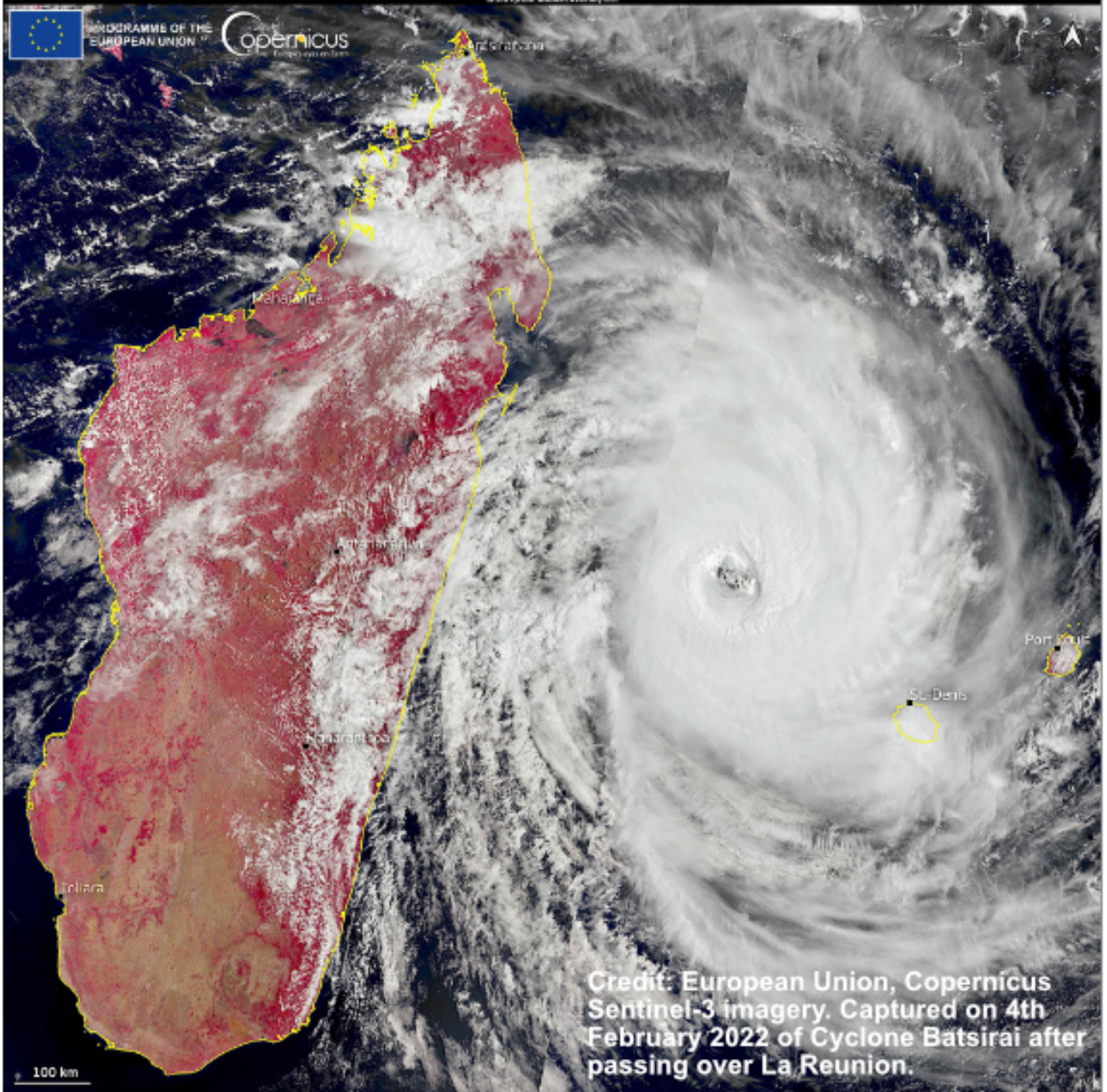


Number 50, February 2022

IF SMA

NEWSLETTER

The Shipmasters' International Voice



Contents

Secretary General's Report	2
From the News Editor	2
The IMO Digest	3
Oil Spill	3
The IMO Council	3
IMO SG at One Ocean Summit	4
The Red Sea Project	5
IMO Sub-Committee on Human Element, Training and Watch-keeping	5
<i>Euroferry Olympia</i> fire	6
Pacific Islands region	7
Ukraine	8
Shipping Industry Flag State Performance Table 2021/2022	8
Indian Ocean Cyclone Batsirai (Cover photo)	9
Green shipping boost	9
EMSA signs cooperation agreements	10
Clean Oceans and the Blue Economy	11
EMSA latest news	12
Sealby: a digital platform for bespoke maritime training	12
New building: ice-breaking tanker	13
The Brest Commitments for the Oceans	14
SMOU Long Membership Awards	16
TT Talk Club presents Lithium complexities	17
USCG <i>Polar Star</i> arrives McMurdo	19
Britannia P&I Club	20
Intercargo: EU beginning to grasp realities of shipping	21
Deepsea Semi TM floating offshore wind foundation	22
P&I Clubs and parametric rolling	22
The 3 rd (III) International Maritime Congress	23
Fuel cell-powered marine transport	23
Our electric future	24
The global shipping workforce	25
Ukraine Crisis: Black Sea, Bosphorus and Sea of Azov - Update	26
UN bodies call for further action to end seafarer crisis	27

Secretary General's Report

Over the last two years, mariners have suffered significantly at the hands of Governments who do not treat seafarers as Key Workers and have kept them at sea and refused the very simple act of allowing Crew Changes so that some form of normality can exist. However, this now pales into insignificance when we see what is happening to the population of Ukraine at the hands of the Russian Federation.

As you all go about your daily lives, wherever that may be, please spare a thought for your colleagues in the Maritime Transport Workers' Union of Ukraine, many of whom have been targeted by the Russian Military in the invasion of their sovereign and peaceful state.

Spare a thought for not only their families, but the whole population of Ukraine who are currently fighting for their lives in defending their country and their very existence.

To all in Ukraine and to all Ukrainian seafarers wherever they may be serving, ashore and afloat, IFSMA wants you to know that our thoughts and prayers are with you at this most difficult and dangerous of times and that we urge the Russian Federation to pull back from this most heinous and totally unwarranted crime against humanity that threatens to destabilise the very world we all live in.

I wish you all "Fair winds and a following sea".

Jim Scorer.

From the News Editor

As part of UN-coordinated efforts to address the risk of an oil spill from the *FSO Safer* moored off the coast of Yemen, the IMO and the United Nations Development Programme (UNDP) Yemen are supporting contingency planning workshops to strengthen Yemen's oil spill response capability.



The first workshop has taken place in Sana'a, Yemen. A second will be organized in Aden, Yemen, in mid-March.

The workshops aim to address current capacity to respond to a spill from *FSO Safer*. They will assist in clarifying equipment and resource requirements; developing response strategies; and addressing the topic of waste management.

Information gathered will serve to identify further training needs for the respective authorities and allow for the updating Yemen's national oil spill contingency plan.

Workshops are being coordinated by UNDP Yemen, under the umbrella of IMO's Integrated Technical Cooperation Programme.

In September, the United Nations' senior management instructed the Resident and Humanitarian Coordinator for Yemen, David Gressly, to provide UN system-wide leadership on *FSO Safer* and coordinate all efforts to mitigate the threat. A UN-coordinated proposal to shift the oil in *FSO Safer* to another vessel is currently under discussion.

The IMO Digest

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

Illustrations per www.imo.org ©

Oil Spill

Peruvian waters

IMO's Media service reported on 2 February that it is supporting international efforts to assist Peru in oil spill response, following an oil spill which occurred north of Lima on 15 January.

The Government of Peru has declared an environment emergency. The crude oil spill – estimated to be in the magnitude of 1000 m³ – affected several tens of kilometres of shoreline, local wildlife, fisheries and tourism-related activities. A government-led clean-up effort is under way, including an oiled wildlife response.



Illustration per www.imo.org ©

Following a request for technical assistance from the Government of Peru, IMO has deployed an oil spill response expert to Lima. He was due to remain in Peru for two weeks and support the Government of Peru by providing technical advice on the ongoing oil spill response and national contingency planning.

The expert will join the international efforts of the UN Office for the Coordination of Humanitarian Affairs (OCHA*) and the United Nations Environment Programme (UNEP)-led Joint Environment Unit** to respond and address the impacts of the spill.

More information is to be found here:

<https://tinyurl.com/vswwfz3p>

Finally, it has been reported that the IMO Secretariat is also supporting the response, by providing technical backstopping to the IMO expert in the field. At IMO the Secretariat has been maintaining close liaison with the affected country and technical partners throughout in order to provide support and assistance, as required.

*To learn about OCHA readers are invited to see here:

<https://www.unocha.org>

** For UNEP see here: <https://www.unep.org/>

The IMO Council

States urged to accept treaty amendments to expand

Member States of the IMO are being urged to accept amendments to the IMO Convention as soon as possible – in order to expand the size of the IMO Council to 52, to reflect the increased membership of IMO.

The text of the amendments, which were adopted by the IMO Assembly in December 2021, have now been circulated via the United Nations (C.N.46.2022), in the Arabic, Chinese, English, French, Russian and Spanish authentic languages.

The United Nations Secretary-General acts as depositary for the IMO Convention. The IMO Convention was adopted in 1948, establishing the IMO (the original name was the Inter-Governmental Maritime Consultative Organization (IMCO) – this was changed to IMO in 1982).

The amendments to the IMO Convention will expand the size of the Council to 52 Members from 40; extend the term of its Members to four years; and recognize three additional language texts as authentic versions of the IMO Convention.

The move to expand the Council reflects the increasing IMO membership over recent decades. It will support the attainment of a representative, balanced, diverse, and efficient Council, that can support the interests of the whole membership and ensures the representation of all the major geographic areas of the world.

The amendments to Articles 16, 17, 18, 19(b) and 81 of the Convention on the International Maritime Organization require acceptance by two thirds of the IMO Membership, or 117 Member States (based on the current membership of 175 Member States) for entry into force.

The IMO Assembly adopted a resolution urging the Members of the Organization to accept the amendments as soon as possible, with the goal of entry into force of these amendments by 2025 (Resolution A.1172(32)).



Expansion of the Council

Upon entry into force of the amendments, the IMO Council will increase by 12 Member States, from its current 40 Members to 52. Expanding the size of the IMO Council would see 12 seats allocated to Categories (a) and (b) each and 28 seats to Category (c).

The categories are:

(a) - States with the largest interest in providing international shipping services

(b) - States with the largest interest in international seaborne trade each;

(c) - States not elected under (a) or (b) above, which have special interests in maritime transport or navigation and whose election to the Council will ensure the representation of all major geographic areas of the world.

Member term length

Under the amendments, Council Members would remain in their roles until the end of the next two consecutive regular sessions of the Assembly, after which they would be eligible for re-election. Since Assemblies are usually held every two years, this would generally mean that Members would serve a four-year term.

Additional authentic languages

In the spirit of multilingualism embraced by the United Nations system, the IMO Assembly adopted an amendment to the IMO Convention, such that Arabic, Chinese and Russian, (which are already official languages of the Organization), will be added as authentic texts of the IMO Convention, supplementing the current authentic texts in English, French and Spanish.

Current Council Members

The list of current Council members for the 2022-2023 biennium is as follows:

Category (a): 10 States with the largest interest in providing international shipping services (listed in alphabetical order)

China, Greece, Italy, Japan, Norway, Panama, the Republic of Korea, the Russian Federation, the United Kingdom and the United States

Category (b): 10 States with the largest interest in international seaborne trade:

Australia, Brazil, Canada, France, Germany, India, the Netherlands, Spain, Sweden and the United Arab Emirates

Category (c): 20 States not elected under (a) or (b) above, which have special interests in maritime transport or navigation and whose election to the Council will ensure the representation of all major geographic areas of the world:

Bahamas, Belgium, Chile, Cyprus, Denmark, Egypt, Indonesia, Jamaica, Kenya, Malaysia, Malta, Mexico, Morocco, the Philippines, Qatar, Saudi Arabia, Singapore, Thailand, Turkey and Vanuatu.

IMO SG at One Ocean Summit

IMO Secretary-General Kitack Lim and the pathway to decarbonisation transition: a speech at One Ocean Summit, Brest, NW France, 10 February.



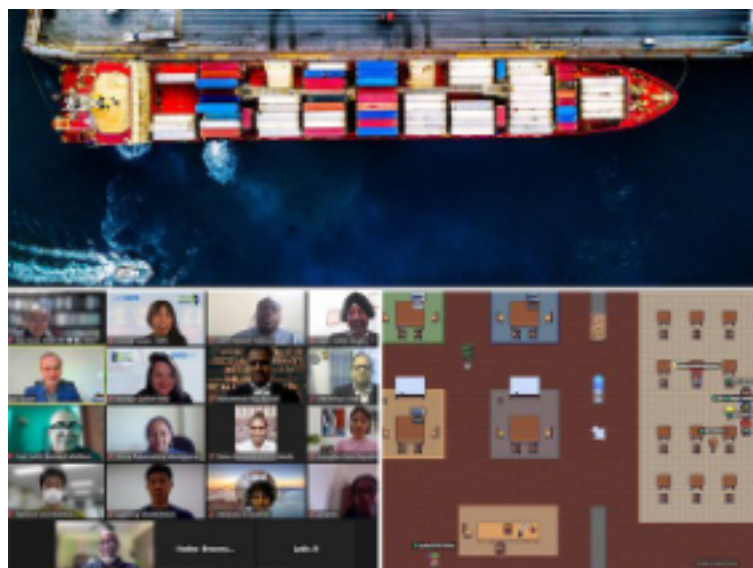
IMO Secretary-General Kitack Lim stressed the importance of collaboration across various maritime sectors in order to achieve industry targets for reduced GHG emissions.

Speaking at One Ocean Summit - Greening Maritime Corridors Forum: From R&D to zero emission ships, he said: *'Without a doubt, achieving decarbonisation ambitions in the shipping sector will rely on a smooth transition to alternative low- and zero-carbon marine fuels.'*

'The transition cuts across all aspects of shipping – from the supply and use of fuels, to safety matters, port operations and training of seafarers.'

'The trials on use of zero-carbon maritime fuels will support a safe transition. We need everyone who is involved to be active in sharing their knowledge and'

experiences, to support the implementation of the strategy and the measures adopted by IMO.’



To read the speech in full on the IMO website readers are invited to see here: <https://tinyurl.com/2p9f6mx3>

The Red Sea Project

IMO has reported that the Regional Programme for Maritime Security in the Red Sea Area (The Red Sea Project) was launched at the Djibouti Regional Training Centre on 10 February.



The project, funded by the European Union, focuses on supporting Djibouti, Eritrea, Ethiopia, Somalia, Sudan and Yemen across four key areas of maritime security:

- Domestication of international maritime legislation.
- Implementation of maritime security measures.
- Development of a port security management system; and
- Port State Control compliance.

This launch follows a six-month inception phase, during which the project team met remotely with the main stakeholders of each beneficiary country to agree on tailored work plans. Implementation is now underway,

starting with legal gap analyses and assistance to maritime authorities in ratifying or strengthening the implementation of relevant regional agreements on Port State Control.

IMO joined the other implementing partners The United Nations Office on Drugs and Crime (UNODC), INTERPOL, EU and the Intergovernmental Authority on Development (IGAD) at the launch event.

IMO Sub-Committee on Human Element, Training and Watchkeeping (HTW 8)

7-11 February 2022

Addressing the human element holistically

The 32nd session of the IMO Assembly included a new specific strategic direction on the human element in the current Strategic Plan for the Organization. This is expected to open new avenues for IMO to review all Human Element related aspects in the maritime and transport sector to enhance sustainable shipping operations where human actions play a fundamental role.

In this connection, the Sub-Committee agreed on the need for a holistic approach and requested the Maritime Safety Committee at its next session (MSC 105 in April) to invite all relevant IMO bodies to assess their respective involvement in the human element within their remit. This represents a very important step towards reviewing and addressing all Human Element related aspects within the Organization in a more structured manner.

The Sub-Committee also agreed on the draft revised checklist for considering and addressing human element issues and associated draft amendments to the Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies (MSCMEPC.1/ Circ.5/Rev.2) to ensure human element considerations are taken into account in all aspects and stages of the work of the Committees.

Electronic seafarer certificates – draft STCW amendments agreed

The Sub-Committee agreed draft amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, and related STCW Code, to formalize the use of seafarers’ certificates in electronic form.

The draft amendments to the 1978 STCW Convention, regulations I/1 and I/2, concern the inclusion of a new definition for “original form of any certificate required by the Convention”. The draft amendments to section A-I/2 of the STCW Code clarify the application in the Code of existing terms and terminologies to the certificates and endorsements that might prevent electronic forms.

Draft guidelines on the use of electronic certificates of seafarers were agreed for approval by the Maritime Safety Committee, in conjunction with the adoption of the

aforementioned amendments to the STCW Convention and Code.

The draft amendments and guidelines on electronic certificates are in line with IMO's effort to integrate new and advancing technologies in its regulatory framework.

Guidance and procedures for STCW Convention

The Sub-Committee also considered issues related to the effective implementation of the STCW Convention. The assessment of the challenges relating to implementation has led to the consideration of one of the main obligations for Parties emanating from the Convention: the communication of information.

The development of new streamlined guidance and procedures for the communication of subsequent reports and initial information is currently ongoing, with the aim of helping Parties to discharge their obligations as required by the Convention.



Learning from casualties – implications for seafarer training

The application of casualty cases and related lessons learnt, to the training of seafarers has been identified as a relevant tool to help reduce the human element-related risk and prevent casualties.

The Sub-Committee has been developing guidance for the application of casualty cases and lessons learnt, to seafarers' education and training, which was agreed at this session and referred to the Sub-Committee on Implementation of IMO Instruments (III) to complete the links to relevant websites for casualty investigation, including IMO's GISIS module on marine casualties and incidents (<https://gisis.imo.org/Public/MCI/Default.aspx>).

Validation of model courses

Recognized as tools intended to assist Member States and other stakeholders to develop detailed training programmes, model courses are routinely developed/ revised and validated by the HTW Sub-Committee.

The Sub-Committee finalized two new appendices on taxonomy action verbs for model courses and guidance on learning outcomes, for inclusion in the Revised guidelines for the development, review and validation of model courses (MSC-MEPC.2/Circ.15/Rev.2).

The Sub-Committee also endorsed the process for the revision of the following model courses with a view to validation by HTW 10:

- 1.32 on Operational use of Integrated Bridge Systems Including Integrated Navigational Systems; and
- 1.35 on Liquefied Petroleum Gas (LPG) Tanker

Cargo and Ballast Handling Simulator.

Seafarers' psychological safety, mental health and wellbeing

The Sub-Committee considered a proposal to prioritize the revision of model course 1.21 on Personal Safety and Social Responsibilities, with a view to including specific content to establish appropriate maritime workplace behavioural norms and essential human elements of psychological safety.

In this connection, the Sub-Committee recognized that psychological safety, mental health and wellbeing (including sexual assault and sexual harassment) are issues of serious concern in the maritime sector that required coordinated action by relevant organizations such as the International Labour Organization (ILO) and IMO.

Therefore, in order to set a robust foundation of measures to address them properly, the Sub-Committee agreed that, in the first instance, relevant requirements for inclusion in the 1978 STCW Convention should be developed. This could be followed by other actions supported by these mandatory requirements, such as the revision of model courses. Furthermore, the Sub Committee invited interested Member States and international organizations to submit relevant proposals to the Maritime Safety Committee for consideration and action, as appropriate.

Measures to ensure the quality of onboard training and to facilitate mandatory seagoing service

The Sub-Committee considered several proposals aimed at addressing the quality of onboard training, as well as facilitating mandatory seagoing service for the certification of officers in both the deck and engine departments.

In this context, follow-up action will continue inter-sessionally by correspondence to prepare a work plan to develop measures regarding the assurance of quality of onboard training required by the STCW Convention, including identification of expected goals, effectiveness and consequences of any measures to be adopted; which should be followed by the development of relevant non-mandatory provisions.

Furthermore, information in order to identify the difficulties faced by Member States to implement STCW provisions for mandatory seagoing service will be collated, specifically on actual practices for satisfying these requirements; and also problems in relation to the identified practices, including possible solutions, classified as short- and long-term measures.

Euroferry Olympia fire

IMO S-G expresses concern

Of the events first reported on 18 February IMO Secretary-General Kitack Lim commented here four days later: *'I express my deep concern regarding the incident involving the fire on board the ro-ro Euroferry Olympia, on 18*

February, near the Island of Corfu in the Ionian Sea, while en route from Igoumenitsa, Greece, to Brindisi, Italy.



'I wholeheartedly appreciate the efforts of the search and rescue authorities of Greece, as well as nearby merchant ships, for the rescue of more than 275 people and the ongoing work to locate a number of missing people.'

'I am saddened to learn of a confirmed fatality. I convey my condolences to all who have been impacted by the loss.'

'We are closely monitoring the situation as it evolves.'

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

It was further reported that IMO's Sub-Committee on Ship Systems and Equipment (SSE) is engaged in ongoing work to minimize the incidence and consequences of fires on ro-ro passenger ships.

Pacific Islands region

Supporting oil spill response, liability and compensation

IMO has been continuing its work to help make oil spill response, liability and compensation a priority on the national and regional agenda in the Pacific Islands region. This was reported on 24 February.

Phase Two of a virtual workshop on the ratification and effective implementation of conventions relating to oil pollution preparedness, response and co-operation (OPRC) and the liability and compensation regime in the Pacific Island Region was held in two sessions on 15 and 16 February followed by 22 to 25 February.

Both workshops recognised that the region's progress is inextricably linked to the waters of the Pacific, thereby making marine environment protection a priority on the national agendas of every State.

Phase One (see <https://tinyurl.com/6wpc2bka>) focused on contingency planning for oil spill response.

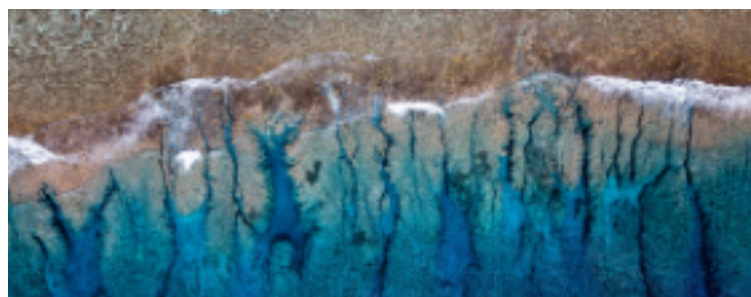
Phase Two of the workshop programme focused on IMO Conventions* dealing with liability and compensation for pollution damage, which is designed to ensure the basis for determining liability and the level of compensation for any damage, including pollution damage, from an incident involving a ship.

Ratification

Ratifying these conventions benefits State Parties but also carries State obligations, in particular, to support effective and uniform implementation of the liability and compensation regime. Fulfilling such obligations can be challenging for State Parties that lack certain human resources and technological and scientific know-how, as is the case in the Pacific Island region.

Central to ratification and implementation of IMO conventions dealing with the marine environment is the inclusion of the three regulatory pillars of prevention, response, and liability and compensation.

The logical next steps after ratification involve drawing up the roadmap to implementation, including, for example: policy and legislation, awareness programmes, inter-agency cooperation, regional arrangements, capacity building and so forth in the form of Country Action Plans and Regional Action Plans.



Participants

The workshop was attended by participants from: the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, the Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

Contributions

In-kind contributions to the event came from Australia, New Zealand, United States Coast Guard, International Group of Protection and Indemnity Clubs, ITOFF Ltd and Oil Spill Response Limited (OSRL).

It is of note that some of these participants included the policy makers and legislative advisors and drafters responsible for the legal and legislative implementation of the IMO instruments into their domestic legislation.

This event was jointly organized by the IMO, the Secretariat of the Pacific Regional Environment Programme (SPREP), and the Pacific Community (SPC), under IMO's Integrated Technical Cooperation Programme (ITCP).

* the International Convention on Civil Liability for Oil Pollution Damage, 1992 (CLC); International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992 (FUND) and its Protocol of 2003; International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001; International Convention on Liability and Compensation of Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 2012, among others.

Ukraine

Statement by IMO Secretary-General

Shortly after 1200 GMT on 26 February IMO Secretary-General Kitack Lim issued a statement:

He said: *'As the humanitarian crisis continues to unfold in Ukraine, I fully support and stand with UN Secretary-General António Guterres' call for hostilities to cease immediately.*



'I am gravely concerned about the spill over effects of the military action in Ukraine on global shipping, and logistics and supply chains, in particular the impacts on the delivery of commodities and food to developing nations and the impacts on energy supplies.

'Along with the people of Ukraine, innocent ships, seafarers and port workers engaged in legitimate trade should not be adversely impacted by this growing crisis.

'Shipping, particularly seafarers, cannot be collateral victims in a larger political and military crisis – they must be safe and secure.'

Shipping Industry Flag State Performance Table 2021/2022

Issued in London on 31 January the annual *Shipping Industry Flag State Performance Table*, from the International Chamber of Shipping, identified reporting on seafarer wellbeing as a *'casualty of the pandemic.'*

The Table is intended to encourage ship owners to maintain a dialogue with their Flag states, and help facilitate necessary improvements in the interests of safety, the environment and decent working conditions, among other issues. The Flag State of a merchant ship is the jurisdiction under whose laws the ship is registered or licensed and is deemed the nationality of the vessel.

This year's Table highlights a drop in levels of reporting on the status of national ILO labour standards, including the 2006 Maritime Labour Convention (MLC), underscoring the severe administrative pressures of the pandemic and the ongoing crew change crisis on seafarers, governments and the industry alike. The Table's criterion assessing flag states' reporting on ILO labour standards, including the MLC, revealed a 6% decrease in Flag States successfully meeting their obligations.

At ILO the Committee of Experts on the Application of Conventions and Recommendations, which compiled the report used by the ICS Table, noted that *'there was a sharp decrease in the number of reports received by the deadline of 1 October this year in relation to previous years.'* In total, of the 2,004 reports on labour standards requested by the ILO from governments in 2021, only 42.9% of these requests were granted. This is in comparison with a 70.7% rate of reporting received by the ILO the previous year.

The findings were an exception against a generally strong performance across the board from most Flag States, on criteria such as Port State Control (PSC) records and ratification of international conventions. ICS noted that while this trend can be partly explained by administrative pressures brought about by Covid-19, it also serves as a reminder that the hardships suffered by the global workforce throughout this pandemic may not be at the forefront of national administrations' minds.

Guy Platten, ICS Secretary General, commented: *'The pandemic has been a challenge for us all and one that Flag States have also had to weather. However, the drop off in reporting against ILO Labour Standards, including the MLC, is further evidence that seafarer wellbeing has been an unintended casualty of the pandemic.*

'Hundreds of thousands of seafarers have been trapped on ships for many months beyond their scheduled tours of

duty throughout the last two years. This report is a reminder that Flag States must keep seafarer wellbeing as a top priority.'

Amongst the ten largest ship registers (by dead weight tonnage), covering more than 75% of the world fleet, none have more than two indicators of potentially negative performance, and five have no negative indicators at all.



The findings also suggest that distinctions between traditional flags and open registers are no longer meaningful, with many open registers amongst the very top performers, alongside several European registers.

To read the document

Produced by the ICS in association with the Asian Shipowners' Association and the European Community Shipowners' Association the publication: *Shipping Industry Flag State Performance Table 2021/2022* at ten pages is available to be downloaded here: <https://tinyurl.com/e6mvrshx>

About the ICS

The International Chamber of Shipping (ICS) is the global trade association representing national ship owners' associations from Asia, the Americas and Europe and more than 80% of the world merchant fleet.

Established in 1921, ICS is concerned with all aspects of maritime affairs particularly maritime safety, environmental protection, maritime law and employment affairs.

ICS enjoys consultative status with the IMO and the ILO.

Indian Ocean Cyclone Batsirai

East of Madagascar (See front cover photo)

4 February 2022

Our cover image of this issue of *Newsletter* was captured on 4 February 2022 by one of the Sentinel-3 satellites. It

shows cyclone Batsirai shortly after it passed over the French overseas department of La Réunion, in the Indian Ocean and moving west towards Madagascar.

Batsirai brought torrential rains and extreme winds to La Réunion, with gusts of 200km/h. The rough seas generated by the cyclone also caused a Mauritius-registered product tanker *Tresta Star* to go aground on the southern coast of La Réunion. Despite the highly adverse meteorological conditions, teams from the department's fire and rescue service were successful in recovering all eleven members of the tanker's crew.

See satellite photograph on front page.

See film here: <https://tinyurl.com/2p88xu4a>

According to officials on La Réunion, *Tresta Star* was not carrying a cargo of oil at the time and any threat to the coastline may be limited to its diesel fuel.

Tresta Star, registered Port Louis, Mauritius, built 2019 is of 2021 gt, and 76metres loa.

About the EU's Copernicus programme

Using Sentinel satellite data and in situ data, the Copernicus Marine Environment Monitoring Service Sea Models can be used to evaluate the potential effects and predict the drifts of oil spills through products such as OSERIT* for the North Sea, or MEDSLIK** in the Mediterranean.

*For more information see here: <https://tinyurl.com/2s4yhb73>

**And here: <https://tinyurl.com/2p8v9e7n>

Green shipping boost

UK Maritime Minister announces plans to explore shore power

In the UK a call for evidence has been launched by the Department for Transport as the government aims to accelerate maritime decarbonisation by switching to emissions-cutting shore power at UK ports.

In an announcement of 7 February it was anticipated that vessels could eventually plug into onshore power sources while berthed, lowering emissions.

Launching a call for evidence on shore power during his keynote speech at the annual UK Chamber of Shipping (UKCoS) Dinner on 7 January, the Maritime Minister Robert Courts outlined how, as well as vital environmental benefits, stimulating the innovation of new green technologies will continue the revival of the UK's shipbuilding industry, bringing private investment, creating jobs and revitalising coastal communities.

Maritime Minister Robert Courts said: '*Climate change is one of the biggest challenges this generation faces, and we will continue to lead international efforts to decarbonise the maritime sector.*

'Shore power will end the outdated practice of ships keeping their engines running while in port, reducing the poisonous fumes entering the air and ensuring we meet our net zero 2050 goals.'

Already leading the charge on key decarbonisation technologies such as zero-emissions vehicles, the UK became one of the few nations in the world to have a dedicated Clean Maritime Demonstration Competition, which pledged £23 million in 2021 to fund over 55 decarbonisation projects.

This was joined by commitments made at COP26, in which the UK launched the Clydebank Declaration, a coalition of 22 countries keen to develop green shipping corridors.

For the consultation document readers are invited to see here: <https://tinyurl.com/raaxths6>

EMSA signs cooperation agreements

EU Naval Missions to Somalia and Libya

Enhanced maritime awareness

It was announced on 11 February that the European Maritime Safety Agency (EMSA) is supporting EU Naval Force operations – known as Atalanta and Irini – following the signature of two cooperation agreements (see illustration here) with EU NAVFOR-Somalia (Operation Atalanta) on the one hand and EUNAVFOR MED (Operation Irini) on the other.



Operation Atalanta targets counter piracy and the protection of vulnerable vessels and humanitarian shipments off the coast of Somalia, while Operation Irini seeks to enforce the UN arms embargo on Libya and in doing so contribute to the country's peace process.

By cooperating with EMSA in the areas of maritime security and surveillance, multiple sources of ship specific information and positional data can be combined to enhance maritime awareness for the EU Naval Force in places of particularly high risk and sensitivity. The support provided by EMSA comes in the context of the EU's Common Security and Defence Policy.

EUNAVFOR-Somalia Atalanta

EMSA has been supporting the EU NAVFOR-Somalia Atalanta operation since April 2011 when piracy off the coast of Somalia was at its peak. The various measures taken to suppress piracy have been successful and the mandate of the operation was not only renewed at the beginning of last year but also expanded to include measures against illegal activities at sea, such as implementing the arms embargo on Somalia, monitoring the trafficking of weapons, and countering narcotic drugs. Through the cooperation agreement, EMSA is providing EU NAVFOR with access to an integrated maritime monitoring solution which offers the possibility of consulting vessel position data, central reference databases and earth observation products. This is integrated with EU NAVFOR data – such as vessel risk level based on vulnerability assessments – creating a specifically tailored maritime awareness picture. The new cooperation agreement extends the longstanding collaboration with EU NAVFOR for an indefinite period and is a great example of how EMSA is serving maritime security and law enforcement communities worldwide.



Maritime traffic off the Horn of Africa as displayed in the SafeSeaNet Ecosystem (SEG) on EMSA's IMS platform.

EUNAVFOR MED Irini

The EUNAVFOR MED operation Irini began on 31 March 2020 with the core task of implementing the UN arms embargo on Libya using aerial, satellite and maritime assets. It replaces operation Sophia but with a new mandate. While EMSA has been providing satellite AIS data to EUNAVFOR MED since 2015, the new cooperation agreement allows for access to EMSA's Integrated Maritime Services platform and in particular to the Agency's Automated Behaviour Monitoring (ABM) capabilities. These services help EUNAVFOR officers to keep a close eye on Libya's ports as well as to monitor the flow of maritime traffic in the area and target specific vessels for inspection based on suspicious behaviour picked up by the ABM tool. While the agreement is open ended, operation Irini's mandate is expected to run until 31 March 2023.

About EMSA

The European Maritime Safety Agency is one of the European Union's decentralised agencies established for

the purpose of ensuring a high, uniform and effective level of maritime safety, maritime security, prevention of and response to pollution from ships, as well as response to marine pollution from oil and gas installations. The agency promotes a safe, clean and economically viable maritime sector in the EU.

Readers are invited to visit EMSA's website for more information on the organisation here:

<http://www.emsa.europa.eu/>

Clean Oceans and the Blue Economy

According to OECD projections, by 2030, the Blue Economy (defined as all economic sectors that have a direct or indirect link to the oceans, such as marine energy, coastal tourism and marine biotechnology) could outperform the growth of the global economy as a whole, both in terms of value added and employment.

However, a wide range of human activities — from burning fossil fuels to overfishing — have been degrading the oceans for years. By increasing the absorption of carbon dioxide, global warming is acidifying the oceans and reducing oxygen levels, harming or killing marine plants, animals and other organisms. And as the ice caps melt, rising sea levels are increasingly putting hundreds of millions of people in coastal areas at risk.



In addition, an estimated 8 million tonnes of plastic waste and 1.5 million tonnes of microplastics enter the oceans every year. This threatens marine ecosystems and the communities relying on the seas for their livelihoods. Much of the plastic in the oceans comes from waste discharged on land or into rivers by the 2 billion people living without access to waste collection services. Fast population growth and rapid urbanisation in many cities around the world — particularly in coastal areas — add to the problem.

Oceans are the largest carbon sink on the planet, meaning that they help absorb CO₂ emissions from human activity. This comes at a great cost, as the chemical interaction with CO₂ and its absorption produces acidification, damaging fragile ecosystems like coral reefs, which house and nurse about 25% of all known marine species.



In its latest report, the Intergovernmental Panel on Climate Change concludes that the ocean is now warmer, more acidic and less productive. Melting glaciers and ice sheets are causing sea levels to rise, and coastal extreme events are becoming more severe.



To quote Jacques-Yves Cousteau, French oceanographer and marine conservation pioneer: *'The sea, the great unifier, is man's only hope. Now, as never before, the old phrase has a literal meaning: we are all in the same boat.'*

An overview of the Clean Oceans and the Blue Economy can be found here:

<https://tinyurl.com/2p8cb6aj>

EMSA's latest news

ROVs for accident investigation underwater survey?

In February it was announced from Lisbon that the European Maritime Safety Agency, EMSA, had launched a preliminary market consultation on underwater survey services using Remotely Operated Vehicles (ROV) for the purpose of accident investigation. The idea is to determine the technical, operational and financial feasibility of setting up a new operational service for Accident Investigation Bodies involving the provision of underwater survey services using ROV.



From 'eyes in the sky' to 'eyes in the sea', remotely operated vehicles may offer valuable insight to accident investigation bodies. Image credit: ©Flickr/Molly des Jardins

Image credit: ©Flickr/Molly des Jardin.

Preliminary market consultation will, we understand, gather knowledge and understanding of the market structure, potential constraints and cost estimations for the various types of operations. It is expected that the services could be used in the aftermath of very serious and serious marine casualties which have led to the sinking of a vessel.

ROVs' capabilities would be expected to offer added value in mapping and assessing the damage to a sunken vessel, collecting visuals; recovering evidence from the sunken vessel such as a VDR fixed capsule or debris, for instance.

CARGOSAFE study: container ship fires

EMSA has signed a contract for the delivery of a safety study on containerised cargo fires, following the structure of Formal Safety Assessment of IMO.

The objective of the study is to identify cost-effective risk control options for cargo fires on board container vessels. The contract has been awarded to a consortium led by DBI (Danish Institute of Fire and Security Technology) supported by RISE (Research Institutes of Sweden AB), Bureau Veritas, SDU (University of Southern Denmark) and OMT (Odense Maritime Technology A/S).



The CARGOSAFE study will look at cost-effective risk control options for cargo fires onboard container ships

It is understood that the opening meeting of the study took place in January and in February, as we were compiling this edition of *Newsletter* work was already proceeding with haste through the performance of a series of online Hazard Identification workshops with significant participation from several experts covering all possible technical areas.

This study is expected to be finalised in February 2023 and its results will be presented to IMO as soon as they become available.

Editor's note

Text here is based on material kindly provided by EMSA and to be found in its Newsletter No 2020 of February 2022.

The complete Newsletter is to be found here:

<https://tinyurl.com/2p8t2x7y>

Seably: a digital platform for bespoke maritime training

On 14 February it was announced from Gothenburg that Seably, a global online provider had welcomed the Synergy Marine Group as a new corporate customer on its digital platform for bespoke maritime training.

The Synergy Group is one of the world's leading ship managers. With HQ in Singapore, and spanning a network of 25 offices in 13 countries, it employs more than 18,000 seafarers.

Synergy manages a fleet of more than 500 vessels, including the most complex LNG (including FSUs), LPG and vast 20,000+ TEU container ships, as well as oil and chemical tankers, and bulk carriers.

With a strong focus on crew wellbeing, digitalisation and environmentally responsible policies, Synergy is at the forefront of transforming the ship management industry.

Martin Ackermann, Synergy's Chief Commercial Officer said: '*Continuous learning is at the heart of our culture at*

Synergy – and our commitment to helping our people upskill and thrive in an ever-changing world. Our engagement with Seably reflects our joint interests and shared values in putting seafarers first and improving safety at sea. Seably’s exciting new seafarer-centric digital training platform is the perfect vehicle for ongoing learning, training and development.’



Capt. Martin Ackerman, Synergy's Chief Commercial Officer

He continued: *‘The dynamics of the new digital platform usher in a new way of delivering maritime training and development, providing relevant, content that is easy to understand and digest. It also means that our seafarers will have access to an increased amount of personalised learning material that will enhance their safety and overall wellbeing.’*



Rikke Haugen Olsen, Seably Business Development Director EMEA

Synergy employees will have access to company-owned content, as well as over 270 courses developed by industry specialists covering a wide range of topics and skills, including specialised wellness programmes, designed and created by health experts with the mariner in mind.

It is understood that Seably (<https://www.seably.com/>) provides affordable and free access to the latest maritime training and development for real-life learning. Created by seafarers for seafarers, it delivers effective immersive learning for the maritime sector in a unique, digitalised, and online format, available virtually anywhere in the world.

Uniquely, it has shared revenue data for the international community of course providers. The Seably platform can be accessed online and offline, at any time on land or at sea using apps, PCs and mobile devices.

New building: ice-breaking tanker

Japan’s Condensate Transport Project

In recent weeks Mitsui OSK Lines, Ltd. (MOL) announced that it had agreed to participate in cargo transport for the Arctic LNG 2 Project on Russia’s Gydan Peninsula, and signed, through an MOL subsidiary, a charter contract for a newbuilding ice-breaking tanker with the project company, whose largest shareholder is Russia-based PAO NOVATEK (www.novatek.ru/en).

It is understood that the vessel will be constructed at Guangzhou Shipyard International Company Limited which is a subsidiary of China State Shipbuilding Corporation Limited (CSSC), and is expected to be delivered in 2024. This contract follows the October 2020 signing of charter contracts for three ice-breaking LNG vessels to serve for the same project.



The vessel will transport condensate from the LNG/condensate plant inside the Arctic Circle on the Gydan Peninsula, mainly to Europe (westbound) via the Northern Sea Route, see chartlet here.

MOL has operated three ice-breaking LNG carriers on the Northern Sea Route for the Yamal LNG Project since March 2018. In addition, three ice-breaking LNG carriers for the Arctic LNG 2 Project are scheduled to go into service in 2023.

MOL has earned high regard for its track record it has built on the Northern Sea Route, its technological capabilities and expertise, and accumulated resources. All of these

assets contributed to the conclusion of the contract. It will further enhance its experience and knowledge of the Northern Sea Route through its involvement in transporting condensate as well as LNG, as it works to expand the maritime transport of this next-generation, environment-friendly energy resources from the Russian Arctic. It will also ensure stable access to energy produced in the Russian Arctic to supply Japan.

The new ice-breaking tanker in brief

Length 214m
Breadth: 34m
Cargo hold capacity: 54,800 m³
Ice Class Specifications: RMRS ARC7
Polar Service Temperature: -50 °C

Maximum icebreaking capacity

1.5m thick at ahead / 1.8m at astern with icebreaker bow structure and 2-shaft POD propeller

Shipyard: Guangzhou Shipyard International Company Limited



PAO NOVATEK is the largest independent natural gas producer in Russia, and in 2017, entered the global LNG market by successfully launching the Yamal LNG project, pictured here.

Founded in 1994, the Company is engaged in the exploration, production, processing and marketing of natural gas and liquid hydrocarbons. The Company's upstream activities are concentrated mainly in the prolific Yamal-Nenets Autonomous Region, which is the world's largest natural gas producing area and accounts for approximately 80% of Russia's natural gas production and approximately 15% of the world's gas production.

Note: This article was sourced before the recent Ukraine conflict and sanctions.

The Brest Commitments for the Oceans

Representatives of more than 100 countries from all sea areas and representing more than half the world's Exclusive Economic Zones, have stated their determination to preserve the oceans by contributing to the Brest Commitments for the Oceans, alongside the Secretary-General of the United Nations, the Director-

General of UNESCO and the Secretary-General of the IMO.

These powerful commitments were made at the One Ocean Summit, held in Brest from 9 to 11 February 2022, which brought together 41 States and representatives of civil society and businesses, in a milestone of the French Presidency of the Council of the European Union which is committed to the climate and a proactive European ocean policy.

Aware that the position of the Oceans on the international political agenda is not currently commensurate with its role in climate, environmental and social balances or with the degree of threats to marine life, the leaders in Brest undertook to work together swiftly and tangibly to put a stop to the degradation of the Oceans.

They have chosen to take action to preserve biodiversity, stop overexploitation of marine resources, fight pollution and mitigate climate change.

Protect biodiversity and ocean resources

The creation of protected areas is an essential pillar for preserving biodiversity. It is now essential to continue and amplify momentum by setting high ambitions for the coming decade.

- More than 30 additional countries have joined the High Ambition Coalition for Nature and People launched at the One Planet Summit in January 2021. Now, 84 countries aim to protect 30% of the world's land and sea by 2030.

Two thirds of the ocean, beyond national jurisdiction, representing 45% of the surface of our planet, cannot currently enjoy marine protected area status.

- The 27 Member States of the European Union, joined by 16 third countries, have therefore launched the High Ambition Coalition on Biodiversity Beyond National Jurisdiction (BBNJ) in order to foster the conclusion this year of an effective, global agreement on the sustainable use of the high seas and the protection of their biodiversity.

Illegal, unreported and unregulated (IUU) fishing accounts for almost a fifth of global catches, undermines efforts to manage fish stocks sustainably and often involves very poor safety and working conditions for fishers.

At the One Ocean Summit, 14 participating countries committed to stepping up the fight against illegal fishing on several fronts:

- Six countries committed to ratify the IMO's Cape Town Agreement, which will then at last come into force, by the October 2022 deadline, setting safety standards for fishing vessels.
- Two more countries will ratify the Food and Agriculture Organization's Agreement on Port State Measures, to better control fishing activities at ports where catches are landed.
- Several EU Member States committed to deploy their navies in overseas operations to step up surveillance

of illegal fishing, in accordance with the European Regulation of 2008.

Join forces with the Oceans to face climate change

The strong growth of shipping, driven by global trade, means it is essential to swiftly and substantially reduce the damage it causes.

- 22 European ship owners have committed to the new Green Marine Europe label, which entails very tangible measures in eight fields: underwater noise, pollutant air emissions, greenhouse gas emissions, aquatic invasive species, residues, oily discharge and ship recycling.
- 35 actors including 18 major European and global ports have committed to speeding up the supply of electricity to berthed ships to limit greenhouse gas emissions and reduce atmospheric pollution in often dense port cities.
- In order to reduce atmospheric pollution, all Mediterranean countries, along with the European Union, have committed to ask the IMO to create a low sulphur emissions zone across the Mediterranean starting on 1 January 2025. This summer, France, Spain, Italy and Monaco will also ask the IMO to establish a Particularly Sensitive Sea Area given the presence of many cetaceans, in order to limit sailing speeds and reduce collisions.

The Oceans play a crucial role in climate change mitigation and adaptation. Some marine and coastal ecosystems (salt marshes, seagrass beds and mangroves) can absorb and store large quantities of carbon. This capacity now needs to be highlighted to speed up projects to protect and restore such ecosystems, to enable genuine blue carbon offsetting.

- In Brest, France and Colombia launched a global coalition for blue carbon, which will bring together national and multilateral actors in the field to contribute to financing the restoration of coastal ecosystems, using shared and rigorous methodologies.

End plastic pollution of the Oceans

Nine million tonnes of plastic end up in the ocean each year, of which 80% comes from coasts and rivers. Massive investment is needed to improve sanitation and waste processing infrastructure on all continents.

- At the One Ocean Summit, the European Bank for Reconstruction and Development (EBRD) joined the European Investment Bank (EIB) and the development banks of France (AFD), Germany (KfW), Italy (CDP) and Spain (ICO), which have joined forces in the most important initiative for the reduction of plastic pollution at sea, the Clean Oceans Initiative. Together, they have doubled their efforts in this sector, committing to provide €4 billion of finance by 2025.

The best way to ensure waste does not reach the Oceans is to stop producing it in the first place. The New Plastics Economy Global Commitment led by the Ellen MacArthur Foundation and the United Nations Environment Programme, brings together national and local governments, businesses and NGOs to speed up the transition to a circular economy with the aim of 100%

reuse or recycling of plastics and an end to all single-use products.

- At the One Ocean Summit, Greece, Italy, Colombia, the Republic of Korea, the City of Paris and Central Greece joined the New Plastics Economy Global Commitment and 500 signatories worldwide, including 250 companies.
- At the One Ocean Summit, India and France together launched an initiative on the elimination of single-use plastic pollution, which aims to be multilateral.

Place the ocean at the top of the global political agenda

The work of the One Ocean Summit is the starting point of a series of international meetings where the Oceans will be central, including the UN Ocean Conference in Lisbon, in June, and COP27 in Egypt, in autumn.

XIII. To confirm this momentum and build an ambitious international ocean agenda, France and Costa Rica have proposed to jointly organize the next UN Ocean Conference in 2024.



To decide, one must first understand. The digital revolution is an opportunity to build an integrated model of the oceans, covering physics, chemistry, marine life and human activities. This “Digital Twin” initiative will inform political decisions and track their effects, enable the marine economy to develop with respect for ecosystems and fuel dialogue with stakeholders and the public.

- The European Union has pledged to produce a “Digital Twin of the Ocean” to gather knowledge and test scenarios for action, supporting European blue growth and global governance.
- UNESCO has pledged to ensure at least 80% of the sea bed is mapped by 2030.

In addition to active participation in the collective commitments announced at the One Ocean Summit, France is active in its national capacity and intends to lead by example as host country

It is contributing to raising collective ambition to preserve marine biodiversity:

- France has announced that it has now achieved and exceeded the goal of classifying 30% of the land and marine spaces under its jurisdiction as protected areas, with the extension of the national nature reserve of the French Southern Lands which is now the second largest marine protected area worldwide, covering more than 1.5 million km².

- To take things further, French Polynesia has committed to creating a network of marine protected areas of at least 500,000 km² within its exclusive economic zone.
- France also presented an update on the implementation of the action plan adopted to address accidental catches of small cetaceans in the Bay of Biscay.

France announced commitments to further combat pollution of the oceans:

- It has committed to process abandoned rubbish tips on its coastlines that risk release into the sea of waste, including plastics. Three of them, where the situation is particularly urgent, will be processed this year: those of Dollemard, in Seine-Maritime Department, Fouras in Charente-Maritime Department, and Anse Charpentier in Martinique Department.
- The Anti-waste Act for circular economy is putting France on track to eliminate single-use plastic packaging by 2040.

Lastly, France has committed to improving knowledge of the effects of climate change on sea level rises:

- France will soon publish its first national polar strategy and will launch a scientific programme to measure the contribution of the Eastern Antarctic to sea level rises.

The contributors

A total of 41 countries answered the invitation and contributed to the One Ocean Summit at a very high level: Barbados, Canada, China, Colombia, Comoros, Costa Rica, Côte d'Ivoire, Croatia, Cyprus, Egypt, France, Gabon, Germany, Ghana, Greece, Iceland, India, Ireland, Italy, Japan, Madagascar, Malta, Mexico, Monaco, Morocco, Namibia, Norway, Palau, Panama, Papua New Guinea, Portugal, the Republic of Korea, the Republic of the Congo, Senegal, Seychelles, Spain, Tanzania, Tonga, Tunisia, the United Kingdom and the United States.

SMOU Long Membership Awards

Last year the Singapore Maritime Officers' Union (SMOU), a longstanding IFSMA member, celebrated the seventieth anniversary of its formation. SMOU is a progressive global union with a growing membership and a dynamic vision.

It exists to safeguard the interests and wellbeing of seafaring officers and plays a pivotal role in promoting good industrial relations between members and their employers, improving the wages and working conditions of members in the maritime industry through collective bargaining agreements with shipping companies which employ them.

SMOU promotes good industrial relations between seafarers (members) and their employers, ship owners and ship management companies, and governments through its strong tripartite relationships with the local, regional and international maritime community.

It is noteworthy that the union has seen tremendous progress, especially in the last 40 years, with membership increasing from 400 to more than 32,000 members.

SMOU values members' contributions to the maritime industry and global economy. While they focus on the challenges ahead, the union continues to protect them wherever they are through affiliated international representative offices around the world. It represents members at international meetings organised by the International Transport Workers' Federation (ITF) and the International Labour Organisation (ILO) and of course at IFSMA.



SMOU General Secretary Ms Mary Liew paying Mr Pang Chin Tong and his family a visit (40 years long membership award).

In addition to industrial matters, SMOU advances the cultural, recreational and educational aspirations of all its members and families.

Remembering their mantra: *We Care for: Your Welfare, Your Family, Your Employment, Your Education*, such that whether members are afloat or ashore, SMOU provides a range of welfare benefits, social activities and education programs to take care of members and their families' needs.

SMOU Senior Members Long Membership Awards home visits

SMOU is a long standing association member of IFSMA and the article below is a fine example of the service an association can offer to its members.

The article is adapted with grateful thanks from SMOU's publication *SeaVoices* – www.SeaVoices.org.sg

SMOU reported on 10 February that it had organised a series of home visits to personally award the Long Membership Awards (LMA) to senior SMOU members.

This year, SMOU announced two new categories – 45 and 50 years membership – under the SMOU Long Membership Awards, to acknowledge and appreciate long standing members with the union.

SMOU took the initiative to visit them at the comfort of their homes. SMOU President Rahim Jaffar and Chairman of SMOU Membership Committee Tan Hung Tat presented Mr Bashir – SMOU member of 40 years – with the Long Membership Award certificate and Tissot watch along with some ART (antigen rapid test) kits and care packs, and stayed to catch up with him and his family. He was pleased to note how SMOU has improved over the years and gave credit to SMOU for helping him and being there for him since the early years of his membership.

Another LMA recipient Mr Pang Chin Tong (pictured here), who received his 40 years award, shared '*I am very thankful that the union has taken good care of me all these years. SMOU is the best union that is welfare-oriented, 我很感恩*' (Meaning: '*I am very appreciative*'). Despite his age of 90, his keenness to learning new skills was awe-inspiring and Sister Mary commended his vigour to stepping out of his comfort zone to learn. Additionally, he prides himself with his proficient use of technology '活到老,学到老' (Meaning: '*One is never too old to learn*'). SMOU General Secretary Ms Mary Liew presented Mr Pang his Long Membership Award certificate and Tissot watch, together with a care pack containing masks and ART test kits.

When SMOU official Dominic Yong and SeaVoices visited Mr Zainal- SMOU member of 49 years, to present him with his 45 years' Long Membership certificate and CapitaLand vouchers, he thanked the Union for being helpful to members and commended the improved welfare today. He elaborated further saying the problems that members raised were always heard and reminisced on SMOU's events such as the Lunar New Year Luncheon and the Birthday meal for members.

The final visit was to Mohamed Fajari Bin Hj Basri and family – SMOU member of 40 years. SMOU Secretary Terence Tan presented the award to his son, who collected the award on his behalf. His son thanked SMOU for making the trip down and recollected how his father always praised SMOU for always reaching out to him.

SMOU will always uphold its core value of caring and sharing for its member's welfare.

TT Talk Club presents Lithium complexities

Lithium as a substance, and indeed lithium batteries, until around the mid-1980s was classified for dangerous goods regulations under Class 4.3 (Substances which, in contact with water, emit flammable gases). Experts and regulators were persuaded that smaller batteries present reduced hazards compared to their larger counterparts through the supply chain. Therefore the criteria for classification was redesigned around the weight and power output of the cell or battery. Consequently, lithium ion batteries are classified by the equivalent energy content in watt-hours (Wh), while lithium metal/alloy batteries are classified by the weight of lithium content in grams.

There are four different UN numbers for classification of lithium cells or batteries based on defined thresholds, being:

- ICells - for lithium metal/alloy cells, the lithium content is not more than 1 gram, and for a lithium ion cell, the watt-hour rating is not more than 20 Wh.
- Batteries - for a lithium metal or lithium alloy battery the aggregate lithium content is not more than 2 g, and for a lithium ion battery, the Watt-hour rating is not more than 100 Wh.

The UN numbers are:

- UN 3090, Lithium metal batteries (shipped by themselves).
- UN 3480, Lithium ion batteries (shipped by themselves).
- UN 3091, Lithium metal batteries contained in equipment or packed with equipment.
- UN 3481, Lithium ion batteries contained in equipment or packed with equipment.

These are included within Class 9 (Miscellaneous dangerous substances and articles) on the basis that lithium batteries did not constitute a "substance", rather they are "articles". In normal use, of course, one would not encounter the lithium contained within a battery.



Special Provision 188 (SP188)

While recognising that there are various Special Provisions applicable to lithium batteries, the focus here is on one alone. On the basis that smaller lithium batteries present a reduced hazard, within the UN regulations SP188 exists to enable transport under specific conditions. Where lithium batteries or cells meet these

requirements, when offered for transport they are not subject to other provisions of ADR/IMDG code. Notwithstanding qualification for transport under SP188, however, these batteries continue to be dangerous goods, presenting the same risks, rather on a smaller scale.

‘Notwithstanding qualification for transport under SP188, however, these batteries continue to be dangerous goods.’

The qualifying criteria under SP188 starts by considering weight and energy content, specifying maximum weights and energy content for both lithium metal and lithium ion cells and batteries. The requirements proceed to focus on protection of the cell or battery, specifying the required packaging and considering protection from the risks of short circuit, particularly where cells or batteries are contained within equipment. Each package containing qualifying lithium batteries must, with certain exception, be marked with the appropriate lithium battery mark.



An important point to raise here is that because those lithium batteries qualifying under SP188 are not subject to other provisions of ADR/IMDG, beyond the marking of the packages (externally invisible once packed in a freight container), there is no requirement to notify the carrier specifically of the contents.

Cells and batteries that are not satisfying the requirements set out under SP188 are fully regulated for transport. Accordingly, such shipments must be declared and shipped as dangerous goods under the applicable UN number. Absent inspection or incident, bad actors will recognise the likelihood of being caught mis-declaring is remote.

Supply chain relationships are often complex, but actors need to be aware where liability may rest and undertake effective due diligence on counterparties and the presented cargo. Requesting a copy of the actual shipper’s Statement of Compliance could provide a useful check point in this process.

‘Actors need to be aware where liability may rest and undertake effective due diligence on counterparties and the presented cargo.’

Importance of advances

Technological advances should logically result in review of classification. Lithium batteries have continued to decrease in size and weight, while being able to deliver increasing energy output through more efficient use of the active content. Advances in technology mean that lesser performing batteries could still qualify for inclusion under SP188, whereas newer more efficient batteries may not.

‘Advances in technology mean that lesser performing batteries could still qualify for inclusion under SP188, whereas newer more efficient batteries may not.’

There is pressure from the manufacturing industry to increase the current criteria for qualification under SP188 to be inclusive of more powerful lithium batteries. This requires careful, independent scrutiny to ensure that the primary objective of only permitting the carriage of dangerous goods that satisfy specified safety provisions is achieved.



Mitigating the risk

As with many cargo types, the majority of shippers will take all practicable steps to ensure that their cargo meets specifications, achieves certification and is classified, packaged, packed, labelled/marked and declared correctly for transport. The small – frankly criminal – minority are motivated to avoid compliance, entering cargo into the supply chain that presents great risk to all.

Once lithium batteries, particularly those shipped under SP188 are placed into the intermodal supply chain, there is very little opportunity for the cargo to be checked, visually or otherwise to verify compliance. Due diligence is therefore critical: know your customer, understand their processes and satisfy yourself that they are taking the required actions in preparing and declaring the cargo correctly.

See here: <https://tinyurl.com/bdh8mzap>

‘Due diligence is... critical.’

Accurate, unambiguous and timely communication between contracting parties is also vital, ensuring that critical information is shared with all actors in a given supply chain.

Conclusion

History illustrates that the most catastrophic losses associated with the carriage of lithium batteries have unfortunately occurred so far in the air mode. All surface modes are, however, exposed to these risks. There may be fewer reported incidents, but a number of container fires are suspected to have involved lithium batteries. Furthermore, the technological advances, modal shift away from air and societal appetite for electric vehicles all point to an emerging risk.

'The technological advances, modal shift away from air and societal appetite for electric vehicles all point to an emerging risk.'

For all actors who contract to transport lithium batteries, developing a thorough understanding of this particular cargo is a prudent step, not least covering the safety aspect. Feedback from the industry indicates a number of ill-informed enquiries and additional documentary demands for such shipments, causing delays and frustration.

For some incidents at sea, it has fallen to an over-stretched crew to respond, with limited resources. Emergency response for lithium battery fires is already complex on land – whether in transit or during storage and handling. The risk is that once on fire the commodity is hard to extinguish and prone to develop rapidly, generating substantial heat. Early detection, possibly through thermal imaging, may be critical, but carriage at sea, potentially stowed where not readily accessible and adjacent to other cargo, presents an environment that is highly challenging to all involved should anything go wrong.

If you would like further information, or have any comments, readers are invited to e-mail TT Club at: riskmanagement@ttclub.com

Readers may also take the opportunity to forward this item to any others whom they may feel would be interested.

USCGC *Polar Star* arrives McMurdo

Supporting Operation Deep Freeze

On 7 February the United States Coast Guard (USCG) reported that 157 crew members of the Coast Guard Cutter *Polar Star* (WAGB 10) had arrived at McMurdo Station in Antarctica that day following an 86-day transit from the United States and the cutter's departure from its Seattle homeport on 13 November last year.

This deployment marked *Polar Star's* 25th passage to Antarctica supporting Operation Deep Freeze, an annual joint military service mission to resupply the United States Antarctic stations in support of the National Science Foundation (NSF: <https://www.nsf.gov/>), lead agency for the United States Antarctic Program (USAP: <https://www.usap.gov/>).

Each year the 399-foot loa, 11,000 displacement tons cutter breaks a navigable channel through miles of ice, sometimes as much as 21-feet thick, to allow fuel and

supply ships to reach McMurdo Station, the US Antarctic Program's logistics hub and largest station.



Polar Star reached the Ross Sea, Antarctica, on 3 January and commenced breaking the 37 miles of ice that extended from the ice pier in Winter Quarters Bay at McMurdo Station out to open water. *Polar Star* spent four weeks breaking ice and grooming the shipping channel. The crew's efforts were aided by favourable winds and currents and by month's end had created an open and ice-free approach for the supply vessels.

The cleared channel to McMurdo Station will enable two supply vessels, *Maersk Peary* and *Ocean Giant*, to safely discharge over 8 million gallons of fuel and 1,000 cargo containers. Together these two ships carry enough fuel, food, and critical supplies to sustain USAP operations throughout the year until the next sealift opportunity in the austral summer of 2023.



Polar Star made international port calls in Wellington and Lyttelton, New Zealand, on passage to Antarctica. While in New Zealand, the crew engaged with the Royal New Zealand Navy, the United States Embassy and volunteered in Christchurch at the local Society for the Prevention of Cruelty to Animals.

Polar Star will also partner with the Royal New Zealand Navy's largest ship, HMNZS *Aotearoa*, in support of resupplying Scott Base, New Zealand's year-round Antarctic research facility.

Captain William Woityra, CO of *Polar Star* commented: *'It is a tremendous honour to lead the men and women of*

Polar Star on this important mission. This team brought renewed energy and passion to this 46-year-old ship, and overcame significant challenges to deliver exceptional results.”

Assigned to Operation Deep Freeze each year, the 46-year-old icebreaker spends January and February breaking ice in Antarctica. *Polar Star* is due to return to the United States after completing the mission.



Stephanie Short, section head of NSF’s Antarctic Infrastructure & Logistics added: *‘We are excited to welcome the return of the Polar Star to McMurdo Station this year. Continuing the U.S. Antarctic Program’s vital operations would simply not be possible without [the cutter’s] support and the hard work of the captain and crew.*

This year also marks *Polar Star’s* return to Antarctica following the onset of the Covid-19 pandemic. In the 2020-2021 season *Polar Star* conducted a winter Arctic deployment, during which the cutter steamed to the Arctic Circle to project constructive presence in the northern high latitudes under winter conditions and to train the next generation of polar sailors. Their efforts resulted in setting a record for the furthest north any American surface vessel has been in the winter months

In the US the Coast Guard has been the sole provider of the nation’s polar icebreaking capability since 1965. Commissioned in 1976 *Polar Star* is the United States’ sole heavy icebreaker. The Coast Guard is increasing its icebreaking fleet with construction of three new polar security cutters to ensure persistent national presence and reliable access to the Polar Regions.

Illustrations kindly provided by the US Coast Guard Pacific Area © 2022.

Britannia P&I Club

Sustainability report template published

Having published its own inaugural sustainability report in 2021, Britannia P&I has created a template for its Members and other shipping companies to use as a guide to help them develop their own sustainability reports.

The topic of sustainability reporting and the qualitative requirements of financial institutions and regulators, both

global and regional, is a fast developing area and an issue of growing strategic importance for many maritime companies, including Britannia’s Members.

It became apparent in Britannia’s discussions on this issue with its membership that there were varying views on the approach that should be taken to sustainability reporting. This is particularly so in relation to content, target audience expectations, regulatory requirements and alignment with bodies such as the Task Force on Climate-Related Financial Disclosures, Science Based Target Initiative, International Sustainability Standards Board, UN Sustainable Development Goals (SDG) and UN Global Reporting Initiative.

Therefore to assist Members and the wider industry, Britannia has published a sustainability report template. This is intended to assist those companies just starting their sustainability reporting process and can be downloaded from the Britannia website.

The template is intended to be used as a guide to the issues on which Members and other companies might consider reporting, recognising that every company is different and certain issues will be more relevant depending on each company’s individual circumstances.



Commenting on the publication of the sustainability report template, Andrew Cutler CEO of Britannia P&I said: *‘After publishing our first Britannia P&I Sustainability Report last year, we felt we could share some of our learning from this process and that is why we have developed a report template to assist our Members in their own sustainability reporting. By making the template available to all the industry on our website, we are aligning with our own declared commitments in our sustainability report under UN Sustainable Development Goal 17, ‘partnership for the goals’.*

Richard Sadler, sustainable business consultant at Britannia P&I, who led the development of the report said: *‘The template will help guide those Britannia Members, and others, who want to produce a sustainability report and we would be happy to clarify any questions on the template itself, although the preparation of reports will be down to individual companies and their own circumstances. We would also welcome comments on the template itself so we can use these to inform future versions.’*

Britannia P&I Club may be contacted through:
<https://britanniapandi.com/>

INTERCARGO: EU beginning to grasp realities of shipping

The recent proposal by MEP Peter Liese to update Amendment 9 of the EU emissions trading system (ETS) draft directive and support the polluter pays principle is cautiously welcomed by INTERCARGO, the international association representing the world's quality dry bulk shipping sector.

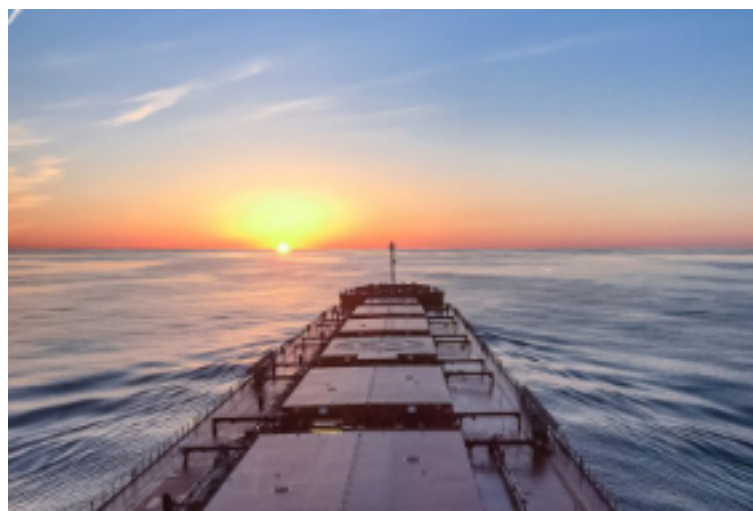


This recognition that often the shipping company is not the commercial entity controlling the ship operation, and thus is not responsible for the resulting GHG emissions, is long overdue.

INTERCARGO Chairman, Dimitrios Fafalios commented: *'Although we retain our reservations on the EU emissions trading system (ETS) as a whole, we are pleased to see the EU take steps in the right direction, as regulators finally grasp some of the realities of our industry.'*

'Trading patterns within the dry bulk sector are diverse and dispersed. A significant share of the bulk carriers' operation is administered by charterers, which not only take responsibility for purchasing the fuel, but also take operational decisions that directly affect the CO2 emissions of the ship, such as speed of transit.'

"the same time, whilst the proposal recognises the need to establish a contractual requirement between the shipowner and commercial operator to pass on the costs, it must be understood that this will be easier said than done.'



Despite this move, INTERCARGO is still firmly committed to supporting the role of the IMO (International Maritime Organization) as the global forum and regulator for driving

the elimination of all CO₂ emissions from shipping worldwide.

The Association does, however, support any initiative designed to ease this transition for ship operators, and as such supports Liese's proposal for the establishment of an Ocean Fund to finance R&D into maritime decarbonisation and to fund R&D projects aimed at bridging the price gap between cleaner and conventional fuels.

About INTERTANKO

As we well know international shipping is vital for the global economy and prosperity as it transports approximately 90% of world trade. The dry bulk sector is the largest shipping sector in terms of number of ships and deadweight. Dry bulk carriers account for 43% of the world fleet (in tonnage) and carry an estimated 55% of the global transport work.



The International Association of Dry Cargo Shipowners (INTERCARGO) unites and promotes quality dry bulk shipping, bringing together more than 220 forward thinking companies from 30 countries and representing close to 25% by deadweight of the global dry bulk fleet. INTERCARGO convened for the first time in 1980 in London and has been participating with consultative status at the IMO since 1993.

INTERCARGO provides the forum where dry bulk ship owners, managers and operators are informed about, discuss, and share concerns on key topics and regulatory challenges, especially in relation to safety, the environment, and operational excellence. The Association takes forward its Members' positions to IMO, as well as to other shipping and international industry fora, having free and fair competition as a principle.

An introductory video by INTERTANKO is available here: <https://www.youtube.com/watch?v=Lt6SyFucf-E>

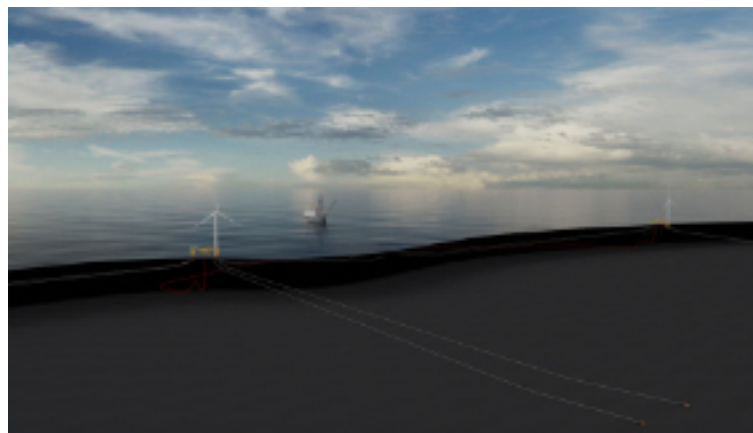
Deepsea Semi™ floating offshore wind foundation

DNV awards AiP

It was announced from Oslo on 22 February that DNV had awarded Odfjell Oceanwind an Approval in Principle (AiP) for their new Deepsea Semi™ floating wind foundation design (see illustration here).

The Deepsea Semi™ floating wind foundation design has been developed for use in floating wind farms and for off-grid applications including temporary electrification of oil and gas installations in harsh environments.

It is understood that the Deepsea Semi™ foundation is dimensioned for up to 15MW wind turbine generators and has been developed for low cost, industrial mass-production. This design includes all areas for floating wind farms currently in planning in the North Atlantic region, including Scotwind and Utsira Nord, and covers a range of 60 to 1300 metres depth of water. It is optimised for Siemens Gamesa's SG 11.0-200DD and SG 14.0-222DD offshore wind turbines and is undergoing classification and certification from DNV on that basis.



The Deepsea Semi™ floating wind foundation design has been developed for use in floating wind farms and for off-grid applications including temporary electrification of oil and gas installations in harsh environments.

Photo: DNV/Odfjell Oceanwind©.

The AiP is part of this ongoing class approval process involving Odfjell Oceanwind, Siemens Gamesa and DNV.

Per Lund, CEO of Odfjell Oceanwind commented: *'This AiP marks an important milestone for us. Building on the long-term relationship with DNV, we have chosen to work closely with them from day one in our development and will continue to do so for the class approval and certification of our fleet of Mobile Offshore Wind Units. The mindset from shipping that we share with DNV has proven very valuable.'*

Erik Henriksen, Director of Business Development - Offshore Classification at DNV added: *'Several recent expert reports have highlighted how important it is to tackle the climate crisis today. As such, we need to be exploring solutions that can maximise the contribution of sustainable, zero carbon energy generation to the energy transition.'*

The proprietary Deepsea Semi™ design has been developed for use in Odfjell Oceanwind's fleet of Mobile Offshore Wind Units (MOWUs) by their in-house design team. Odfjell Oceanwind plans to order the first batch of MOWUs later in 2022, with a plan of going into operation in 2024. The units will be operated as one fleet under Odfjell Oceanwind's management.

Odfjell Oceanwind intends to build the first MOWUs for electrifying offshore oil and gas installations and will contribute to significant decarbonisation of the industry, complementing electrification with power from shore.

The Deepsea Semi™ design also allows for an integrated WindGrid™ module, using hybrid technologies and energy storage for uninterrupted power supply to installations not connected to a larger power grid. The WindGrid™ module has been designed and optimised by Siemens Energy based on its experience in Oil and Gas and Grid applications to enable energy storage systems, including the BlueVault™ battery energy storage and BlueDrive™ converters.

DNV has previously verified that MOWUs with WindGrid™ may contribute with up to 60-70% reduced emissions compared to power generation from gas turbine generators alone.

What is an AiP?

An Approval in Principle (AiP) is an independent assessment of a concept within an agreed framework, confirming that the design is feasible, and no significant obstacles exist to prevent the concept from being realised.

P&I Clubs and parametric rolling advice

Beware of parametric rolling in following seas

MARIN (<https://www.marin.nl/en>) is a globally recognised institute for hydrodynamic and nautical research.

Its mission is Better Ships, Blue Oceans and it stands for clean, smart and safe shipping and sustainable use of the sea. This is achieved as an independent knowledge partner for the maritime sector, government and society.

With regard to growing interest in container losses on 1 February the Netherlands-based MARIN issued what it called a Notice to Mariners.

Readers are invited to see here:

<https://tinyurl.com/3274hzhd>

A series of incidents with exceptional container losses occurred during the winter season 2020-2021.

The Joint Industry Project TopTier group was mindful to address the loss of containers, with active participation of major stakeholders, to find ways to avoid similar incidents in the future.

Initial results show that parametric rolling in following seas was especially hazardous. The TopTier JIP took initiative to distribute this Notice to Mariners.

This document describes how container vessel crew and operational staff can plan, recognize and act to prevent parametric rolling in following seas. More explicit guidance on the hazard of parametric rolling in following seas is work in progress.

For more information on TopTier:
www.marin.nl/en/jips/top-tier

The P&I Clubs

The International Group of P&I Clubs recently became a member of the Maritime Research Institute of the Netherlands (MARIN) Top Tier project. The project has been established to examine and assess the causes of container losses arising from at-sea incidents onboard various sizes of container ships.

The project has been approved by a cross-section of industry, academic and government interests. MARIN will produce a report of its findings, including recommendations in due course. It is envisaged that the recommendations will eventually lead to operational and technical improvements that should mitigate the risk and identify the underlying causes of container losses at sea.

The 3rd (III) International Maritime Congress

17-19 May 2022 Bilbao

Registration now open

We were informed towards the end of February that the organisers have extended the registration period for the III International Maritime Congress.



ASOCIACIÓN VIZCAÍNA
DE CAPITANES
DE LA MARINA MERCANTE
EUSKAL MERKATARITZA-
ITSASKETAKO
KAPTAINEN ELKARTEA

ORGANIZAN



Universidad
del País Vasco Euskal Herriko
Unibertsitatea



After the postponement of the congress due to Covid a few months ago a new definitive date was agreed and it will now take place from 17 to 19 May 2022.



This event will serve as a meeting point for professionals in the maritime, port, and related cultural areas, where opinions of the sector will be expressed, it is understood.

Following successes achieved by Maritime Congresses in 2012 and 2017, this year's event will be presented by Spanish Merchant Marine Ship Masters' Organisation (IFSMA member AVCMM), the Port of Bilbao with the University of the Basque Country (UPV/EHU).

By the time you read this the closing date will be past although there may be chance of a late entry for presentation.

For details on rates and more readers are invited to see here: <https://tinyurl.com/455pra5s>

Or contact: oferencia@tisasa.es

Fuel cell-powered marine transport

ABB and Ballard reach milestone

ABB and Ballard (www.ballard.com) are progressing with their industry-leading partnership to decarbonise marine transport and have received an AiP from DNV for their high-power fuel cell concept, the development of which was launched in 2018.

An AiP is a major milestone in developing new technology as an independent assessment of the concept, confirming that the design is feasible and no significant obstacles exist to prevent the concept from being realized. With the AiP in place, the jointly developed solution can be completed within the next two years for application on board a wide range of vessels.

Tuva Flagstad-Andersen, Regional Manager North Europe, DNV Maritime commented: *'We are pleased to have worked with ABB and Ballard on this AiP. Hydrogen plays an important role in the energy transition, so it is essential to establish safe technologies that the industry has confidence in. As an early phase verification for new design concepts, based on long-standing, trusted and independent standards, an AiP can help build this confidence.'*

The high-power fuel cell unit is a flexible solution that will support the energy needs of a diverse range of vessels requiring multiple 3 MW blocks of power. A cruise vessel operating in coastal areas could either run entirely on fuel cell power or switch to it when operating in environmentally sensitive areas or emission control zones, while a ferry with a regular schedule and frequent bunkering opportunities could operate solely on fuel cell power. For ocean going vessels, fuel cell power could support auxiliary needs. The concept of the solution also envisions the integration with an energy storage system.

Jesper Thomsen, President and CEO of Ballard Power Systems Europe A/S added: *'ABB's industry-leading experience in marine solutions and Ballard's expertise in development and deployment of megawatt-scale fuel cell systems for land-based use has proven to be the right combination, enabling us to take the next step in our joint efforts to make this technology available for larger vessels. Securing an AiP offers a signpost to the maritime industry regarding the potential of this truly transformative concept.'*

Juha Koskela, Division President, ABB Marine & Ports concluded by saying: *'This AiP is an important milestone in making high-power fuel cells commercially available, and it underpins our commitment to bring new levels of efficiency, reliability and sustainability to the global shipping industry.'*

'As we continue to pave the way towards decarbonizing shipping, we are confident that vessel electrification, including fuel cell technology, will play a pivotal role in helping the marine industry achieve its environmental targets.'

The successful development of a high-power fuel cell system concept builds on a collaboration between ABB and Ballard, a leading global provider of proton exchange membrane (PEM) fuel cell solutions, initiated in June 2018.



ABB and Ballard reach milestone towards fuel cell-powered marine transport.

Credit: ABB ©.

As part of its strategy to develop alternative emission-free technologies, ABB is already well advanced in collaborative development of fuel cell systems for ships. Considered among the most promising technologies available in terms of greenhouse gas reduction, zero-emission hydrogen fuel cells are already powering smaller vessels over short distances and the technology is on the verge of being ready for installation on larger ships.

Shipping contributes close to 3% of global greenhouse gas emissions (GHG) every year and pressure to transition the industry to more sustainable power sources has resulted in fixed reduction targets from the IMO. In this regard IMO aims to cut for GHGs from ships by at least 50% by 2050 from 2008 levels.

Fuel cells turn the chemical energy from hydrogen into electricity through an electrochemical reaction. When renewables are used to produce the hydrogen, the entire energy chain can be clean. Having a larger, megawatt-scale power unit makes it feasible to combine units to reach much higher total power than is practically possible with smaller power units.

Demand for hydrogen, which has grown more than threefold since 1975, continues to rise¹.

Scaling up technologies and bringing down costs of production is vital to enable hydrogen to become widely used. ABB is collaborating with customers and partners to develop and integrate technology that will make hydrogen an accessible, affordable component of the world's low carbon energy mix.

In Italy, ABB is partnering with Swiss utility company Axpo to develop modular green hydrogen plants that aim to

create an optimum operating model to produce affordable, green hydrogen.

In France, ABB is supplying its Freelance distributed control system and ABB Ability™ Manufacturing Operations Management digital platform to the first production site for Lhyfe, a producer and supplier of 100 percent green hydrogen.

ABB is working with Hydrogen Optimized (<https://hydrogenoptimized.com/>) a sustainable energy conversion company in Canada, to jointly explore the development of large-scale green hydrogen production systems connected to the electrical grid to offer a clean, sustainable, and affordable energy carrier.

¹ <https://tinyurl.com/3u43d6yj>

Our electric future

By Michael Grey

Here is a useful motoring tip that you probably will not discover in your service manual, should your new, all-electric vehicle inadvertently burst into flames. While your natural inclination might be to run for your life, it is suggested that the terrifying fire might be smothered in a blanket, or better still, the whole car immersed in a tank of water. I pass on these hints from a communication by Stream Marine Training, which, recognising some of the risks that are being run by seafarers and others involved with the new generation of lithium-ion batteries powering cars, is offering a two-day training course on firefighting. It would be worth checking out.

People don't realise how dangerous these batteries are, with a particular risk being the "thermal runaway" caused by the entire battery package overheating. And with very many more of these electric cars appearing, as we transition from hydrocarbon fuels, it would appear that it is something that the vehicle carrying sector badly needs to understand.

As this was written, salvors were getting to grips with a raging fire aboard the MOL car carrier *Felicity Ace* which had been abandoned by her crew some 90 miles south-west of the Azores on a westbound voyage to the US. She had sailed from Emden fully laden with a cargo of 4000 export cars, which included Bentleys, Porches, Audis and VWs. And while it would be speculation at this stage to blame the blaze on car battery ignition, it is a reasonable assumption that much of the load will have been electric vehicles. These, it has been found, burn with a ferocious heat, which within the enclosed decks of a car carrier would have been exceedingly difficult for the crew to fight. Nobody, surely, could blame them for the decision to evacuate, leaving the problem to the better equipped salvage professionals.

In all the enthusiasm for our zero-carbon future and a world powered by electricity, it is perhaps understandable that the less desirable characteristics of cars driven by batteries are skirted around in the sales material. But we have already had quite serious accidents caused by the tiny batteries in laptops or mobile phones going up in flames. It doesn't happen very often, admittedly, but as the

batteries get bigger and more powerful and they spread around the world, it maybe is something that more people ought to be aware of.

Tony In't Hout, the director of SMT, which is offering the training courses in Glasgow, points to the hypothetical horror story of a ferry cardeck in which a hydrogen truck, an aluminium battery car and an LNG powered vehicle are stowed adjacent to one another when a fire breaks out. "What should the crew do in that scenario?" he asks. Actually knowing more about these risks would seem to be a useful investment, even if your first instinct is to abandon ship.

I can recall talking to a classification society surveyor who had been studying some of the risks of our electric future, and he was very concerned about the colossal heat generated should a battery ignite and how this could be safely isolated and contained. He was thinking about the new generation of battery-powered ferries, which are relatively few in number. A whole population of battery powered road vehicles is a very different proposition that now faces ship operators, who are going to be carrying more as cargo. It is also worth reminding ourselves that unit for unit, these battery-driven vehicles are very much heavier than petrol or diesel fuelled vehicles, which has serious implications for the vessel's stability, or even capacity.

But it doesn't need a lithium-ion battery to start a serious fire on a ferry or vehicle-carrier as a list of bad casualties which have been attributed to vehicle electrics grows ever longer. Several have resulted in the loss or CTL of the ship, as a gutted car carrier is fit for nothing but the scrap heap. There has been no shortage of helpful advice from administrations, class, P&I and other experts, including the need to disconnect batteries before the vessel sails and the requirement to take special care with used or damaged vehicles. But you won't do this on a ferry, where you have to rely on a good fire-fighting system and a well-trained crew, and then have to put up with truck drivers who will try and sleep in their cabs and ill-maintained vehicles.

This is also being written while other salvors are trying to control the raging inferno that has spread the whole length of the *Euroferry Olympic* aboard which a truck caught fire in the small hours on her passage to Brindisi from Greece earlier this month. Nearly 280 people were evacuated from the ferry, but some 11 were still missing. Was that started by electricity? Looking at the video of this conflagration, it will be difficult to establish. But with an estimated \$750m of charred luxury cars still blazing in the Atlantic, you have to wonder what hull and cargo insurers make of it all. And if I get around to buying an electric car, I shall make sure that I have an enormous tank of water on hand.

Editor's note:

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

This item appears here by kind permission of the author

**and the Editor: *The Maritime Advocate Online*
(<https://themaritimeadvocate.com>)**

The global shipping workforce

Russian and Ukrainian seafarers' contributions

On 24 February the International Chamber of Shipping (ICS), representing 80% of the world's merchant fleet, warned of supply chain disruption should the free movement of Ukrainian and Russian seafarers be impeded.

*The Seafarer Workforce Report*¹, published in 2021 by BIMCO and ICS, reports that 1.89 million seafarers are currently operating over 74,000 vessels in the global merchant fleet.

Of this total workforce, 198,123 (10.5%) of seafarers are Russian of which 71,652 are officers and 126,471 are ratings. Ukraine accounts for 76,442 (4%) of seafarers of which 47,058 are officers and 29,383 are ratings. Combined they represent 14.5% of the global workforce.

Shipping is currently responsible for the movement of near 90% of global trade. Seafarers have been at the forefront of the response to the pandemic, ensuring essential supplies of food, fuel and medicine continue to reach their destinations.



ICS reported that the average ship has a mix of at least three nationalities on board, and sometimes as many as thirty. Three languages were the minimum spoken on the average ship

Photo: Ambrose Greenway ©.

Importance of crew change stressed

To maintain this unfettered trade, seafarers must be able to join and disembark ships (crew change) freely across the world. With flights cancelled in the region, this will become increasingly difficult. The ability to pay seafarers also needs to be maintained via international banking systems.

ICS has previously warned of a shortage of merchant sailors to crew commercial ships if action is not taken to boost numbers, raising risks for global supply chains. This has been compounded by draconian travel restrictions, brought on by the pandemic, that saw seafarers unable to crew change and resulted in hundreds of thousands overstaying contracted periods at sea.

Mix of nationalities and languages

Research carried out by ICS reported that the average ship has a mix of at least three nationalities on board, and sometimes as many as thirty. Three languages were the minimum spoken on the average ship.

Guy Platten, Secretary General of the International Chamber of Shipping commented: *'The safety of our seafarers is our absolute priority. We call on all parties to ensure that seafarers do not become the collateral damage in any actions that governments or others may take.'*

'Seafarers have been at the forefront of keeping trade flowing though the pandemic and we hope that all parties will continue to facilitate free passage of goods and these key workers at this time.'

¹ See here: <https://tinyurl.com/mrrzmqh7t>



Ukraine Crisis: Black Sea, Bosphorus and Sea of Azov- Update

We at IFSMA are greatly indebted to Dryad Global who kindly permitted use of material from which this article was written.

As is now well-known, on the early morning of 24 February, Russian forces commenced operations within

Ukraine. This included blocking access to the Sea of Azov and blockading other Black Sea ports such as Odessa.

There were reports that the Marshall Islands-flagged Bulk Carrier *Yasa Jupiter* had suffered damage to the vessel's bridge while approximately 50 nautical miles south of Odessa.

A report by the Turkish General Directorate of Maritime Affairs said: *'Following the information that a bomb hit the Turkish-owned Yasa Jupiter with the Marshall islands flag off the coast of Odessa, it was learned during the meeting that there was no request for help, that the ship was in transit to Romanian territorial waters, that there was no loss of life and that it was safe.'*



Damage to Namura Queen.

We learnt that all commercial operations at Ukrainian sea ports were suspended by order of the Ukrainian military.

Any vessel currently within Ukrainian Ports was advised to leave immediately it was deemed safe to do so. Vessels were advised to ensure they broadcast on AIS and clearly state their intentions across VHF. Any vessels challenged by Russian military vessels were advised to comply fully with instructions.

Dryad Global issued advice that all commercial operators should avoid any transit or operation within the EEZ of Ukraine or Russia within the Black Sea. Commercial operations within the EEZ of Turkey, Bulgaria and Romania remained unaffected as at 28 February.

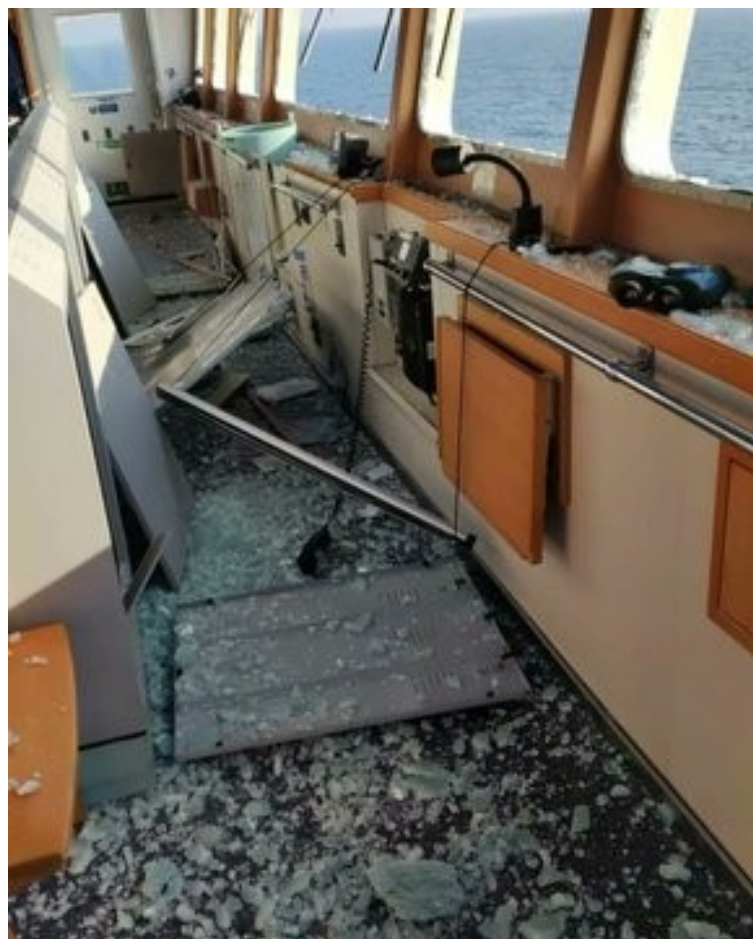
As the situation developed there remained a high degree of uncertainty regarding the freedom of navigation throughout the wider Black Sea.

It was found that the primary risk to all vessels and commercial operations operating beyond the key risk area remained one of commercial uncertainty rather than risk to safety of crew.

Vessels and commercial operators were minded by Dryad Global to avoid all operations and transits within the EEZ of Russia and Ukraine with no attempt made to access the Sea of Azov.

It was understood at the time that Russia was not believed to hold any intent towards targeting any foreign or civilian vessels through military action.

While an invasion of Ukrainian territory was underway it was assessed as unlikely that this would lead to an exchange of fire between forces within the maritime domain.



Damage to the bulker Yasa Jupiter.

Despite this, all vessels and commercial operators were advised (and continued to be advised as at 28 February) to avoid the EEZ of Russia and Ukraine within the Black Sea and Sea of Azov.

On 15 February the Joint War Committee added Ukrainian and Russian Waters in the Black Sea and Sea of Azov to the Hull, War, Piracy, Terrorism and Related Perils Listed Areas.

Dryad Global's advice was that any vessel currently within Ukrainian Ports should seek to leave immediately if deemed safe to do so. Vessels should ensure they are broadcasting on AIS and clearly state their intentions across VHF. Any vessels challenged by Russian military vessels should comply fully with instructions.

In order to keep up to date with this fast moving scenario readers are invited to see here:
<https://www.dryadglobal.com/>

UN bodies call for further action to end seafarer crisis

From Geneva on 28 February it was reported that four UN organizations have called for continued global collaboration to address the crew change crisis that at times during the Covid-19 pandemic has left more than 400,000 seafarers stranded at sea.

In a joint statement¹ issued on 28 February, the International Labour Organization (ILO), the International Maritime Organization (IMO), the United Nations Conference on Trade and Development (UNCTAD) and the World Health Organization (WHO) say new challenges and variants of concern like Omicron threaten to worsen the plight of the world's seafarers, who play a vital role in global trade.

They note that as Covid-19 travel restrictions eased and vaccination rates increased among maritime personnel, the humanitarian crisis at sea showed signs of improvement before the Omicron variant appeared.

According to the Neptune Declaration Crew Change Indicator², which is based on data from ten major ship managers employing some 90,000 seafarers, the percentage of seafarers on board vessels beyond their contracts decreased from 9% in July 2021 to 3.7% in December 2021.

But the share bounced back up to 4.2% by mid-January 2022. Following Omicron's designation as a "variant of concern" (VOC), many countries quickly re-imposed measures such as travel bans that have affected the world's seafarers, most of whom are from developing countries.

Restrictions to fight the spread of the pandemic have meant many seafarers could not leave ships. They remained stranded at sea far beyond the expiration of their work contracts and often beyond the default eleven-month maximum period of continuous service on board, as required by the Maritime Labour Convention of 2006.

Over 80% of the volume of global trade in goods is carried by sea. And throughout the pandemic, the world's 1.9 million seafarers have played a vital role in keeping ships moving and ensuring critical goods such as food, medical equipment and vaccines are delivered.

¹ <https://tinyurl.com/3byskrny>

² <https://tinyurl.com/yckwr5ek>