1/Circ.885), to be approved by MEPC 79.

### **Development of life-cycle guidelines**

The MEPC noted the discussion in the ISWG -GHG 11 on the progress made in the development of draft guidelines on lifecycle GHG/carbon intensity for marine fuels (LCA guidelines) and established a correspondence group on marine fuel lifecycle GHG analysis to further the work. The correspondence group will submit an interim report to MEPC 79, and final draft guidelines to be adopted by MEPC 80. The LCA guidelines will allow for a Well-to-Wake calculation, including Well-to-Tank and Tank-to-Wake emission factors, of total GHG emissions related to the production and use of alternative marine fuels.

### **Mediterranean Sea Emission Control Area for Sulphur Oxides approved**

The MEPC agreed to designate the entire Mediterranean Sea as an emission control area, meaning that ships will – from 2025 – have to comply with more stringent controls on sulphur oxide emissions. In a SOx-ECA, the limit for sulphur in fuel oil used on board ships is 0.10% mass by mass (m/m), while outside these areas the limit is 0.50% m/m.

The MEPC approved proposed amendments to MARPOL Annex VI, with a view to adoption at MEPC 79, which will designate the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (SOx-ECA) and particulate matter. The amendment could enter into force in mid-2024, with the new limit taking effect from 2025.

There are currently four designated SOx-ECAs worldwide: the Baltic Sea area; the North Sea area; the North American area (covering designated coastal areas off the United States and Canada); and the United States Caribbean Sea area (around Puerto Rico and the United States Virgin Islands).

### **BWM Convention experience-building phase and application**

The Ballast Water Management Convention (BWM) has been in force since 2017 and aims to prevent the spread of invasive aquatic species in ballast water. In 2017, MEPC 71 established the experience-building phase (EBP) associated with the BWM Convention (resolution MEPC.290(71)), in order to carry out a systematic and evidence-based review of the BWM Convention, potentially leading to review of the Convention and development of a package of amendments. Following consideration of the data analysis report on the EBP, the MEPC agreed in principle to develop a BWM Convention Review Plan (CRP) and established a Correspondence Group on Review of the BWM Convention to finalize the CRP.

The MEPC also approved revised Guidance on methodologies that may be used for enumerating viable organisms for type approval of ballast water management systems (BWM.2/Circ.61/Rev.1), and guidelines for re-evaluations in cases where modifications have been made to a ballast water management system, for inclusion as a new chapter 12 in the revised Methodology for information gathering and conduct of work of the GESAMP-Ballast Water Working Group (BWM.2/Circ.13/Rev.5).

### **Discharge water from exhaust gas cleaning systems (EGCS) – guidelines approved**

IMO's Sub-Committee on Prevention of Pollution (PPR) has been considering issues related to discharge from exhaust gas cleaning systems (EGCS). The MEPC approved:

- MEPC Circular on 2022 Guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems, to provide information on recommended methodology for risk and impact assessments that Member States should follow when considering local or regional regulations to protect the sensitive waters/environment from the discharge water from EGCS.
- MEPC Circular on 2022 Guidance regarding the delivery of EGCS residues to port reception facilities, providing best practices intended to assist both ship operators and port States in assuring the proper management and disposal of EGCS residues and stored discharge water from EGCSs into port reception facilities.

In 2021, the MEPC adopted the updated Guidelines for exhaust gas cleaning systems (MEPC.340(77)), which specify the criteria for the testing, survey, certification and verification of EGCS as well as discharge water quality criteria.



## **Fuel flashpoint in Bunker delivery note – amendments approved**

The MEPC approved draft amendments to appendix V of MARPOL Annex VI, for adoption by MEPC 79, to include flashpoint of fuel oil or a statement that the flashpoint has been measured at or above 70°C as mandatory information in the bunker delivery note (BDN).

## **Marine litter: Mandatory garbage record books for smaller ships approved**

The MEPC approved draft amendments to MARPOL Annex V, to make the Garbage Record Book mandatory also for ships of 100 gross tonnage and above and less than 400 gross tonnage, with a view to subsequent adoption.

## **Marine litter: marking of fishing gear**

The MEPC noted the ongoing work in the PPR Sub-Committee on marking of fishing gear, which has been identified as a key action in order to reduce marine plastic litter from lost, abandoned and otherwise discarded fishing gear.



Following discussion, the MEPC instructed the Sub-Committee to develop draft amendments to MARPOL Annex V and associated guidelines to make the marking of fishing gear mandatory, using a goal-based approach.

As a short-term measure, the Committee instructed the PPR Sub-Committee to develop an appropriate MEPC circular to promote the implementation of fishing gear marking systems and the FAO Voluntary Guidelines for the Marking of Fishing Gear.

In 2021, MEPC 77 adopted the Strategy to address marine plastic litter from ships, which sets out the following outcomes as key goals: reduction of marine plastic litter generated from, and retrieved by, fishing vessels; reduction of shipping's contribution to marine plastic litter; and improvement of the effectiveness of port reception and facilities and treatment in reducing marine plastic litter. Actions have been agreed, to be completed

by 2025, which relate to all ships, including fishing vessels. The action plan supports IMO's commitment to meeting the targets set in the UN 2030 Sustainable Development Goal 14 (SDG 14) on the oceans.

GloLitter Partnerships, a project between the Government of Norway, IMO and FAO is supporting developing countries, including Small Islands Developing States (SIDS) and Least Developed Countries (LDCs), in identifying opportunities for the prevention and reduction of marine litter.

## **Adoption of amendments (watertight doors, GESAMP\* Hazard Evaluation Procedure)**

The MEPC adopted the following amendments to:

- MARPOL Annex I and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) in relation to watertight doors, with an expected entry into force date of 1 January 2024 and 1 July 2024, respectively; and
- MARPOL Annex II, updating the abbreviated legend to the revised GESAMP Hazard Evaluation Procedure, with an expected entry into force date of 1 November 2023.

## **Protecting seas in the Arctic - regional arrangements for port reception facilities**

The MEPC approved, for subsequent adoption, draft amendments to the MARPOL annexes to allow States with ports in the Arctic region to enter into regional arrangements for port reception facilities. The draft amendments relate to MARPOL Annexes I (oil), II (noxious liquid substances), IV (sewage), V (garbage) and VI (air pollution). Related draft amendments to the 2012 Guidelines for the development of a regional reception facility plan (resolution MEPC.221(63)) were also agreed.

## **Revision of the Anti-fouling Systems Convention - guidelines adopted**

The MEPC adopted revised guidelines to support implementation of the AFS Convention, following the adoption, in 2021, of amendments to include controls on the biocide cybutryne. The amendments enter into force on 1 January 2023.

The consequential revisions relate to:

- Guidelines for brief sampling of anti-fouling systems on ships;
- Guidelines for inspection of anti-fouling systems on ships; and
- Guidelines for survey and certification of anti-fouling systems on ships.

## **Unified interpretations of provisions of IMO environment-related conventions approved**

The MEPC approved:

- Unified interpretation of appendix I to the BWM Convention (Form of International Ballast Water Management Certificate), concerning the principal ballast water management method(s) employed on the ship;
- Unified interpretation on the application of regulation 18.3 MARPOL Annex VI to biofuels.
- Revised unified interpretation of paragraph 4.4.6.1 of the NOx Technical Code 2008, to make the interpretation (see MEPC.1/Circ.895) applicable to the "Engine Family" concept under certain circumstances.

**GESAMP is a group of independent scientific experts that provides advice to the UN system on scientific aspects of marine environmental protection.**

Picture captions

*The MEPC agreed to designate the entire Mediterranean Sea as an emission control area.*

## IMO in the Pacific

### Maritime transport costs data in the Pacific

The IMO Secretariat has initiated a project aiming to improve the availability of relevant maritime transport costs data for the Pacific SIDS/Pacific Region with a view to facilitating future assessments of the possible impact on States of potential GHG reduction measures in shipping, including, as appropriate, carbon pricing instruments. This was reported by IMO towards the end of June.



To assist in this it is understood, the project aims to establish interim baselines and to initiate the modelling of the impact on Pacific SIDS of a hypothetical increase in transport costs or change in connectivity patterns. Central to the project's success will be its ability to identify the foundation of a system of continued monitoring and collection of data on maritime transport costs in the Pacific region.

The activity will be implemented by MTCC-Pacific, a centre of expertise established by IMO as part of the Global MTCC Network (GMN) and hosted by the Pacific

Community (SPC) and the Secretariat of the Pacific Regional Environment Programme (SPREP).

To ensure that the outcomes of the project are transparent and not policy prescriptive, a broad range of organizations, institutions and resources with relevant experience and expertise, including UNCTAD, will be involved.

The main outcome of this project will be a study on maritime transport costs data in the Pacific region which is to be submitted to the IMO Secretariat by 1 October 2022.

It is also expected that the project will identify and initiate a possible permanent partnership or structure for the ongoing collection and sharing of maritime transport costs data and other relevant statistics for Pacific SIDS. The project is also expected to enhance the understanding of the determinants of maritime freight rates in the Pacific region.

The project is funded by the IMO GHG-TC Trust Fund details of which will be found here:

<https://tinyurl.com/mufmu8wb>

Interested stakeholders are invited to liaise with the IMO Secretariat for more information here: [ghg@imo.org](mailto:ghg@imo.org)

To read an article on this topic which originally appeared as Article No. 90 (UNCTAD Transport and Trade Facilitation Newsletter N°94 - Second Quarter 2022) readers are invited to see here:

<https://tinyurl.com/yc3n5ezh>

## Combatting micro-plastics, bio-fouling and other wastes

Raising awareness of and combatting ocean pollution caused by micro-plastics, bio-fouling, chemicals and macro-organisms were the focus of the most recent meeting of the IMO's GloFouling Partnership Project's Global Industry Alliance (GIA) for Marine Biosafety. This was reported by the IMO media service on 20 June.

GIA members have noted increasing evidence of biological material, microplastics and chemicals found in wastes generated by in-water cleaning of vessel anti-fouling paints and coatings. This trend in pollution could negatively impact the marine environment if it continues to grow, prompting the GIA to make this an area of future work.

Participants at the hybrid meeting also discussed the ongoing impact of ships' biofouling on Greenhouse Gas Emissions (GHG), and the status of a short documentary video to increase awareness of good biofouling management.

Meeting delegates highlighted the need for greater participation by the ports sector in discussions about bio-fouling. As ports control in-water cleaning of ships on their premises, they are key players in biofouling management and would bring greater expertise and resources to the



work of the GIA for Marine Biosafety. The GIA is actively seeking to recruit new members\* from the ports sector.



Many of the topics discussed at the meeting will be in the spotlight at the second R&D Forum and Exhibition on Biofouling Prevention and Management for Maritime Industries, which will be held in London from 11-14 October 2022.

**For more see here:** <https://tinyurl.com/ydmfd2vj>

The GloFouling Partnerships is an international project led by the IMO to address the transfer of harmful aquatic species through biofouling in some of the developing regions of the world.

\*The GIA works as a platform to bring committed maritime leaders together to support IMO efforts to protect the marine biodiversity and decarbonise shipping. It currently consists of nine members (AkzoNobel, Cleansubsea, Ecosubsea, Hapag-Lloyd, HullWiper, KCC, SoniHull, SLM global and Tas Global) and one association with observer status: the International Association of Oil & Gas Producers (IOGP).

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## IMO in South Africa

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### Prevention of stowaway cases

#### Ratification of the FAL Convention

Stowaway cases are a human tragedy and hamper the economy of the country by increasing transport costs for import and exports flows.

South African government, port and shipping industry representatives attended a national seminar on the prevention of stowaways in Cape Town from 27 to 29 June, organized by the IMO in collaboration with the Department of Transport of South Africa.

Stowaway incidents cause considerable difficulties for shipmasters, shipping companies, ship owners and ship operators in disembarking stowaways from ships into the care of appropriate authorities.

Globally, the number of stowaway incidents in the year February 2020 to February 2021 was 364, with a total 1,050 stowaways. Costs were an estimated \$8.9 million, according to the International Group of P&I Clubs.

### An exchange of views

Participants in the Cape Town seminar exchanged views on stowaway prevention and incidents and discussed the challenges and the further measures needed on board ships and at the main ports of South Africa in order to prevent and deal with stowaway incidents.

It was found that pragmatic solutions for ship owners, masters and crew on board ships are needed and the objective of all stakeholders is to arrive at a holistic and integrated approach on risk management, port security and procedures to facilitate the disembarkation of stowaways. This will reduce the impact of stowaway incidents on trade and the economy of South Africa.

### Widespread representation

Other delegates at the seminar included representatives from the main South African ports and from the United Nations Refugee Agency (UNHCR), International Organization for Migration (IOM), International Standardization Organization (ISO), BIMCO, the International Group of P&I Clubs, the Port Management Association of Eastern and Southern Africa (PMAESA), the United States Coast Guard, the Intergovernmental Standing Committee on Shipping (ISCOS), shipping companies (Maersk and MSC) and P&I correspondents in the country.



An additional two-day national seminar was set to follow on 30 June and 1 July with the main border agencies involved in the clearance of ships in South Africa, in order to gain further understanding of the provisions of the IMO Convention on Facilitation of international maritime traffic, and to support South Africa in its process to ratify the FAL Convention<sup>1</sup>. The aim is to support government agencies in the implementation of the Convention, which, it is understood, is now undergoing the formal ratification process by South Africa.

Participants have been trained in the concept, practical planning and implementation of a Maritime Single Window<sup>2</sup> for ship clearance, a mandatory requirement of the FAL Convention from 2024. This includes identification of challenges involved in digitalizing information exchange in ship-shore activities.

It was reported that these national seminars are funded by IMO's Integrated Technical Cooperation Programme (ITCP).

<sup>1</sup> Per IMO: The Facilitation Committee (FAL) deals with matters related to the facilitation of international maritime traffic, including the arrival, stay and departure of ships, persons and cargo from ports. The Committee also addresses electronic business, including the single window concept, and aims to ensure that the right balance is struck between regulation and the facilitation of international maritime trade.

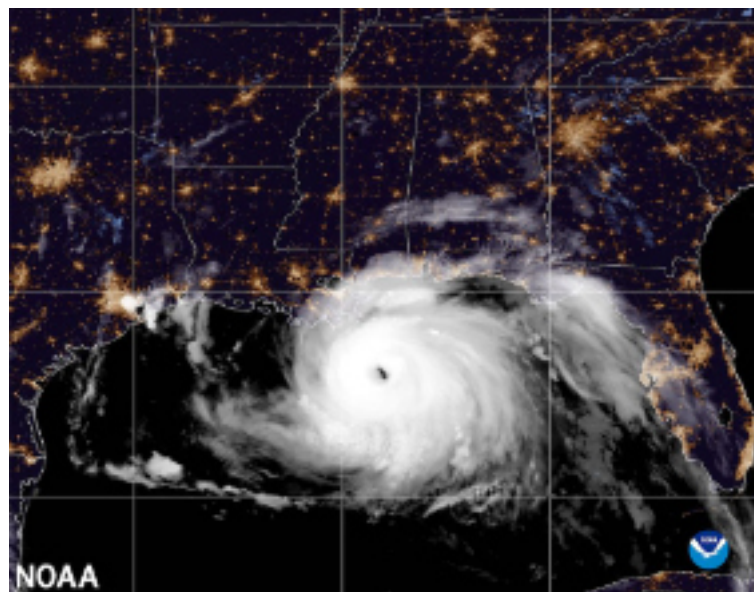
<sup>2</sup> For more see here: <https://tinyurl.com/mv9aj77j>

## The hurricane season

### US Coast Guard urges mariners to stay safe

#### Tropical storm across South Florida, Atlantic Ocean

On 4 June from Miami US Coast Guard District Seven urged mariners to take precautions, heed weather warnings and stay safe as a tropical storm continued to impact South Florida and the Atlantic Ocean.



The official start of hurricane season was 1 June and the USCG warning stated that it was time to prepare for the six-month long hurricane season running to 30 November.

Furthermore, mariners and public alike were warned that it is essential they take proper measures to prepare for the hurricane season before a storm arrives.

Advice included the need to ensure those going afloat have proper equipment, have a hurricane mooring plan or a safe place to store the trailered boat, and monitor the

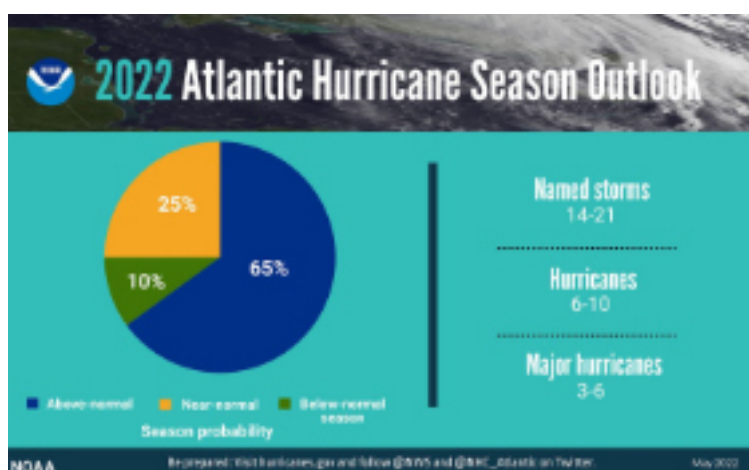
weather and can communicate on VHF-FM Channel 16 prior to a voyage and while on the water.

**Hurricanes and tropical storms can be deadly, and the US Coast Guard's ability to conduct rescues can be diminished or unavailable at the height of a storm.**

### Weather information

Up-to-date weather information can be found at <https://www.weather.gov/>

Mariners finding themselves in an evacuation or flood zone are advised to follow the instructions from local emergency managers, who work closely with federal, state, local, tribal, and territorial agencies and partners. They will provide the latest recommendations based on the threat to the various communities and appropriate safety measures.



### Advice available

Advice can be found here: <https://www.ready.gov/hurricanes> with more information on how to prepare for the hurricane season.

### Ports

Updated port conditions for hurricanes and tropical storms can be found at <https://homeport.uscg.mil/>

### Links to further advice

For more information about hurricanes and hurricane preparedness, readers are invited to visit the websites of the National Oceanic and Atmospheric Administration (NOAA) and the Federal Emergency Management Agency (FEMA) where links can be found indicating hurricane tracks and other updates.

These are available at:

[www.ready.gov/hurricanes](https://www.ready.gov/hurricanes)  
[www.nhc.noaa.gov](https://www.nhc.noaa.gov)  
[www.fema.gov](https://www.fema.gov)



## The Navigator by NI

### Fighting fatigue and tiredness at sea is key focus

Causes of fatigue, how to spot the signs and advice for tackling tiredness at sea are all discussed in detail in the latest edition of *The Navigator*. The free magazine from The Nautical Institute, which is aimed at shipborne navigators around the world, published its thirtieth edition at the beginning of June.

Contents include articles about the causes and signs of fatigue, the effects of tiredness on health and ideas for tackling fatigue and tiredness at sea. There are contributions from the Seafarers' Hospital Society and Royal Institute of Navigation, as well as an interview with a serving cruise ship officer.



David Patraiko, Director of Projects for The Nautical Institute, said: 'A ship is an industrial platform that operates 24/7. There are vibrations and noises to contend with and it is often too hot or too cold.'

*'Demanding watch patterns mean that you do not always get enough continuous sleep, so your body's natural cycle is disrupted. Then, there is the sea itself...'*

*'Do not let fatigue be the norm; lives depend on good decisions so talk about fatigue, seek help if you need it and work out strategies to manage it effectively.'*

The Nautical Institute launched its Navigator Distributor scheme in 2015, encouraging a wider, global distribution of the free, twelve-page magazine to as many professional marine navigators as possible. Anyone interested in finding out how their organisation can take part in the scheme should visit [www.nautinst.org/thenavigator](http://www.nautinst.org/thenavigator) where previous issues available may be downloaded.

*The Navigator* is produced by The Nautical Institute with support from the Royal Institute of Navigation. Sponsored by IFAN and Trinity House, it is available as a free pdf, digital magazine or App via The Nautical Institute's website as above. Printed copies are distributed alongside The Nautical Institute's membership magazine, *Seaways*, as well as through missions and maritime training establishments.

## Enclosed space deaths

### InterManager speaks

As two more workers were reported to have died in an enclosed space in a ship, InterManager hit out at the shipping industry's inadequate reporting of serious and fatal accidents. This was reported at the end of May.

Captain Kuba Szymanski, Secretary General of InterManager, the international trade association for ship and crew managers, commented: *'Another two workers have died this month. They were two shore workers who apparently 'entered the wrong space' on a cargo ship and paid the ultimate price for their mistake.'*

InterManager has been keeping statistics on incidents involving enclosed spaces since 1999, and during this period enclosed spaces have claimed the lives of 104 seafarers and 51 shore workers. However, Captain Szymanski fears these figures could be higher still and says he believes there is under-reporting by shipping authorities.

Szymanski added: *'The shipping industry is very slow in reporting accidents in enclosed spaces, as it also is with lifeboat incidents. Accident reports take ages even for Flag States rated as 'excellent'. The IMO's Global Integrated Shipping Information System (GISIS) database is largely being ignored by Flag States. We have discovered that only 26% of enclosed space accidents were reported through GISIS – which means 74% were not reported at all.'*

*'By not reporting accidents the shipping industry is not giving people the chance to properly investigate, understand and learn from them. This is potentially putting the lives of more seafarers and port workers in danger.'*

Captain Szymanski urged the shipping industry to work harder to address the root causes of enclosed space accidents which InterManager has identified are particularly due to:

- Ship design
- Time pressure on workers
- Contradicting and confusing regulations.

InterManager is currently working with the members of the Human Element Industry Group (HEIG) to identify the biggest risk factors and potential solutions to minimise deaths and injuries in enclosed spaces.

InterManager is the international trade association for the ship management industry and is the only global organisation dedicated to representing the ship management industry. Its members are in-house or third party ship managers, crew managers, or related maritime businesses and organisations.

Collectively InterManager members are involved in the management of more than 5,000 ships and responsible for in excess of 250,000 seafarers. The current President is Mark O'Neil, CEO of Columbia Shipmanagement.

For more information readers are invited to see: [www.intermanager.org](http://www.intermanager.org)

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## Does Canada need a new naval strategy?

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By Paul T Mitchell

**Professor of Defence Studies, Canadian Forces College**

Amid Russia's ongoing assault on Ukraine, nations have started re-evaluating their security policies. Sweden and Finland, for example, are clamouring to join NATO in the face of Russian aggression.

The war is a visible manifestation of the return of great power competition. Both Russia and China are carving out what they see as their natural spheres of interest.

Canada has not been immune to these shifts given the \$8 billion in additional defence funding announced in the recent federal budget. Every military must be capable of meeting its objectives and service levels. Unfortunately, Canada's traditional approach to defence tries to be all things without adequately funding them.

In a world where co-operation has given way to competition and conflict, how will Canada approach the prospect of war?

### National styles of warfare

The idea that nations have particular approaches to war was introduced by British military historian Basil Liddell Hart in his 1932 book *The British Way of War* in which he claimed that sea power was the United Kingdom's natural strategy.

Surrounded by oceans, Britain could take advantage of its navy to both ward off any potential attack as well as choose the manner and place for amphibious assault. Britain needed to only make limited investment in its army, whereas continental powers had to build large and expensive ones.

Other national styles to fighting wars are evident, including in the United States. American historian Russell Weigley

argued that the US style was based on using overwhelming force to crush any opponent.

While subsequent historians have criticized Weigley's assertions, others have noted that the so-called Powell Doctrine largely subscribes to them. Prior to the 1991 Gulf War, General Colin Powell argued that any war America engaged in should be directly related to its national interest, fought with overwhelming force, and had broad public support.

Germans, too, have historically sought quick victories using innovative wars of rapid movement. This approach was dictated by its geographic centrality in Europe, surrounded by potential rivals for power, and the need to avoid fighting a multi-front war.

A country doesn't have to be a major military power to have a way of war. Tiny Lithuania has fewer than three million people and a military of just over 100,000. Its army has no tanks, fighter jets or major naval platforms. If attacked, it will fight a defensive war based on mobility and strong points strengthened by anti-tank missiles and robust artillery.

### Canadian isolation and its 'way of war'

Canada's geographic isolation on the North American continent and friendly relations with the United States might seem to render a way of war entirely unnecessary.

In fact, Canadian defence policy has been focused on just three generic priorities since a 1964 white paper on defence: defending Canada; co-operation on North American defence and contributions to international peace and security.

These general tasks provide little guidance for developing the country's Armed Forces. As historian Desmond Morton observed, Canada remains both '*indefensible and unassailable*,' advanced military capabilities are only required for international contingencies. In the eyes of many Canadians, our isolation makes weaponry like fighter jets largely discretionary.

Many Canadians would likely take umbrage at the suggestion that we need a way of war, especially given the mythology of Canada's peacekeeping tradition. To them, the very notion would be '*un-Canadian*' to its core.

However, a world dominated by great power politics is one that will be decidedly hostile to the interests and values of smaller powers.

### Peacekeeping distrust

Peacekeeping, after all, is reliant on great powers agreeing within the United Nations Security Council. Ukrainian President Volodymyr Zelensky dramatically illustrated the weakness of this arrangement in his recent address to the council:

*'We are dealing with a state that turns the right of veto in the UN Security Council into a right to kill.'*



Russia cynically uses “peacekeepers” in many locations to enforce its own strategic interests, and views the UN’s “responsibility to protect” doctrine, which requires member states to intervene in another’s domestic affairs if human rights are being violated, as sheep’s clothing for regime change.

Even the attitudes of France, the UK and the US towards multilateral institutions — as shown by Brexit, fears of a “Frexit” and anti-NATO stances from within both France and among some American politicians — suggest unilateralism is growing among powerful nations.

Given this context, the recent \$8 billion addition to Canada’s defence budget is unlikely to be the last. Ensuring our military can meet its objectives will require serious contemplation on how we intend to use it.

The days of doing our bit for the British Empire or being part of the NATO team assume that any capability shortfall will be adequately covered by our partners. This policy has resulted in the slow shedding of military capability in Canada over the past several decades.

### **Dangerous assumption**

In a great power world, this is a dangerous assumption that may later be paid for in Canadian blood and treasure. Rather than simply throwing money at our crumbling military, we need to carefully consider Canada’s strategy in this hostile new world, and build it to reflect that approach.

In strategy, geography matters. Canada is isolated, which has been a blessing, but it might become a curse should the US turn hostile to our interests and values.

Like in the UK, oceans are a natural frontier for Canada that can be strengthened by both air and sea power. Land power gives us the ability to intervene directly in causes we must support.

In the future, how we intervene will remain under our discretion. We must do so economically given the burdens of climate change, social welfare and infrastructure renewal.

Simply rebuilding the military we slowly gave up during the Cold War will not address the challenges of the coming era.

**Editor’s note:**

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## **Shipping Industry Suffering from ‘Long COVID’ says INTERCARGO**

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The shipping industry is facing its own version of ‘long Covid’ said INTERCARGO, following warnings received from members.

“Seafarers worldwide continue to face major issues with crew change, port entry and changing vaccination requirements,” says Dimitrios Fafalios, Chairman of INTERCARGO.

“New waves of infection continue to affect ports, and once again we are seeing local authorities creating their own interpretation of the rules.



*Dimitris Fafalios, Chairman of INTERCARGO*

“This is happening today at ports around the world, and governments and administrations seem not to have learned the lessons of the past two years, as they move to a post-COVID agenda.”

INTERCARGO is concerned that the crisis in Ukraine has distracted from the very real shockwaves that are still affecting the maritime sector as a result of the pandemic. In a number of ports globally seafarers are finding access to shore leave restricted, and in some cases are finding it difficult to access non-emergency medical assistance.

The Association urges consideration by national governments at the highest level for the issue to remain at the top of their agenda.

Dimitrios Fafalios says: “The situation is ongoing and requires pan industry commitment. Our efforts to highlight the plight of the seafarer must not stop, and the industry must never consider what is happening to seafarers today in any way normal.”

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## **Shore cables**

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**France: ABB to lead turnkey project for largest shore-to-ship provision**

France’s Port of Toulon, which handles over 1.6 million ferry and cruise passengers annually, has committed to ABB Shore Connection technology at a key stage in its sustainability drive. This was reported by ABB on 8 June.

### **Importance of Toulon**

With around 1,300 yearly calls from ferries and cruise vessels in the heart of the city, the port of Toulon plays an important role in developing the attractiveness of the region for business and tourism. The port is also central to the Zero-smoke stopovers plan by the region of Provence-

Alpes-Côte d'Azur (Région Sud PACA), which aims to electrify the docks of Toulon, Marseille and Nice to enable emission-free stays for vessels<sup>1</sup>.

Shore-to-ship power connections allow ships to turn off diesel generators during port calls. For shipowners, this means savings on fuel and maintenance costs while switching to cleaner and more sustainable energy. Cruise and ferry passengers, as well as local residents benefit not only from cleaner air, but also from less noise and vibrations generated when ships are docked.



*ABB shore connection technology enables emissions-free stays for ferries and cruise ships at Port of Toulon.*

Hubert Falco, President of the Toulon Provence Méditerranée Metropolis commented: *'Toulon is the first Mediterranean port to supply power to all of its docks.'*

*'This is an innovative project built on an intelligent energy flow management system with a unique energy mix. With the support of ABB as well as the Région Sud PACA and our partners, we are significantly improving air quality in the port, while maintaining business activity.'*

*'The shore-to-ship power connection will eliminate more than 80 percent of pollutant emissions. It will also save 9,000 hours of vessels running on diesel annually. For the ferry activity in the city of Toulon alone, this adds up to a reduction in sulphur emissions equivalent to those of 50,000 cars in a year.'*

Frédéric Mestivier, designer and technical director of the power project for the Toulon Provence Méditerranée Metropolis added: *'Technically, this project is developing a new, intelligent smart grid power network using digital technology to manage energy flows from several interconnected sources. The infrastructure makes it possible to optimize overall energy efficiency while limiting the carbon footprint.'*

ABB is leading the consortium selected to manage and execute this turnkey project, with commissioning due in 2023. The ABB provision will be capable of delivering enough energy to cover the needs of three ferries calling to port simultaneously, or one cruise ship.

Vessels will have the possibility of 50 or 60Hz power connections. As part of the consortium, Eiffage

Construction will carry out the civil engineering work, and Fauché will be responsible for installing and connecting the equipment.

Through the innovative design established by the Toulon Provence Méditerranée Metropolis, the system implemented with ABB equipment will have the ability to automatically adjust the energy e-mix to supply vessels through the local power network (Enedis), with solar energy produced from a photovoltaic shelter, as well as an energy storage system made up of lithium batteries.

It is understood that the system will help smooth consumption peaks while allowing the storage of excess solar energy production. It will also be able to use other renewable energy sources such as fuel cells, as they become available.

Jyri Jusslin, Head of Service, ABB Marine & Ports reflected: *'We are honoured to have been selected by Toulon Provence Méditerranée Metropolis to work on this innovative project. We commend the Toulon authorities for grasping this opportunity. It sets a course for a more sustainable future with smart systems that already exist today.'*

### **The French aim: carbon neutrality**

Sustainable transport, including marine and inland vessels, will play an important role in the goal set by France to achieve carbon neutrality by 2050 in accordance with the climate plan announced in 2017.

Worldwide, ferries transport around four billion passengers and 370 million vehicles every year, according to trade association Interferry<sup>2</sup>. The IMO has adopted a strategy to reduce annual emissions by at least 40% by 2030 and 70% by 2050, and the passenger transport is under pressure to achieve these targets.

As a leader in electric shipping and smart port technology, ABB offers comprehensive shore connection comprising state-of-the-art infrastructure both onshore and on board vessels. ABB's shore-to-ship power technology has already been integrated by over 50 ports around the world to support the objective of reducing emissions and striving towards sustainable maritime transport.

### **At ESPO**

In May a meeting between the European Sea Ports Organisation (ESPO) and Interferry agreed a common work programme to promote an environmentally sustainable future for the European ferry business through the provision and use of onshore power supply (OPS).

<sup>1</sup> <https://interferry.com/ferry-industry-facts/>

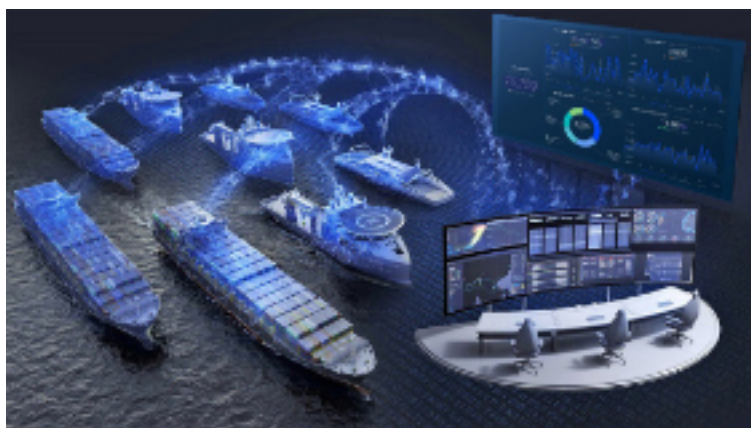
*For previous issues of the IFSMA Newsletter see here: [www.ifsma.org/newsletters.html](http://www.ifsma.org/newsletters.html)*



### A new partnership to advance augmented ship services

Bureau Veritas (BV), one of the world's leading ship classification societies, Laskaridis Shipping and smart tool provider METIS Cyberspace Technology have agreed to embark on a pilot project to develop and apply a new BV SMART 3 Class notation covering the use of augmented data in ship operations. This was reported from BV's HQ in La Défense, Paris, early in June.

Modern ships increasingly use smart systems designed to improve their operational efficiency. As part of its strategy to support maritime digitalization, BV has developed a framework of SMART notations for ships which provide consistent and uniform standards for the 'smart' techniques used to monitor and improve fleet performance.



*BV's new SMART notations provide uniform standards for the digital techniques used to enhance fleet performance.*

In a new Smartship pilot project, BV is working with Laskaridis Shipping and METIS to develop a range of additional class notations adapted to the latest advances in digitalization technology, with a focus on the augmented ship. The SMART 3 notation will also cover ship-to-shore connectivity, remote decision support and remote operations.

Paillette Palaiologou, Vice President for Southeast Europe, Black Sea & Adriatic Zone at Bureau Veritas Marine & Offshore commented: *'Digitalization is transforming the maritime industry, bringing new challenges and opportunities. The new range of notations will help advance the journey towards more digitalized and autonomous ships.'*

Laskaridis Shipping has been at the forefront of applying the advanced real-time monitoring solutions which help to optimize ship efficiency and minimize environmental impacts.

George Christopoulos, Chief Operating Officer, Laskaridis Shipping added: *'...We have committed to being at the forefront of maritime digitalization based on the gains these technologies deliver in operational excellence and enhanced ship sustainability.'*

METIS Cyberspace Technology SA specializes in data acquisition, real-time performance monitoring and

intelligent analytics for the maritime industry, using machine learning and artificial intelligence.

Mike Konstantinidis, Chief Executive Officer, METIS, commented: *'Collaboration in this part of the SMART certification program confirmed BV's recognition of METIS intelligent analytics as fully ready to secure the rewards of shipping's digital future.'*

Drawing on Bureau Veritas expertise in the certification, implementation and survey of data infrastructure, the new SMART 3 class notation is expected to provide added value for owners, shipyards and manufacturers of digital solutions for the maritime industry.

To find out more about Bureau Veritas Marine & Offshore readers are invited to see here:

<https://marine-offshore.bureauveritas.com/>

### About Bureau Veritas

Bureau Veritas is a world leader in laboratory testing, inspection and certification services. Created in 1828, the Group has more than 80,000 employees located in more than 1,600 offices and laboratories around the globe. Bureau Veritas helps its clients improve their performance by offering innovative services.

### About METIS Cyberspace Technology SA

METIS Cyberspace Technology specializes in Data Acquisition, Real-time Performance Monitoring and Intelligent Analytics for the Maritime Industry, based on advanced Machine Learning and Artificial Intelligence techniques.

## USCG – CCG co-operation

Rear Admiral Nathan Moore, US Coast Guard 17<sup>th</sup> District, commander, and Neil O'Rourke, Canadian Coast Guard Arctic Region, assistant commissioner, and their staffs met in Yellowknife and Hay River, Northwest Territories, Canada on 7 / 8 June to discuss joint mission cooperation in the Canada-US trans-boundary waters of the Beaufort Sea portion of the Arctic Ocean.

These collaboration talks included joint planning and operational coordination of maritime search and rescue, mass rescue, navigational safety, waterways management, and marine environmental response.

The two regional leaders signed the newly revised Beaufort Sea Annex to the national Canada-United States Joint Marine Pollution Contingency Plan, toured the Canadian Coast Guard Hay River Base, discussed Arctic maritime risks and response methods, and established a framework for continued bi-national cooperation in the increasingly important Arctic Region.

Canada and the United States are parties to a long-standing bilateral agreement regarding cooperation in protection of natural resources in Canada-U.S. (CAN-US) trans-boundary areas.

Since 1983 the CAN-US Joint Marine Pollution Contingency Plan (JCP) has included five geographic annexes which outline the scope and terms for planning

and coordinating responses to transboundary pollution in the maritime domain. These annexes are the responsibility of the respective regional Coast Guard offices. US Coast Guard District 17 collaborates with Canadian Coast Guard counterparts to maintain and exercise two of the annexes: Annex 4 (Beaufort Sea) and Annex 5 (Dixon Entrance).



*Rear Admiral Nathan Moore, US Coast Guard 17<sup>th</sup> District, commander, and Neil O'Rourke, Canadian Coast Guard Arctic Region, assistant commissioner, holding the officially signed Beaufort Sea Annex, at Hay River Base, Northwest Territories, Canada, 8 June.*

*Photo by Petty Officer 3<sup>rd</sup> Class Alexandria Preston, US Coast Guard District 17. USCG ©.*

The national level JCP was signed once again in August 2017 by the US Coast Guard Commandant and the Commissioner of the Canadian Coast Guard and is also under revision for 2022, it was reported.



*Rear Admiral Nathan Moore, US Coast Guard 17<sup>th</sup> District, commander, and Neil O'Rourke, Canadian Coast Guard Arctic Region, assistant commissioner, holding the officially signed Beaufort Sea Annex, at Hay River Base, Northwest Territories, Canada, 8 June.*

*Photo by Petty Officer 3<sup>rd</sup> Class Alexandria Preston, US Coast Guard District 17. USCG ©.*

## UK MAIB Annual Report 2021

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

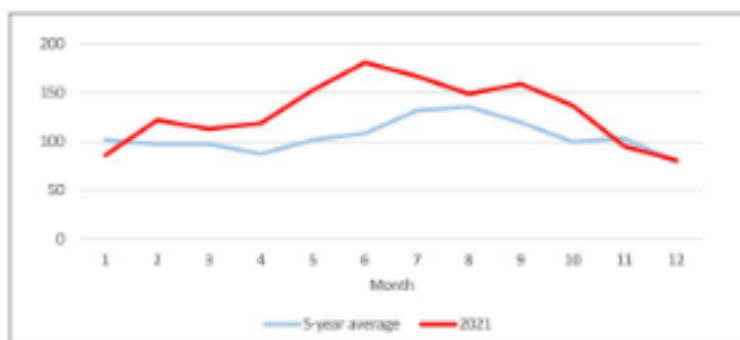
Located in offices in Southampton, the MAIB is a separate, independent branch within the Department for Transport (DfT). The head of the MAIB, the Chief Inspector of Marine Accidents, reports directly to the Secretary of State for Transport.



*Figure 2: Example of a failed pilot ladder*

Writing in the introduction to the document the Chief Inspector of Marine Accidents, Captain Andrew Moll, said: 'I am pleased to introduce MAIB's annual report 2021. 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 lockdown conditions affecting work early in the year. The branch raised 1,530 reports of marine accidents and commenced 22 investigations in 2021.'

The 2021 MAIB Annual Report at 77 pages and issued on 9 June details the work of the branch during 2021 and includes his statement as Chief Inspector of Marine Accidents. There is an overview of accidents reported, a summary of investigations commenced, details of investigation reports published and recommendations issued in 2021 with an update on their status.



*Figure 1: Reported Marine Casualties and Marine Incidents by month to MAIB*

Furthermore updates are provided on open recommendations made in previous years and marine accident statistics.

Highlighted were the problem of loading into dead-end bays in ro-ro vessels and, when published, the MAIB



investigation report will say more about initiatives to further improve vehicle deck safety.

In addition the report emphasised industry meetings concerns about dangerously weighted heaving lines and unsafe pilot ladders. With regard to the latter the MAIB asked that all such incidents, no matter how minor, be reported so a fuller picture of the problems could be gained. In respect of weighted heaving lines, the branch received just sixteen reports; far fewer than anecdotal reporting would suggest, perhaps indicating that this extremely hazardous practice is still being under-reported. Much stronger evidence emerged in terms of pilot ladders.

In 2021, the branch received 194 reports about sub-standard pilot ladders. Of those, 172 pilot ladders (88.6%) were not rigged in compliance with SOLAS guidance, and 22 were observed by the pilot as being in a materially poor condition as the accompanying illustration shows. Fortunately, serious accidents have been rare, but the potential clearly exists and the MAIB will continue to collate statistics in 2022.

#### Editor's note:

**This article is based on material kindly provided by the UK Marine Accident Investigation Branch (MAIB).**

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## Class NK and AiP for Mitsubishi ammonia carrier

It was announced from Tokyo in mid-June that classification society ClassNK had issued an Approval in Principle (AiP) for the conceptual design of an ammonia-ready very large gas carrier (VLGC) developed by Mitsubishi Shipbuilding Co Ltd, of the Mitsubishi Heavy Industries Group.

Ammonia is expected to be used as ship fuel for decarbonisation since it does not emit CO<sub>2</sub> when burned. Meanwhile, taking adequate safety measures are imperative due to its characteristics of being toxic to humans and corrosive against materials, and ClassNK has worked on development of standards and certification.

In 2021, ClassNK published its *Guidelines for Ships Using Alternative Fuels* to minimize the risks related to ammonia-fuelled ships for the ships, crew, and environment by stipulating requirements for installation, controls, and safety devices.

For Mitsubishi Shipbuilding's conceptual design converting LPG-fuelled VLGC's main fuel to ammonia, ClassNK reviewed it based on the Concept Design category of its *Guidelines for Ships Using Alternative Fuels*, Annexe 1. Having verified the conformity to their requirements as a future ammonia-fuelled ship, ClassNK has issued an Approval in Principle (AiP) as an ammonia-ready VLGC.

ClassNK will continue participating in innovative initiatives related to decarbonisation. By incorporating expertise

obtained from the collaborative work with others into its rules and guidelines, ClassNK will support the decarbonisation of the entire industry, it was reported.



*An ammonia-ready very large gas carrier (VLGC).  
(Illustration courtesy of Mitsubishi Shipbuilding Co Ltd. ©)*

### About Approval in Principle (AiP)

At the initial stage of designing or before the specific target ship to be implemented is decided, the design is examined based on the existing regulations such as international conventions and ship classification rules, and an Approval in Principle (AiP) is issued as proof of conformity with these requirements. It also prevents rework of regulatory aspects in the post-process, shortens the examination time at the time of class registration, and can be used as a technical basis for external appeal of the design status.

## US NOAA ocean research vessel newbuilds

### Vestdavit systems

Boat-handling technology company Vestdavit reported in mid-June that it was supplying equipment to support ocean research with the delivery of davit systems for two scientific vessel new builds for the US National Oceanic and Atmospheric Administration (NOAA).

The company has secured a contract with US shipbuilder Thoma-Sea Marine Constructors to supply one of its HN-5000 workboat davits for each of the two vessels, to be named *Oceanographer* and *Discoverer*, under construction for the NOAA at the Louisiana-based fabrication yard.

It is understood that this is the latest in a series of contracts awarded in the ocean research business for Vestdavit, which has previously supplied twenty davit systems to the NOAA in recent years following its first delivery in 1995.

The HN-5000 davits, due for delivery in mid-2023, are designed for launch and recovery of workboats that will carry out diverse missions in various sea states ranging from general oceanographic research and exploration to marine life, climate and ocean ecosystem studies.

### Advanced features

The high-specification features of the HN-5000 make it well-suited to the operating requirements of challenging ocean conditions, enabling workboats to be safely launched and recovered in extreme conditions.

Thoma-Sea's Project Manager Mike Rowsey commented: 'These two vessels will be equipped with advanced technology for scientific research but also require reliable operating equipment to ensure the safety and efficiency of boat missions.'



NOAA research vessels are required to deploy workboats with scientific crew in variable sea states.

Photo: NOAA ©.

### NOAA's tasks

Oceanographer and Discoverer, each with a twenty-strong crew and accommodation for up to twenty-eight scientists will also be required to perform maintenance on buoys and moorings, deploy scientific instruments to collect weather and water column data, and conduct seafloor mapping surveys.

Survey and data collection work will entail operations in different marine environments across the globe spanning shallow coastal and continental shelf waters to the deep ocean.

Oceanographer, which will have Honolulu as its home port, and Discoverer, to be homeported at Rhode Island, represent a significant expansion of the NOAA fleet to facilitate its work to explore and gain vital understanding of the oceans.

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For previous issues of the IFSMA Newsletter see here: [www.ifsma.org/newsletters.html](http://www.ifsma.org/newsletters.html)

## DNV's Hydrogen Forecast to 2050

### A missed opportunity?

It was reported from Høvik, Norway, on 14 June that in its *Hydrogen Forecast to 2050*, DNV predicted the amount of hydrogen in the energy mix will be only 0.5% in 2030 and 5% in 2050. However, to meet the targets of the Paris Agreement, hydrogen uptake would need to triple to meet 15% of energy demand by mid-century.

Remi Eriksen, Group President and CEO of DNV said: *'Hydrogen is essential to decarbonise sectors that cannot be electrified, like aviation, maritime, and high-heat manufacturing and should therefore be prioritized for these sectors.'*

*'Policies do not match hydrogen's importance. They will also need to support the scaling of renewable energy generation and carbon capture and storage as crucial elements in producing low-carbon hydrogen.'*

### Production by electrolysis

According to *Hydrogen Forecast to 2050*, electricity-based green hydrogen – produced by splitting hydrogen from water using electrolysis – will be the dominant form of production by the middle of the century, accounting for 72% of output. This will require a surplus of renewable energy, to power an electrolyser capacity of 3,100 gigawatts. This is more than twice the total installed generation capacity of solar and wind today.

Blue hydrogen – produced from natural gas with emissions captured – has a greater role to play in the shorter term (around 30% of total production in 2030), but its competitiveness will reduce as renewable energy capacity increases and prices drop.

Global spend on producing hydrogen for energy purposes from now until 2050 will be \$6.8trillion, with an additional \$180billion spent on hydrogen pipelines and \$530billion on building and operating ammonia terminals, according to DNV's forecasts.

### Pipeline considerations

Cost considerations will lead to more than 50% of hydrogen pipelines globally being repurposed from natural gas pipelines, as the cost to repurpose pipelines is expected to be just 10-35% of new construction costs. Hydrogen will be transported by pipelines up to medium distances within and between countries, but not between continents.

### Global ammonia trade

It is also reported that global hydrogen trade will also be limited by the high cost of liquefying hydrogen for ship transport and the low energy density of hydrogen. The hydrogen derivative ammonia, which is more stable and can be more readily transported by ship, will be traded globally.

Early uptake of hydrogen will be led by hard-to-abate, high-heat manufacturing processes such as iron and steel production which currently use coal and natural gas.

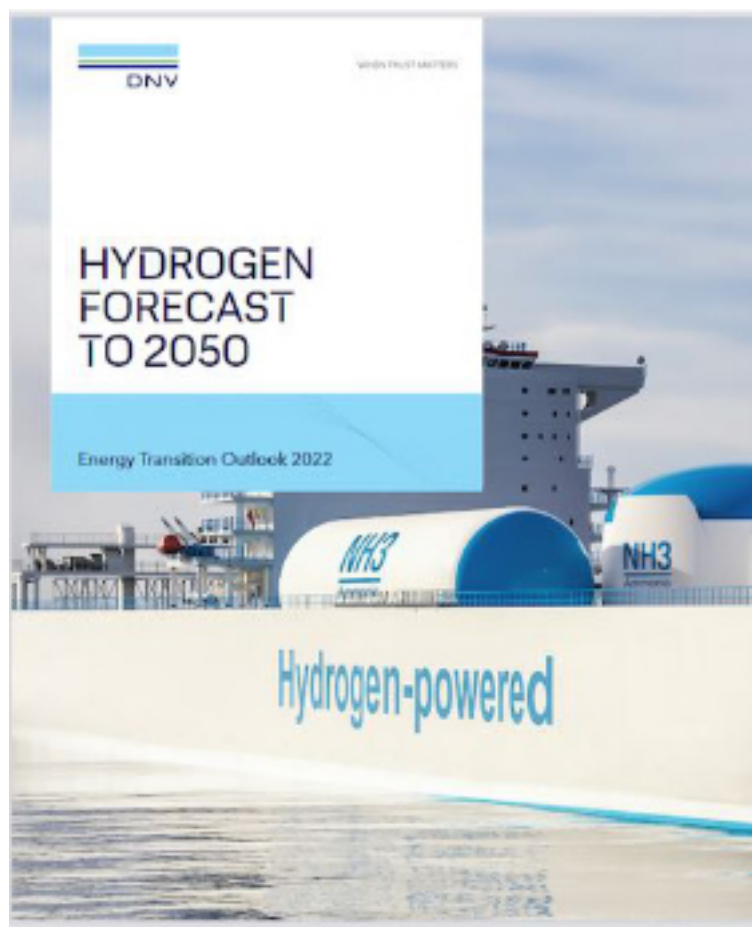


Hydrogen derivatives, such as ammonia and methanol, are key to decarbonising heavy transport such as shipping and aviation, but these fuels will not scale until the 2030s, according to DNV's forecasts.



Illustrations per: [www.dnv.com](http://www.dnv.com). Reproduced with thanks.

DNV's forecast indicates that hydrogen will not see uptake in passenger vehicles, and only limited uptake in power generation. Hydrogen for heating of buildings will not scale globally, but will see early uptake in some regions that already have extensive gas infrastructure.



Eriksen added: 'Scaling hydrogen value chains will require managing safety risk and public acceptance, as well as employing policies to make hydrogen projects competitive and bankable. We need to plan at the level of energy systems, enabling societies to embrace the urgent decarbonization opportunities presented by hydrogen.'

### European leadership

The uptake of hydrogen will differ significantly by region, heavily influenced by policy. Europe is the forerunner with hydrogen set to take 11% of the energy mix by 2050, as enabling policies both kickstart the scaling of hydrogen production and stimulate end-use.

OECD Pacific (hydrogen 8% of energy mix in 2050) and North America (7%) regions also have strategies, targets, and funding pushing the supply-side, but have lower carbon-prices and less concrete targets and policies. Greater China (6%) follows on, recently providing more clarity on funding and hydrogen prospects towards 2035, coupled with an expanding national emissions trading scheme. With Europe these four regions will together consume two-thirds of global hydrogen demand for energy purposes by 2050.

Illustrations per: [www.dnv.com](http://www.dnv.com). Reproduced with thanks.

## Container vessel *Rio De La Plata*\*

### Serious injury to crew member, unmooring, Timaru Port, New Zealand

14 November 2020

### New Zealand Transport Accident Investigation Commission (TAIC) report

A new TAIC report calls for review of safety systems on Singapore-flagged ships; safer installation of mooring winches. A ship's rope handler suffered serious injuries to hand and face, trapped between incoming rope and winch.

#### What happened

A container ship was preparing to leave the Port of Timaru. The forward mooring party's rope handler got dragged into the mooring winch, resulting in serious injuries to their hand and face.

#### Why it happened

This accident happened because the rope handler got too close to the winch and became trapped between the incoming rope and the winch. The three key sets of circumstances were:

- Deviation from the ship's safety system;
- Situational awareness, and
- An equipment installation not optimised for safety.

#### 1) Safety system – MOST IMPORTANT:

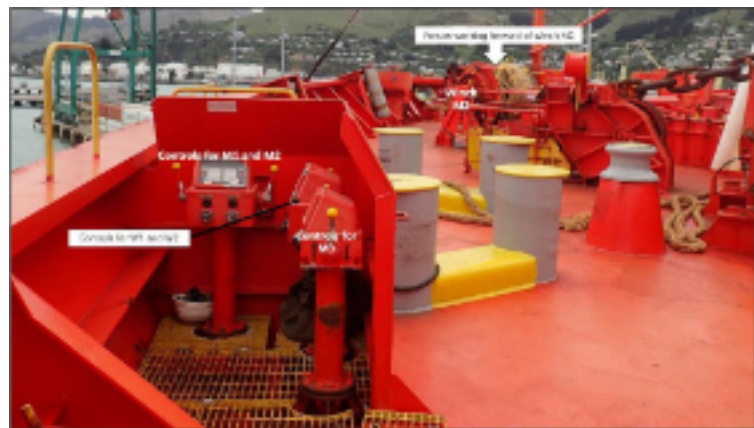
- As with all good safety management systems, this ship's SMS identified mooring operations as a risk and a standard mitigation was to have a forward mooring party of four crew operating two winches.
- But this time the mooring party was one crew member down. The supervisor was also operating the winch, and each rope handler had to both handle the rope with one hand and signal to the supervisor/winch operator with the other.
- With some safety-focused thinking, they could have changed the unmooring plan to use just one winch at a time, enabling one worker to concentrate on handling the rope and another to monitor the rope handler and communicates safely with the winch operator.

## 2) Situational awareness, two issues:

- When controlling the winch, the supervisor lacked an overall view of the whole mooring party – including the rope handler who was on the other side of the winch.
- It is likely the rope handler was concentrating more on communicating with the winch operator, and handling the rope, that they forgot the need to stay clear of the winch.

## 3) Equipment installation:

A 'transverse bar' on the winch (see photo) increased the risk of a worker becoming trapped between the incoming rope and the winch storage drum. It would have been safer if this had been removed at time of installation.



*The port half of the forward mooring deck. Winch operator console is in left foreground. The large mooring winch is in the distance. Shows how the winch operator would have lacked a clear view of the rope handler - who was working on the other side of the winch.*

## Avoiding similar accidents in future

### Lessons

1. **Safety system:** Assess risks AND mitigate them. Measures to control hazards should reduce risk to as low as possible. For example, safety in unmooring and mooring (both equally dangerous) depends on availability of enough crew.
2. **Situational awareness:** It is important that the person in a supervisory role remains an observer and does not take part in the actual work or handling operation.
3. **Equipment installation:** Equipment must be installed and operated as intended by the manufacturer. Deviation from that can increase the risk of serious injury.

### TAIC recommendations

- Safety system and situational awareness: TAIC has recommended that Singapore's Maritime and Port Authority [work to] identify weaknesses in safety management systems and their practical implementation on board vessels under their flag. The Maritime and Port Authority of Singapore has responded positively. (Recommendation 006/22)
- Equipment installation: TAIC has recommended that

winch manufacturer MacGregor tell other operators using the same type of winch about a safer way to install the winch. MacGregor has also responded positively with a schedule of communications to relevant operators over coming months. (Recommendation 007/22)



*View of winch shows the rope handler would be unable to see the winch operator. A transverse bar was fitted for rigidity during travel for installation. A safety improvement would be to remove the bar after installation.*

## No repeat accidents – ever!

The principal purpose of the Transport Accident Investigation Commission is to determine the circumstances and causes of aviation, marine, and rail accidents and incidents with a view to avoiding similar occurrences in the future, rather than to ascribe blame to any person. TAIC opens an inquiry when it believes the reported circumstances of an accident or incident have – or are likely to have – significant implications for transport safety, or when the inquiry may allow the Commission to make findings or recommendations to improve transport safety.

To view a copy of the Final Report readers are invited to see here: <https://tinyurl.com/4xskk8ee>

### Editor's Note:

**The text published here is based on material kindly provided by the New Zealand Transport Accident Investigation Commission (TAIC)**

**TAIC ©**

\*Singapore-flag; ABS Class; built 2008; owned and operated by Maersk; 286.45metres loa; 40.00 metres breadth; 73,899 gt.



## Port of Aden

### Franco-German diplomatic visit

#### Importance of stimulating the Yemeni economy

On 9 June Eng Abdulrab Al- Khulaqi, Deputy Executive Chairman of Yemen Gulf of Aden Ports Corporation (YGAPC), received at the Marine Department Building, Ms Marcela Masiarik, the chancellor of the German Embassy, and Ms Melissa Rahmouni, Senior Advisor at the French Embassy in Yemen.

Captain Ahmed Al-Bishi, Acting Director of General Maritime Operations, welcomed the visitors and explained the functions of this department, which works around the clock, the main interface of the port, through which the procedures for receiving ships, berthing and sailing are arranged.



For his part, Captain Hani Abdul Muti, Deputy Director of Maritime Operations for Traffic Affairs, pointed out that the Maritime Administration is on the verge of an unprecedented development in its work through the implementation of the Ships Control Services (VTMIS) project funded through the United Nations Development Programme (UNDP).

An extensive discussion took place with the visitors about ways to stimulate economic activity through the port of Aden, which is the main gateway to Yemeni maritime and commercial activity. Here they addressed the challenges that emerged after the war, which resulted in restrictions to commercial activity and the shift of part of it to neighbouring ports, especially Salalah. They also discussed the tremendous efforts made by the Resident Representative of the United Nations Development Programme, Mr Auke Lootsma, to implement the project of placing the financial deposit in the marine insurance market, which will reduce the war risk fees imposed on the port due to its classification as a war zone.

After the meeting the visitors left for port of Ma'alla to see the port's cargo handling capacity and its facilities, such as grain silos, oil tanks and cement production, and to learn of the ongoing activity and the port's assets' damage.

The United Nations Development Programme, represented by Mr Kennedy Chibvongodze, had arranged for this visit, which was appreciated by the visitors who

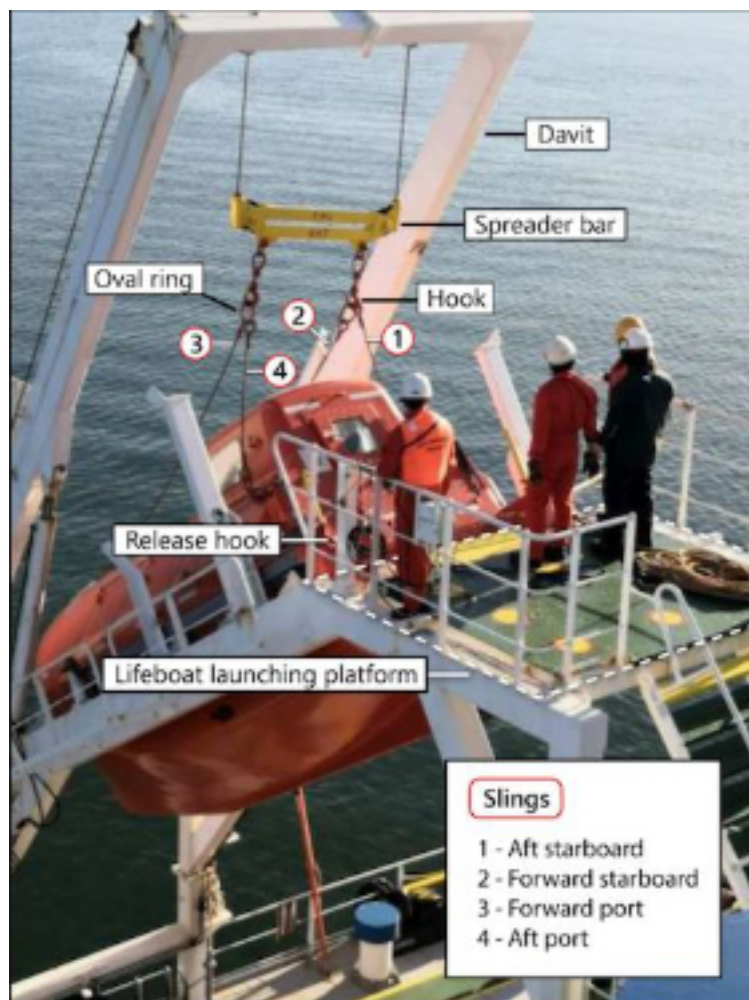
expressed their fascination with the size of the port, the natural protection it provides, and its great potential for expansion.

### Accidental release and injuries during lifeboat drill

#### Transportation Safety Board of Canada investigation

In its investigation report (M20P0353) released on 21 June the Transportation Safety Board of Canada (TSB) found that weakened hardware and an improperly secured lifeboat sling caused the accidental release of a free-fall lifeboat during a drill aboard the bulk carrier *Blue Bosphorus*\* in British Columbia.

On 1 December 2020, while the crew on *Blue Bosphorus* were carrying out a free-fall lifeboat drill in English Bay, British Columbia, the slings holding the lifeboat failed. As a result, the lifeboat fell approximately 14 m to the water. There were two unsecured crew members in the lifeboat at the time. Both crew members were seriously injured and were transferred to hospital. The forward starboard side of the lifeboat's hull sustained damage. There was no pollution.



The investigation found that the crimp sleeves, which are used to secure the eyes on the lifeboat slings, had weakened over time. The manner in which the slings were attached to the hooks on the lifeboat davit caused the load to concentrate on the right rear sling. This, in combination with the weakened crimp sleeves, caused the failure of the slings and a bracket on the lifeboat.

Without a complete procedure for conducting a drill that involved launching the lifeboat using the davit, the crew had developed an informal practice that did not address the risk of standing unsecured in the lifeboat, which led to the serious injury of two crew members when the lifeboat fell.

Although the vessel owner, Apollonia Lines S.A., had regular maintenance routines in place to verify the condition of the lifeboat and its launching appliances, they did not prompt the crew to specifically check the condition of the slings.

While there are international requirements for inspections of lifeboat lifting appliances and associated components, they do not clearly address slings associated with free-fall lifeboats.

In the absence of any international guidance requiring free-fall lifeboat slings to be verified periodically, inspected before use and marked with a safe working load, there is a risk that this critical equipment will be overlooked during inspections or its safe limits will be exceeded, leading to an accident.

Following the occurrence, Apollonia Lines S.A. replaced the failed and damaged equipment aboard *Blue Bosphorus*, including a newly manufactured, load tested and certified sling assembly and brackets. The company also issued a safety management system circular to all its vessels regarding requirements for inspections of lifeboats and associated equipment and for lifeboat drills.

In Canada the TSB is an independent agency that investigates air, marine, pipeline, and rail transportation occurrences. Its sole aim is the advancement of transportation safety. It is not the function of the Board to assign fault or determine civil or criminal liability.

Appendix C of the report on pages 38/39 outlines similar occurrences internationally and in Canada.

\*Panama-flag; 78,810 dwt; 41,668 gt; 225metres loa; built 2007; Class NK.

#### Editor's Note:

The text published here is based on media material kindly provided by the Transportation Safety Board of Canada. In addition some text is taken from investigation report M20P0353 authored by the Transportation Safety Board of Canada and released on 21 June entitled:

***Accidental Release of Free-Fall Lifeboat  
Bulk carrier Blue Bosphorus  
English Bay, British Columbia  
01 December 2020.***

This report may be downloaded here:

<https://tinyurl.com/2k267c8y> Our accompanying illustration is reproduced from page 8 of that report.

© Her Majesty the Queen in Right of Canada, as represented by the Transportation Safety Board of Canada, 2022.

## The Future of Maritime Safety

### Inmarsat's second Safety Report uncovers trends

#### Steering shipping into a safer future

Despite the challenges posed by Covid-19 and global supply chain disruption, total vessel losses across the industry have continued to steadily decrease, following a downward trend of 57% over the past decade.

The Allianz Global Corporate and Speciality (AGCS) Safety and Shipping Review 2022 shows a drop from 65 total vessel losses in 2020 to 54 in 2021, suggesting the industry's continued focus on regulation, improved ship design and technology and risk management advances are increasing overall trends in safety.



*The Future of Maritime Safety Report* provides insight into safety trends from GMDSS data gathered between 2019-2021 and reveals patterns at a local and global level. INMARSAT informs us that better understanding these patterns can help us to take proactive steps to prevent such incidents going forward and help guide us to a safer future.

#### Key highlights of the document are:

- The analysis of four-years of aggregated GMDSS distress data.
- The impact of Covid-19 on maritime safety.
- Tankers, fishing vessels and bulk carriers rank highest in distress call numbers, with the lowest incidents arising in passenger ships.
- The need for collaborative and proactive approaches to safety underpinned by data and the use of available and future technology.

#### Key findings of the Report are:

***What is a growing cause of concern in the maritime sector?***

While total vessel losses may be decreasing, data gathered by Inmarsat indicates a significant spike in Global Maritime Distress and Safety System (GMDSS) calls, rising abruptly from 597 in pre-Covid 2018 to 761 in



2019 and 834 in 2020, before a potential drop and re-stabilisation in 2021 with 749 incidents reported.

### **What vessels rank as the top three for distress calls?**

The data shows the top three sectors with the highest distress calls as tankers, fishing vessels and bulk carriers, with the lowest incidents arising in passenger ships.

### **What impact did the Covid-19 crises have on safety?**

As parts of the world began to stabilise from the effects of the pandemic in 2021, shipping too saw a stabilisation of GMDSS numbers, suggesting that many challenges caused by Covid-19 to crews and ships were lessening. It could also suggest that crews and owners have adapted to operating in this 'new normal' and can better anticipate and prepare for future safety issues.

In the words of: *'Anonymised data holds the potential to demonstrate trends that can be benchmarked to track progress, without creating liability or blame. It will allow us to know for a fact that something is an issue, rather than relying on conjecture or gut-instinct.'*

### **The report also includes opinion pieces from key maritime industry leaders:**

Dr Grahaeme Henderson OBE, Chair of 'Together in Safety'.

Cyrus Moody, International Maritime Bureau.

Oliver Delteil, General Directorate of Maritime Affairs, Norway.

Trond Ski, NAVAREA Coordinator, Norwegian Coastal Administration, Chair of the IMO EGC Coordinating Panel.

Theresa Crossley, CEO, International Maritime Rescue Federation.

Christopher Janus, Branch Chief, Maritime Safety Watch, National Geospatial-Intelligence Agency.

**The Report may be downloaded here:**

<https://tinyurl.com/yc227byu>

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## **Driving forward hydrogen-fuelled SeaShuttle container ship**

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### **Samskip and Ocean Infinity secure funds**

SeaShuttle an ambitious project to build two hydrogen-powered, remotely controlled and autonomous-ready containerships for delivery by 2025 has secured NOK150 million (€15M) in funding from Norwegian state enterprise ENOVA.

This bold scheme, led by multimodal transport and logistics group Samskip and marine robotics specialist Ocean Infinity, envisages two SeaShuttle ships operating emissions-free between Oslo Fjord and Rotterdam, with each powered by a 3.2MW hydrogen fuel cell.

ENOVA, which operates under Norway's Ministry of Climate and Environment, promotes a shift towards more environmentally friendly energy consumption and production, as well as technologies based on sustainable energy.



*Samskip, container shuttle vessel.*

Originally announced at Nor-Shipping 2022, Oslo, in April, the Samskip-Ocean Infinity partnership covers both the construction and operation of the ships, in a collaboration seeking to push forward towards zero-emission, efficient and safe, multimodal logistics.

Are Gråthen, CEO, Samskip Norway commented: *'Samskip is very proud to take the lead role in pioneering the SeaShuttle initiative, as part of its 'making green logistics easy' strategy.'*

*'Securing this funding provides a platform to make emissions-free container shipping a reality. Together, Samskip and Ocean Infinity will also accelerate their plans to advance autonomous ship technologies, and remote operation of ships and cargo handling equipment. These ships are the first part of an exciting collaboration with Ocean Infinity.'*

Gråthen added that in line with commitments given at COP26 Clydebank Declaration, SeaShuttle would create what amounted to one of Europe's first zero-emission green corridors.

Christoffer Jorgenvag, CCO, Ocean Infinity, added: *'Ocean Infinity's enabling technologies can facilitate green corridors but also the broader decarbonisation and transformation of maritime operations. The emphasis today is on the SeaShuttle vessels, which are just part of Ocean Infinity's overall strategy of unlocking innovation to deliver truly sustainable maritime operations.'*

*'We would like to thank Enova for their support for our vision which represents a firm endorsement of our ground-breaking approach and allows us to proceed at full speed in bringing this project to life.'*

The funding means the partners can move forward to contract two new 500TEU ships installed with a main propulsion solution that can be adapted to run on hydrogen fuel. Diesel electric propulsion plant will be on board as back up, although Gråthen emphasized: *'We have faith that green hydrogen will be affordable and available in Norway.'*

Kari-Pekka Laaksonen, Group CEO, Samskip reflected: *'For Samskip, sustainability is one of the fundamentals of doing business. The SeaShuttle project is a substantial step in Samskip's journey towards zero emission logistics. Its combination of fuel, technology and operational best practice is expected to make emissions-free shortsea shipping cost competitive with existing solutions.'*

### About Samskip

Samskip high frequency services connect destinations across Europe including the Baltic States, Iceland and Faroes Island, and Russia, both door-to-door (including collection) and quay-to-quay, transported using a wide range of owned vessels, containers, trucks and trailers. To match equipment to cargoes shipped, options include a full range of ISO containers and reefers, including 33-pallet capacity 45ft units. The group transports 800,000 containers every year to bring fresh food to markets worldwide.

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## Faster port turnarounds

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### African teamwork by Inchcape

People power is a vital factor in expediting port calls efficiently in Africa, according to Inchcape Shipping Services' Area General Manager Adrian Richter.

He commented: *'Our greatest asset is our people with in-depth local knowledge, skills and passion, as well as the right attitude, motivation and leadership to handle this 24/7 business and the diverse challenges of voyage transits on the continent.'*

Richter believes it is important to play to the strengths of the company's 300-strong workforce spread across nearly 45 ports on the African continent with wide expertise in special local operating conditions, while functioning as a team as part of a global support network. In other words: *'a world of local expertise,'* he reflected then continued by saying: *'No port call is the same and each one carries different risks and challenges that can only be resolved through having professional staff on the ground trained to tackle such issues with the focus on risk and cost mitigation for the shipowner.'*



*Inchcape's strategic procurement and reliable end-to-end supply chain enable cost reductions with spare parts delivery onboard.*

*Photograph: Inchcape Shipping Services ©.*

### Multiple cargoes, high throughput

Thousands of vessels pass through African ports each year ranging from drybulk vessels carrying cargoes such as steel, grain and coal, to oil tankers and containerships, to cruise ships, warships, barges and yachts, with Inchcape handling about 1500 port calls annually.

A number of ports specialise in certain cargoes. For example, Mombasa is a hub for grain and steel shipments and South Africa's Richards Bay has various coal terminals. Kenya also has a container depot, Namibia's Walvis Bay is a strategic location for drydocking, repairs and lay-ups for offshore vessels and Port Louis on Mauritius is a key bunkering port.



*Crew changes carried out by Inchcape outside port limits off South Africa.*

*Photograph: Inchcape Shipping Services ©.*

Richter: *'One of Inchcape's main strengths is that we are an all-rounder able to handle all different types of vessel',* with port agency, husbandry including crew changes, bunker calls, third-party liner agency, owners' protective agent (OPA), P&I representative, ship chandlery and cruise consultancy among the comprehensive services provided by the company.

Given the high number of ports catering for different cargoes, navigating the plethora of complex local operational procedures, rules and regulations can be difficult for shipowners calling at African ports, while there is also a high risk of bribery and corruption.

Compliance and security is a particular challenge in some countries and therefore one of the key roles for Inchcape is serving as OPA to safeguard the interests of the shipowner by ensuring local regulations are followed to avoid delays and additional costs, according to West Africa Area Manager PT Ramdass.

He highlights the fact that minor rule deviations found by Customs and immigration officials boarding vessels can result in cumulative fines of as much as \$20,000 per vessel on average.



## Navigating bureaucracy

Providing guidance for the ship's master on official documentation and acting as a witness of procedures onboard is therefore a vital duty of the OPA, as well being available for assistance around the clock, day-in-day out.

Ramdass explained: *'The ship's master will initially be provided by Inchcape with a checklist of do's and don'ts before arrival to prevent problems with the authorities. Subsequently, an Inchcape boarding agent will embark on the vessel on arrival to secure immigration, Customs and port clearances to avoid hefty fines or even vessel detentions in some cases.'*



*Inchcape liner operations in Maputo, Mozambique.*

*Photograph: Inchcape Shipping Services ©.*

## Zero-tolerance on bribery

All Inchcape employees practice the company's zero-tolerance policy on bribery and corruption as part of a strict code of conduct, as well as stringent Quality, Health, Safety, Security, and Environment (QHSSE) management standards based on international regulations that are applied across its African operations and cover issues such as welfare of personnel with crew changes.

Ramdass believes this operational integrity is a competitive strength given increasing demands for compliant and transparent port agency services from shipowners and industry stakeholders.

Transparency also extends to proactive communication with a vessel prior to arrival to inform of possible risks or delays, provide useful contact details while at port and valuable information on berth availability based on Inchcape's knowledge of other ship movements.

Richter points out that congestion is a major issue at African ports as development of dock infrastructure has largely lagged countries' economic growth and increasing ship traffic volumes.

## Tackling congestion

Given the lack of a berth booking system at most ports, this can be countered by giving timely information to enable ships to sail faster to take advantage of available berths, thereby avoiding waiting time and voyage delays that can incur demurrage costs.

Efficiency of cargo discharging and loading operations at African ports is a further challenge as this is labour-intensive and can be adversely affected by crane and other machinery breakdowns, according to Richter, adding: *'This cannot be compared with European ports' with a high level of automation.*

In its role as OPA, Inchcape can hold the charterer's agent responsible for cargo release to protect the shipowner's interest and thereby safeguard against significant demurrage cost liability in the event of port delays. The OPA is also able to segregate the interests of the owner and charterer's agent in relation to different activities such as crew changes and underwater inspections.

Indeed, managing and mitigating costs is a key factor with African port stays as expenses, such as for inland container transport, can sometimes come as a shock to shipowners.

Inchcape's strategic procurement policy is geared to sourcing services such as crew transport, hotel bookings or launch boats at competitive rates from a network of local vendors that are audited annually for QHSSE compliance, while its global buying power also benefits procurement.

## Working smarter

To expedite port calls more effectively, the company is also adopting new technology such as water drones to carry out underwater inspections to check the condition of hull and propellers without the use of divers. Inchcape is now the sole accredited water drone operator in Mauritius where it also specialises in bunker calls and bunker quantity surveys.

Digital ways of working have been a key factor for Inchcape personnel to co-ordinate port services amid lockdowns during the Covid-19 pandemic that also required them to keep track of constantly changing protocols and handle issues such as flight cancellations and delays in relation to crew changes.

Inchcape's Area Manager for Mauritius and the Indian Ocean Islands cluster, Arnaud Teycheney, says the company's business continuity plan enabled personnel to implement crew changes from their laptops, as well as expedite other tasks, without physically going on board.

In Teycheney's words: *'Paradoxically, the pandemic resulted in economies due to less electricity consumption at the office and time savings as not being able to board vessels bunkering at anchorage meant we avoided a typical five-hour round-trip to each vessel – and this non-boarding protocol has been maintained by the authorities.'*

## African expansion

As the company expands its offices to new African ports such as Tanga in Tanzania, it is calling on the complementary competence of its staff based in this country as well as Kenya, Mozambique, Mauritius, South Africa, Namibia, Nigeria and Ghana to extend its reach across the continent with support from regional partners.

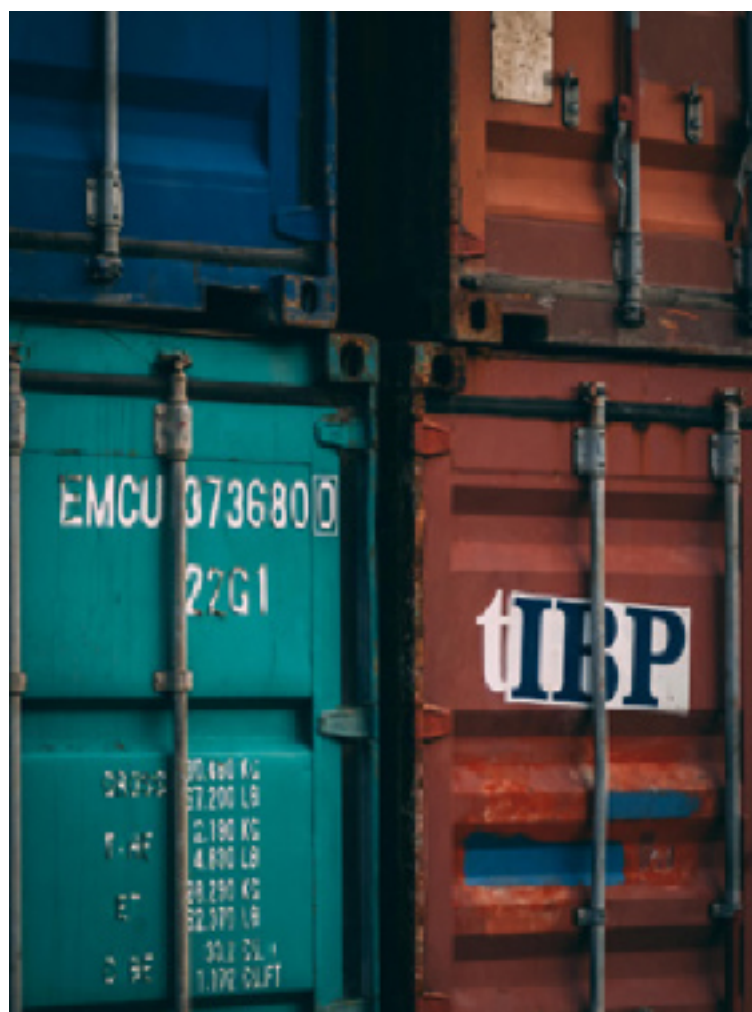
## Containers lost at sea

### World Shipping Council Report 2022 Update

It was announced simultaneously in Washington, Brussels and Singapore on 22 June that the previous year, 2021, international liner carriers' onshore staff and crews managed 6300 ships, successfully delivering vital supplies worth \$7 trillion to the people of the world, in approximately 241 million containers.

The World Shipping Council (WSC) *Containers Lost at Sea Report* covering 2020-2021 shows that containers lost overboard represent less than one thousandth of 1% (0.001%). However, the past two years have seen a worrying break in the downward trend for losses, with the average number of containers lost at sea per year since the start of the survey increasing by 18% to 1,629.

From a liner shipping industry perspective, every container overboard is one too many, and every day carriers work with the other parties in the supply chain to enhance safety. But even with proper packing of the cargo into the container, correct container weight, and proper stowage and securing aboard ship, several factors ranging from severe weather and rough seas to more catastrophic and rare events such as ship groundings, structural failures, and collisions can result in containers being lost at sea.



The winter of 2020-21 saw an unusually high number of weather-related incidents, and the average losses for the two-year period 2020-2021 were 3,113 compared to 779 in the previous period.

### Taking action to improve safety

Triggered by these events, maritime actors across the supply chain have initiated the MARIN Top Tier project (<https://www.marin.nl/en/jips/toptier>) to enhance container safety, with WSC and member lines among the founding partners.

This project will run over three years and will use scientific analyses, studies, and desktop presentations as well as real-life measurements and data collection to develop and publish specific, actionable recommendations to reduce the risk of containers lost overboard.

Initial results from the study show that parametric rolling<sup>1</sup> in following seas is especially hazardous for container vessels, a phenomenon that is not well known and can develop unexpectedly with severe consequences.

To help in preventing further incidents a Notice to Mariners has been developed<sup>2</sup> describing how container vessel crew and operational staff can plan, recognize and act to prevent parametric rolling in following seas. Many more topics, tests and measurements will be undertaken by the project, which will continue reporting on progress and sharing insights on a regular basis through the IMO and other forums.

John Butler, President & CEO of WSC commented: *'Container vessels are designed to transport containers safely and carriers operate with tight safety procedures, but when we see numbers going the wrong way, we need to make every effort to find out why and further increase safety.'*

*'liner shipping industry's goal remains to keep the loss of containers as close to zero as possible. We will continue to explore and implement measures to make that happen and welcome continued cooperation from governments and other stakeholders to accomplish this goal.'*

In addition to the MARIN TopTier project, WSC and member companies have actively contributed to and supported revision of the IMO's guidelines for the inspection programmes for cargo transport units. WSC also supports the creation of a mandatory reporting framework for all containers lost at sea – an issue that will be on IMO's agenda in September (CCC 8), it is understood.

### Annual updates for improved data

Correct data plays an important part in the work to enhance container safety. The Containers Lost at Sea Report has until now been updated every three years. However, the unusually high number of incidents in the winter of 2020-21 caused great concern, so WSC has decided to increase the frequency of its *Containers Lost at Sea* report. Hence, this update covers 2020-2021, and in the future a survey of members will be carried out each year.

Since its inception, WSC has worked to increase safety in container handling and transport. A strong focus has been to reduce the number of incidents with containers lost at sea to limit related injuries and harm to seafarers, possible pollution and navigational safety issues.



Many improvements have been achieved over the years including improvements to the SOLAS convention, creation and communication of the Code of Practice for Packing of Cargo Transport Units (CTU Code) and ISO standards for container lashing equipment and corner castings. This work continues.

To download a copy of Containers Lost at Sea - 2022 Update readers are invited to see here:

<https://tinyurl.com/35rcnd38>

To read more about WSC's work on safety see here:

<https://www.worldshipping.org/safety>

<sup>1</sup>*Parametric rolling is used to describe the phenomenon of when a vessel experiences a large unstable rolling motion from side to side in head or stern seas.*

<sup>2</sup> <https://tinyurl.com/3n6fjnr9>

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## ABB's CoriolisMaster flowmeter

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### Certified for custody transfer

ABB's CoriolisMaster flowmeter has received recognition for its high levels of accuracy, gaining custody transfer standards approval it is understood.

This flowmeter now offers a new custody transfer application approved under OIML R 117-1 and Wellmecc standards and certified for the European Measuring Instruments Directive MID.\*

Accuracy and reliable measurement are paramount in the transfer of expensive commodities such as oil and gas. Custody transfer is a highly regulated area which falls under both international standards and regional regulations.



ABB CoriolisMaster with custody transfer certification

The CoriolisMaster certification complements ABB's Flow-X series of flow computers, a single hardware and software solution that connects to flowmeters, and to temperature, pressure and density transmitters as well as chromatographs to calculate the volume at standard conditions, mass and energy following international standards.

The Flow-X aims for the highest precision to protect the interest of buyer and seller. Its analog inputs have an unmatched accuracy of 0.008 percent over a wide ambient temperature range.

Frank Frenzel, Global Product Line Manager, ABB Process Flowmeters, commented: *'This certification places ABB at the forefront of custody transfer measurement.'*

*'We have seen significant growth in this area in recent years, with increased demand for our Flow-X computers, and customers asking for a complete fiscal metering offering. Our CoriolisMaster has never been faster or more precise in its measurements.'*

*'Certification confirms that it is ideally placed to meet customers' need for precise measurement, joining the Flow-X computer for unrivalled accuracy in custody transfer applications around the globe.'*

With its distinctive lean design, the ABB's CoriolisMaster has a small footprint which reduces on-site handling, commissioning and costs by being easy to install and using less pipeline than has been traditionally required.

Extensive communication capabilities provide real-time data insights for instant action, and the inclusion of the ABB Ability™ Verification for measurement devices solution allows the performance of the meter to be verified at any stage either in-situ or remotely.

As we know even the smallest imprecision in custody transfer can lead to big financial losses, so the high accuracy of the CoriolisMaster makes it ideal for liquid mass flow measurement.

With repeatability an equally important element, the stability of ABB's CoriolisMaster in maintaining calibration across its lifecycle is an essential element. The flowmeter also eliminates the need for an additional inline density meter, making it invaluable for product quality assurance purposes, by providing direct density measurement and improving the measurement of liquid and gas flow composition.

\* <sup>1</sup>*The International Organization of Legal Metrology (OIML) is a worldwide, intergovernmental organization whose primary aim is to harmonize the regulations and metrological controls applied by the national metrological services, or related organizations, of its Member States.*

## Japan's first electric tugboat

### ABB to power

Taiga, and electric tugboat is the result of collaboration between Tokyo Kisen Co Ltd and e5 Lab Inc a Japanese consortium with the purpose of planning and developing fully electric vessels.

Constructed at the Kanagawa Dockyard Co Ltd at Kobe, the tug is due for delivery by end of December this year, becoming the first vessel of its kind to operate in Japanese waters. It is equipped with ABB's Onboard DC Grid™, system complete with a high battery capacity.



*Electric tugboat Targa.*

*Photograph by Tokyo Kisen Co Ltd*

Designed to enable zero-emission operations in harbourside environments, the tug will deliver superior performance while supporting Japan's ambition of achieving net-zero GHG emissions from international shipping by 2050.

Tokyo Kisen's harbour tug will be used to manoeuvre other vessels by pushing or towing them with 2.5-megawatt-hour battery systems supplied and integrated by ABB, reducing greenhouse gas emissions on a day-to-day basis, and acting as spinning reserve back-up power to prevent prolonged outages.

It is understood that the tug's future-proof configuration also enables it to achieve emission-free operations by integrating alternative energy sources as technologies mature.

In the words of Munekazu Tanikawa, Local Division Manager, ABB Marine & Ports: *'ABB is honoured to be involved in such a prominent project to power the first electric tugboat for Japan. Our hybrid and electric solutions have established a strong reputation in the short-distance shipping segment, now further strengthened by this prestigious opportunity in a highly competitive market.'*

In addition to the energy storage provision ABB supplies the tug with its award-winning power system platform

Onboard DC Grid™, which enables simple, flexible, and functional integration of energy sources and loads. Leveraging Onboard DC Grid™, the tug's engines will be able to run at variable speeds for optimized energy economy at each load level. This helps cut fuel consumption, reducing the environmental impact as a result. The batteries will be able to provide power to the tug's propulsion system almost instantaneously, where ABB's Power and Energy Management System (PEMS™) will control the overall power distribution, increase fault tolerance and provide a high degree of reliability.

## Rotterdam's Green shore power facility

The Port of Rotterdam Authority and Eneco are going to construct shore-based power facilities in the Waalhaven, Rotterdam, in order that moored Boskalis vessels can run on green electricity instead of fossil fuels. This was reported from

Royal Boskalis Westminster HQ at Papendrecht on 27 June. This shore-based power installation will be built on the Boskalis site in the Waalhaven. There are two berths on the quay at this location, which are both frequently used. Vessels come to the Boskalis Waalhaven base for maintenance and to be mobilised for offshore projects.



It is understood that the intended completion date of the green shore power installation is 1 June 2023, and it will supply 2 GWh of green electricity per year. This will reduce CO<sub>2</sub> emissions by 1.6 kiloton per year. With this project Boskalis is demonstrating green leadership, which is good for the port, for the climate and for local residents.

Shore power is an important part of the energy transition and this project fits in with the joint shore power strategy of the Port of Rotterdam Authority and the City of Rotterdam, and with Eneco's One Planet strategy, which aims to achieve climate neutrality by 2035. At present, moored vessels often run on generators to provide the necessary power on board thereby creating emissions. Green shore power offers the opportunity to reduce these emissions by up to 90% by providing vessels with a clean source of energy and switching off generators also helps to reduce noise. After the shore power electricity installation on the Rozenburg peninsula and the Hoek van Holland ferry terminal in Rotterdam, the Boskalis location in the Waalhaven will be the third quayside electricity installation for seagoing vessels in the Port of Rotterdam.



Eneco and the Port of Rotterdam Authority are implementing this project through the Joint Venture Rotterdam Shore Power. They own the shore power installation and offer the green shore power as a service. Boskalis is realizing the grid connection under its own management. Eneco is supplying the green power to Boskalis, which comes from Dutch Eneco wind and solar sources. The project is co-financed by the City of Rotterdam and the European Union through the European Regional Development Fund.

## Port of Dover Western Docks progress

Despite being known as the UK's busiest international ferry port, the Port of Dover has a hugely diverse offering, encompassing cargo and cruise, as well as roll-on, roll-off freight. Dover's Western Docks have a busy Summer ahead with inaugural ship calls, as well as a schedule of existing services.

June was an eventful month for Dover as business was very good within the cargo terminal and the cruise season continued with enormous success; both markers of post-Covid recovery and testament to the value of the £250m investment made in Dover's Western Docks.

Dover port's modern cargo terminal, which opened at the end of 2019 to an established trade in perishable freight, is now experiencing a thriving breakbulk trade among many other cargo types. This was indicated by the port at the end of June.



Dover Strait Shipping ©.

In 2021, Port of Dover Cargo Ltd received its first steel cargo and is now seeing significant growth in this commodity. The cargo terminal has an ever-widening steel product portfolio – including rebar, coil, mesh, beams and plate – and continues to attract an increasing number of additional vessel calls to Dover. Towards the end of June the terminal welcomed mv *Jette Marit* from Dubai, to discharge 1025 tonnes of rebar, and *Interlink Quality* with 6346 tonnes of beams from India for Jindal & Parkers.

Port of Dover Cargo Ltd also saw calls late in June from Seatrade's *Pacific Reefer*, from *Frakt Fjord* discharging

4,000 tonnes of aggregate for DC Aggregate and received a vessel for Cefetra to load 4,000 tonnes of milling wheat for Dublin.

Eik Schuster, Senior Commercial Manager at Seatrade, commented: *'We are delighted to see that Dover Cargo Terminal has been able to generate a thriving business handling also non-refrigerated cargoes, whilst still maintaining outstanding service levels for our weekly specialised reefer vessel arrivals. Today, there are very few facilities in UK and Europe that can offer similar true multi-purpose facilities on this scale.'*

Christian Pryce, Chief Commercial Officer at the Port of Dover, added: *'The investment in the new terminal means the Port has the capability to process a whole range of commodities, from fresh produce and breakbulk, to containers, project cargo, general cargo and grain. Furthermore, the Port offers zero ship deviation by operating at a strategic location next to the world's busiest shipping lane and is the quickest sea route to European motorways via Calais and Dunkirk.'*

Meanwhile, Dover's Cruise terminal continues with its record-breaking year welcoming 130 cruises, including 73 turnaround visits and 11 inaugural ship calls.

The Port hosted a double cruise call on 26 June by Carnival Cruise's *Carnival Pride* and Royal Caribbean's *Jewel of the Seas*. *Carnival Pride* had arrived in Dover for its inaugural call the previous week – Carnival's first call to the port since 2013. In addition it is reported that there have been more inaugural calls recently by Lindblad Expeditions' vessel *National Geographic Explorer* and *Sea Cloud Spirit*.

Pryce added: *'The Port of Dover welcomes over 25 individual cruise lines and counting, and with the investment made in our berths, we can accommodate up to three ships at once.'*

*'Dover's Cruise Terminal is welcoming hundreds of thousands of passengers to experience the wonders of Kent's Heritage Coastline and our world-famous White Cliffs and helping them onward on adventures to multiple destinations around Europe, taking in Norwegian Fjords, Spanish islands or rugged stretches of coastline on Scotland's West Coast.'*

The £250million investment in the Dover Western Docks Revival Scheme (DWDR) was co-financed by the European Union. The DWDR Scheme is an continuing project and has already transformed the waterfront with a new marina pier and curve, as well as developing Dover's cargo business with a new cargo terminal and distribution centre.

## About Dover

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

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

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

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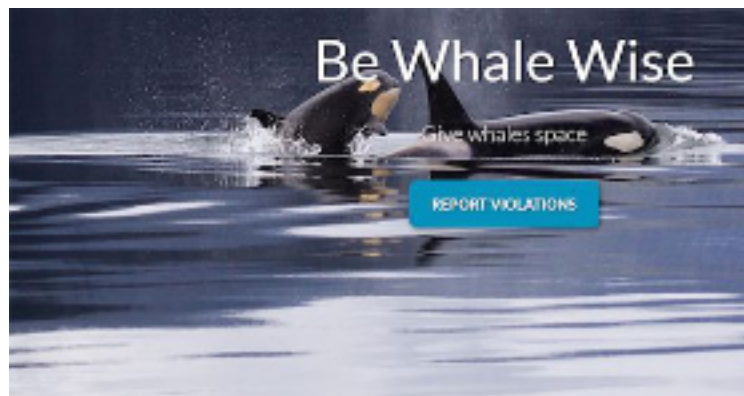
## Protecting whales in the Pacific Northwest

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On 1 July the US Coast Guard reported that it had commenced Operation Be Whale Wise to encourage the public to practise safe whale-watching this summer in the Pacific Northwest.

Operation Be Whale Wise is an effort to educate the public through outreach and enforcement activities, as well as to increase the public's stewardship of local orcas through engagement of what is regarded as citizen science.

Although the endeavour to ensure the safety of protected marine species is continuous, the Operation Be Whale Wise officially began on 1 July.



It was reported that the Coast Guard is working closely with several partner agencies focused on educating the public and raising awareness within the recreational boating community, including enforcing buffer zones and other vessel-related regulations in place to protect the Southern Resident orca population of Puget Sound.

The Puget Sound and Salish Sea is home to numerous species of marine mammals. The most recognised of these is the Southern Resident Killer Whale (SRKW). This species of whale is a distinct population of orcas that are genetically unique from their transient counterparts. They have evolved to feed on fish instead of mammals. SRKW continue to be a critically endangered species with only 75 members remaining as of February 2021.

**Federal regulations prohibit vessels from approaching killer whales within 200 yards or parking in the path of killer whales.**

**In 2019, the State of Washington enacted regulations requiring vessels to remain at least 300 yards away from either side or 400 yards in front of or behind orca whales.**

**Additionally, state regulations require that vessels within a half mile of orcas must reduce speed to less than seven knots.**

From 1 July thirteen SRKW have been deemed as in vulnerable condition. Four of these whales may be pregnant it was reported. The State of Washington has adopted an emergency rule to prevent commercial whale watching vessels from approaching these individual whales or groups in which they are in within 0.5 nautical miles.

The additional distance is necessary to ensure the ability of the SRKW's survival is not hindered by the presence of vessels.



### Mariners have been urged to report whale sightings.

The WhaleReport App helps mariners and members of the public practice citizen science by providing a user-friendly tool directly on their tablet or smart phone that displays whale safety zones.

The app also allows the user to report any live, dead, or distressed whale sightings to the appropriate response agency.

Be Whale Wise is a coordinated effort between the US and Canada with multiple commercial, non-profit and environmental non-governmental organizations dedicated to educating the public and raising awareness within the boating community.

For more information readers are invited to visit Be Whale Wise here: <https://www.bewhalewise.org/>

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## Seafarers - We need your feedback!

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Don't forget to complete the World Maritime University survey (in collaboration with IfsM, NI and IMarEST. All members were sent details of this by email, in case you have mislaid the message then the link is repeated below.

The deadline for this survey is 31 December 2022.

Please follow the link to complete the survey

<https://wmuhq.questionpro.eu/t/AB3uvMYZB3vReL>