

Number 94 November 2025

IF SMA

NEWSLETTER

The Shipmasters' International Voice

RV Investigator
Deep-sea survey of marine life in the Coral Sea

See story on page 15



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Readers are reminded that the opinions expressed in the IFSMA Newsletter are those of the various authors and providers of news and are not necessarily in accord with IFSMA policy.

Secretary General's Message

As I write to you this month, it is with some sadness as this will be my last introduction to our acclaimed Newsletter. Captain Andy Cook has now taken over as your accredited representative at the IMO and I will formally retire next month after our December EXCO meeting.

I have enjoyed every day working on your behalf and hope that the changes I have made and my achievements at the IMO have been worthwhile for you.

I believe that we are now stronger and ready for the continued evolution of the Federation under the helm of Andy. He and Paul are busy working on revamping the website and formulating a new communications strategy making better use of social media, under the guidance of Captain Martin Bjorkell, our ExCo member from the Finnish Ships' Officers' Union.

I am sure you will find this way ahead exciting as it is anticipated it will be much more personalised with interesting news on a weekly/daily basis as events happen that might affect you as you go about your business.

At the same time I hope you will play a part and make this new strategy something of which all shipmasters will want to be involved. This will engender interesting and useful discussions for IFSMA to use in its everyday business at the IMO and make you feel more included in what we do.

On a personal note this is most exciting and a great way for me to retire knowing that you will have a safe and invigorating new Secretary General.

While I am retiring, I will keep an eye on all that you do and will be happy to help out if needed in any way. Finally, I welcome Andy and send him good luck and every success for the voyage.

May I also take this opportunity to wish you all the very best for the forthcoming festive season and 2026.

Fair winds and following seas.

Jim

From the News Editor

Unfrozen: The Fight for the Future of the Arctic

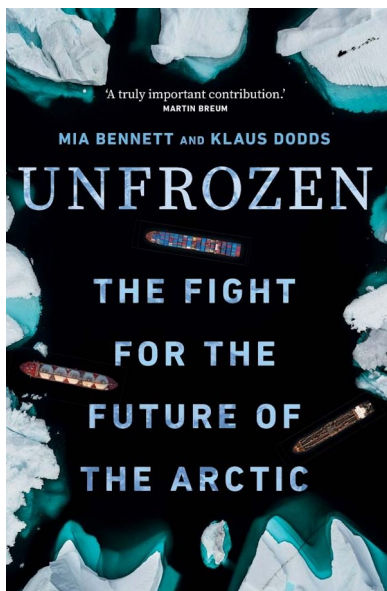
By Mia Bennett and Klaus Dodds

This book represents a vital account of the state of the Arctic today emphasising the twin dangers of climate change and geopolitical competition

Nowhere is the dual threat of climate change and geopolitical contest felt more strongly than in the Arctic. Sea ice is declining rapidly, wildfires are burning, and permafrost is thawing. All the while,

global interest is gathering pace as the region transforms from being a frozen desert into an international waterway.

To set the scene the eight Arctic states are: Canada, Denmark / Greenland and the Faroe Islands, Finland, Iceland, Norway, Russia, Sweden and the US. Whereas the US is an Arctic state and the UK is a non-Arctic state it is one which considers itself as the Arctic's nearest neighbour.



Unfrozen it could be as the US NOAA warned in 2017 that the region was showing no signs of being 'reliably frozen' as human activities have driven up greenhouse gases, raising temperatures, liquifying sea ice and glaciers and thawing permafrost. As the authors put it the new and unfamiliar Arctic is: 'a warmer, wetter, and a windier place.'

And that condition delivers opportunities for a change in trade, with the Northern Sea Route made use of and reported in our columns when the Panamax-class 4800TEU *Istanbul Bridge* steamed from China to Northern Europe in twenty days, less than half the normal transit time. A route that may be exploited with caution when one considers vessel size, ice class, icebreaker availability as well as the time of the year.

Growing geopolitical competition is accompanying environmental disruption. Countries including Russia, China, and the US are investing in the Arctic and consolidating their interests in strategic access, resource exploitation, and alliance-building.

Indeed, the US keeps a close eye on all shipping in its Arctic waters, one cutter, USCGC *Waesche*, recently returned from a 105-day deployment during which it steamed over 21,000 nautical miles, evidence enough that the Arctic is a national priority and part of its Operation Frontier Sentinel. This responds, for example, to unknown vessels reported in Alaskan and US Arctic waters while safeguarding US sovereignty, enforcing border control, and ensuring national security in the strategically vital Bering Sea, Arctic Ocean, and along the US – Russia Maritime Boundary. A mammoth task.

The consequences of this emerging geological age are truly global – from rising sea levels due to melting glaciers to tensions between great powers determined to protect their territory and resources, and the well-being of indigenous peoples who have fought for centuries for rights and recognition.

Mia Bennett and Klaus Dodds have examined the state of the Arctic today, showing how the region is becoming a space of experimentation for everything from indigenous governance to subsea technologies. Bennett is an associate professor of geography at the University of Washington. Dodds is Hon. Professor of geopolitics at Royal Holloway, University of London. Their respective positions provide an opportunity to reflect on how the Arctic is studied, situated and contested in academic, policy and media environments.

Here in this volume the highly informative preface is followed by ten chapters, supported by a list of abbreviations and acronyms and over twenty-five pages of endnotes and a selected list of titles for further reading supported by a broad index to inform the reader. There is so much material here explained with consummate skill that the book is an ideal introduction to Arctic affairs for those who need to understand the topic in such depth: climate, boundaries, mining, exploration, resources, cables, indigenous peoples, ecology, meltdown, tourism, agriculture, intelligence gathering, NATO, the IMO Polar Code, the Arctic Council, and more. An impressive effort in research and presentation by the authors.

In all a most valuable document on the Arctic region, its players, their history and the dilemmas they face.

Unfrozen: The Fight for the Future of the Arctic
By Mia Bennett and Klaus Dodds. Published by Yale University Press, Newhaven CT and London. Of 352 pages with 30 colour illustrations and 3 maps

**Available in hardcover format:
ISBN 978 0 300 25999 5;
or as an e-Book with ISBN 978 0 300 28581 9.**

Price \$30.00

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 as a source and copyright holder.

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Türkiye: Exploring ferry electrification

The Sea of Marmara hosts one of the Mediterranean region's densest roll-on/roll-off (RoRo) and Roll-on/Roll-off Passenger (Ropax) shipping networks, carrying millions of passengers and vehicles annually across numerous routes.

With Türkiye's target to reach net-zero emissions by 2053 and its strong potential for renewable energy, the electrification of ferries here offers a pathway to cut greenhouse gas emissions, and improve air quality in and around port areas.

Stakeholder consultations

The IMO's GreenVoyage2050 Programme¹, in collaboration with Türkiye's Ministry of Transport and Infrastructure convened from 23 to 25 September a series of stakeholder consultations in Istanbul to explore the potential benefits, opportunities and challenges for electrifying ferries operating in the Sea of Marmara.

Officials from the Ministry of Transport and Infrastructure, Türkiye, commented: *'Electrifying ferries in the Sea of Marmara is a strategic step towards achieving our national climate goals and improving air quality for millions of citizens. These consultations ensure that all stakeholders are part of shaping a cleaner, more sustainable maritime future for Türkiye'.*



Hosted by the Istanbul Regional Harbour Master's Office, the consultations brought together approximately fifty stakeholders representing ferry owners and operators, cargo owners, port authorities, shipyards, electricity providers, international financial institutions, academia, and government officials. The discussions form a part of a study conducted under the GreenVoyage2050 Accelerator², which aims to identify viable opportunities for developing pilot projects in the region.

In the words of Ms Astrid Dispert, Programme Manager of GreenVoyage2050: *'The aim of the GreenVoyage2050 Accelerator is to advance the deployment of low- and zero-carbon solutions on board ships and in ports by supporting the development and implementation of pilot projects.'*

'By working closely with stakeholders in Türkiye, we can turn innovative ideas into practical solutions that demonstrate real emissions reductions and set an example for other regions.'

Identifying three potential routes

This study, delivered with technical input from Ricardo environmental and engineering consultancy, will examine the technical, financial, and environmental aspects of upgrading both vessels and terminals. It will identify up to three RoRo/RoPax routes most suitable for electrification.

Insights from these initial consultations will feed into the next stage of analysis and ensure that perspectives from government, industry, and academia guide the direction of future pilot projects. The study is expected to be finalized by December 2025.

Danish funding

This collaboration with Türkiye Ministry of Transport and Infrastructure is funded by the Government of Denmark through contributions made to the IMO GHG Multi-Donor Trust Fund to support the GreenVoyage2050 Programme.

GreenVoyage2050 Programme

GreenVoyage2050 is a major technical cooperation programme initiated by the IMO to assist developing countries in reducing greenhouse gas (GHG) emissions from shipping, in line with the 2023 IMO GHG Strategy.

Now in its second phase (2024–2030), GreenVoyage2050 is supporting partner countries in developing National Action Plans (NAPs) including: Bangladesh, Egypt, Ghana, Mexico and Nigeria as well as implementing pilot projects in Türkiye, India, Indonesia and Viet Nam to test solutions for reducing GHG emissions from ships.

Further funding from Finland, France, Germany, the Netherlands and Norway

Leveraging funding from the Governments of Denmark, Finland, France, Germany, the Netherlands and Norway, the GreenVoyage2050 Programme continues to expand, with new countries added each year.

The open call for countries to join GreenVoyage2050 to support NAP development is available now and readers are invited to learn more by using the link here: <https://tinyurl.com/4u9vjnzz>

¹ <https://greenvoyage2050.imo.org/>

² <https://tinyurl.com/3f7825p8>

Net-Zero Framework

IMO's MEPC to adjourn discussions for one year

The IMO has agreed to adjourn the extraordinary session of the Marine Environment Protection Committee (MEPC)¹, which was convened from 14 to 17 October 2025 to consider the adoption of draft amendments to MARPOL Annex VI, including the IMO Net-Zero Framework.

The extraordinary session will be reconvened in 12 months' time.

The Intersessional Working Group on the Reduction on Greenhouse Gas Emissions from Ships, scheduled to meet 20 to 24 October 2025, went ahead to continue work on the guidelines for implementing the Net Zero Framework.



The IMO Net-Zero Framework was approved at the MEPC 83 session in April 2025, as a new Chapter 5 of the Draft Revised Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL)². It comprises a set of international regulations aimed at reducing greenhouse gas (GHG) emissions from ships, in line with IMO's 2023 Strategy for Reduction of GHG Emissions from Ships. It includes two key elements: a global fuel standard and global GHG emissions pricing mechanism.

¹ <https://tinyurl.com/7kw5pt9v>

² <https://tinyurl.com/yc64r7f5>

Ecuador biofouling data sharing

Maritime officials in Ecuador have agreed to set up a national information network, connecting ports, ship operators and environmental authorities to help tackle biofouling – the unwanted accumulation of aquatic organisms on ships' hulls.

IMO – Caribbean collaboration

This initiative is one of several key outcomes of a recent workshop delivered by the IMO in collaboration with the Maritime Technology Cooperation Centre Caribbean (MTCC Caribbean) and the Armada del Ecuador, held in Manta, Ecuador from 1–3 October.

Norad* TEST Biofouling Project

Here the workshop was delivered as part of the IMO–Norad TEST Biofouling Project – a global initiative aimed at supporting developing countries in strengthening their capacity to manage biofouling, prevent the transfer of invasive aquatic species (IAS), and reduce greenhouse gas (GHG) emissions from ships.

The IMO–Norad TEST Biofouling National Demonstration Pilot Workshop saw renewed commitment among maritime authorities, port administrations, research institutions, and industry stakeholders to work more closely together to promote

environmentally sound biofouling management practices aligned with IMO's Biofouling Guidelines.

Reinforcing links

Discussions reinforced the links between biofouling management, energy efficiency, and GHG emissions reduction from ships, while highlighting the role of women and young professionals in sustainable maritime governance.

Advancing regional collaboration

As one of the Project's Lead Partnering Countries (LPCs), Ecuador plays a central role in advancing regional collaboration and demonstrating practical, technology-driven approaches to sustainable biofouling management.



Over the three days participants received hands-on training in biofouling risk assessment and in-water inspection methodologies.

Use of ROVs

On 3 October, the final day, proceedings featured a live demonstration by Franmarine at the Terminal Portuario de Manta, showcasing advanced Remotely Operated Vehicles (ROVs) for hull inspection and environmentally friendly cleaning.

MTCC Caribbean and IMO will continue to support capacity development and knowledge-sharing as Ecuador explores next steps, ensuring lessons from the demonstration are incorporated into future capacity-building initiatives.

Ecuador previously hosted an international workshop, co-organised by IMO's GloFouling Partnerships Project, in the Galapagos Islands – home to some of the world's most uniquely endemic wildlife species – which focused on preventing the spread of invasive aquatic species in Marine Protected Areas (MPAs) and Particularly Sensitive Sea Areas (PSSAs).

*For more on NORAD, the Norwegian Agency for Development Cooperation readers are invited to use the link here: www.norad.no

IMO-WMU-WISTA training course

Breaking the glass ceiling in the maritime sector requires a wide range of skills, including strong leadership capabilities. This was precisely the focus of the Women's Leadership and Empowerment (WLE) training course, commissioned by the IMO and developed by the World Maritime University (WMU).



Held in a hybrid format, with five remote days and five in-person days at WMU in Malmö from 6-10 October the course brought together thirteen women from developing countries sponsored by the IMO, along with two additional private sector participants sponsored by the Women's International Shipping & Trading Association (WISTA International) and two WMU PhD students.

To cultivate leaders

The programme was designed to cultivate confident, capable leaders who can navigate complex maritime challenges, motivate their teams, and foster innovative solutions across the industry.

An integrated approach

The WLE course covers a variety of modules, including critical thinking, gender mainstreaming, strategic thinking, entrepreneurship, and leadership. But what sets this course apart is its integrated approach, blending technical project management training with the development of interpersonal and managerial skills. Collaborative learning and group activities are central to the programme, enabling participants to translate theoretical concepts into practical applications.

Mindful of the UN SDGs

This initiative supports gender equality and empowerment efforts in maritime, contributing to UN Sustainable Development Goal 5 (Gender Equality)*.

Key drivers of industry's future

Looking ahead, these women carried the valuable lessons learned back to their home countries, inspiring positive change and innovation in the

maritime sector. Their experience also reinforces a powerful truth: they belong in this industry and are key drivers of its future.

*<https://sdgs.un.org/goals>

Black Sea littoral states

Enforcing the IMO liability and compensation regime

Maritime stakeholders from Georgia, Republic of Moldova, Türkiye and Ukraine have strengthened their capacity to enforce the IMO liability and compensation regime, following a workshop held in Batumi, Georgia from 6-11 October.



IMO's liability and compensation regime ensures that victims of maritime incidents receive prompt and adequate compensation, while establishing clear, uniform and limited liability rules for shipowners to ensure a level playing field for safe and clean shipping in the region.

Georgian host

The Maritime Transport Agency of Georgia, in cooperation with IMO, hosted the Sub-regional workshop, bringing together representatives of maritime administrations and legal practitioners in the Black Sea region to enhance their understanding and improve application of key international conventions governing maritime liability and compensation, including:

- The International Convention on Civil Liability for Oil Pollution Damage (1992 CLC).
- The International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1992 Fund Convention).
- The Protocol on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (2010 HNS Convention).
- The International Convention on Civil Liability for Bunker Oil Pollution Damage (2001 Bunkers Convention).

- The Nairobi International Convention on the Removal of Wrecks (2007 Nairobi WRC).
- The International Convention on Salvage (1989 Salvage Convention).

Opening the workshop, Maritime Transport Agency of Georgia representative Mr David Varshanidze encouraged all participating Member States to accede to and fully implement all relevant IMO instruments on liability and compensation for maritime transport. This would help ensure that costs arising from maritime incidents are properly covered and also enhance sustainable shipping, noting recent incidents where compensation for damages was inadequate or where ships just lacked the relevant insurance coverage.

Highlighting national experiences and challenges

Presentations were delivered by a team from the IMO Legal and External Relations Division, the IOPC Funds Secretariat, and the P & I Clubs, alongside contributions from national representatives highlighting their domestic law-making and implementation processes. These exchanges highlighted national experiences and challenges in aligning with IMO conventions.

Ratification due

This workshop was expected to contribute to the ratification, implementation and enforcement of the IMO's liability and compensation instruments across all participating Member States.

Tanzanian ports

Bolstering security

Ports across the United Republic of Tanzania are enhancing their preparedness to respond to maritime security threats, following key training in Dar es Salaam held from 6-10 October.



This workshop equipped Port Facility Security Officers (PFSOs) and port management staff with hands-on skills to plan and conduct effective security drills and exercises.

The APEC Manual

Using the Asia-Pacific Economic Cooperation (APEC) Manual of Maritime Security Drills and Exercises for Port Facilities¹ as a guide, participants learned to enhance coordination and implement Port Facility Security Plans (PFSPs) more effectively across the country's ports.

The manual was created to support port facilities in conducting regular maritime security drills and exercises, as required under the International Ship and Port Facility Security (ISPS) Code².

Ms Stella Katondo, Director of Transport, Environment and Safety at the Ministry of Transport commented: *'These drills and exercises serve not only as practice, but as vital opportunities to assess our preparedness and refine our responses and procedures in line with national and international standards.'*

Commitment

The United Republic of Tanzania expressed its commitment to adopting a practical, whole-of-government approach³ to maritime security, as recommended by IMO.

Key institutions participated

The workshop brought together 24 participants from key institutions, including the Ministry of Transport, Ministry of Infrastructure, Communication and Transport, Tanzania Shipping Agencies Corporation (TASAC), Tanzania Ports Authority (TPA), SHIPCO, Zanzibar Maritime Authority (ZMA), Zanzibar Ports Corporation (ZPC), and the Zanzibar Multipurpose Terminal (ZMT).

EU-funding for the region

This training forms part of the European Union-funded project on Port Security and Safety of Navigation in Eastern and Southern Africa and the Indian Ocean (Port Security Project), which supports nine participating countries. Through this initiative, IMO continues to help States enhance maritime security and safety in line with the 2050 Africa's Integrated Maritime Strategy (2050 AIMS)⁴.

¹ <https://tinyurl.com/4auuzafs>

² <https://tinyurl.com/uhrwh8zm>

³ <https://tinyurl.com/3y92z4m9>

⁴ <https://tinyurl.com/36tsc35p>

Eritrea spill preparedness

A national workshop held from 6 - 8 October brought together senior officials and operational focal points from across Eritrea to strengthen the country's preparedness and response to oil and hazardous and noxious substances (HNS) spills.

To focus on a National Contingency Plan

This workshop focused on developing a National Maritime Pollution Contingency Plan for Eritrea. Key discussions included identifying the roles, responsibilities and requirements to effectively manage and mitigate maritime pollution incidents within the country's maritime and coastal zones.

Crucial areas covered in sessions

Sessions covered crucial areas such as coordination, emergency response strategies, incident management systems and the importance of a cohesive national approach to pollution response and environmental protection. To support the capacity analysis, participants were engaged in a number of working groups and table-top exercises to discuss how to best set up a national contingency plan and the requirements for efficiently managing potential environmental disasters.



To strengthen coordination efforts

The workshop was expected to strengthen coordination efforts and provide a platform for the development of Eritrea's National Contingency Plan, ensuring that Eritrea is better prepared to protect its marine and coastal environments from potential oil and hazardous and HNS spill incidents.

Broad representation

A total of 44 representatives from the Ministry of Transport and Communications, the Ministry of Marine Resources, the Ministry of Land, Water and Environment, as well as other government agencies, UN organizations and key industry stakeholders involved in responding to oil and HNS pollution incidents, participated in the training.

Facilitated by IMO's ITCP

The workshop was organized through IMO's Integrated Technical Cooperation Programme (ITCP)* and built on coordination work started between the Government, the IMO and other UN agencies over the past year.

* <https://tinyurl.com/bdz3xpsn>

Seafarers' welfare

ISSA support

IMO's continuing work to protect and support seafarers was presented at the 67th Convention of the International Ship Suppliers and Services Association (ISSA 67).

Senior Legal Officer Mr Jan Engel de Boer delivered a keynote presentation during the event in Singapore held from 15 to 18 October, focusing on IMO's comprehensive welfare framework for seafarers.

He highlighted the IMO/ILO joint database on abandonment of seafarers which was established 20 years ago in 2005 with ISSA support. The recently upgraded database contains regularly updated information on vessels with seafarers onboard that have been reported as abandoned worldwide.

Mr De Boer commented further: *'ISSA has always been a strong advocate for seafarers' welfare, especially during the crew change crisis brought on by the COVID-19 pandemic.'*

'This conference was an excellent opportunity to strengthen our partnership and advance efforts to improve seafarers' welfare, working conditions, and preparedness for future global health emergencies.'

The IMO/ILO welfare system

The IMO/ILO welfare system for seafarers also includes, with weblinks to pdfs, the following:

- Guidelines on fair treatment of seafarers in the event of a maritime accident.

<https://tinyurl.com/3z58bfwr>

- Guidelines on liability and compensation regarding claims for personal injury to or death of seafarers. <https://tinyurl.com/57ca2dw8>

- Guidelines on provision of financial security in case of abandonment of seafarers.

<https://tinyurl.com/2p9hznz5u>

- Guidelines on how to deal with seafarer abandonment cases. <https://tinyurl.com/nhaee2x9>

- Guidelines on fair treatment of seafarers detained in connection with alleged crimes. <https://tinyurl.com/mryzw7cw>

The ISSA represents nearly 2000 ship suppliers throughout the world, with 40 national associations of ship suppliers and 51 associate members.

COVID-19 recollections

Readers are invited to learn more about IMO's work to support and protect seafarers during COVID-19 with the link here: <https://tinyurl.com/27yepysc>

Philippines maritime safety

E-navigation capabilities

To enhance national capacity for digital maritime services and strengthen maritime safety, maritime professionals from the Philippines participated in the **SMART-C Traffic S-100 workshop on strengthening capacities for building the e-navigation platform**. The workshop took place in Seoul, Republic of Korea on 22 October during the 2025 Korea Maritime Week¹.

Joint organisation by IMO and MOMAF

Conducted under the SMART-C Traffic Project², the workshop was jointly organized by IMO and the Ministry of Oceans and Fisheries of the Republic of Korea (MOF). It focused on the S-100 Universal Hydrographic Data Model³ and its practical applications to e-navigation, supporting safer and more efficient maritime operations.

Sixteen technical officials from the Philippine maritime authorities⁴ took part in the training. Resource experts provided hands-on guidance and shared international best practices on the transition from S-57 to S-100 standards.

Interactive sessions

Through interactive sessions led by IMO, participants examined the latest international developments in the S-100 framework, its alignment with IMO's Common Maritime Data Structure (CMD5), and its role in enhancing navigation safety, digital maritime traffic management and search-and-rescue coordination.



The workshop also reviewed recommendations from the SMART-C Traffic Project mission to the Philippines in April 2025, identifying next steps for introducing digital maritime services and building institutional competencies.

An important step

Undoubtedly the workshop marks an important step in the Philippines' move toward e-navigation and digital maritime services, enhancing inter-agency collaboration, technical expertise, and regional

cooperation to support safer, more efficient and sustainable maritime operations.

¹ Hosted by the Ministry of Oceans and Fisheries of the Republic of Korea, the Korea Maritime Week 2025 took place from 20 to 23 October at the Shilla Hotel, Seoul. This year's theme was: ***The Beginning of Transition: New Opportunity, New Ocean.***

² <https://smart-c.imo.org/>

³ <https://tinyurl.com/587h2fsv>

⁴ The Philippine maritime authorities: Maritime Industry Authority (MARINA), National Mapping and Resource Information Authority (NAMRIA), National Telecommunications Commission (NTC), Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), and the Philippine Coast Guard (PCG).

Gender equality and decarbonisation

WISTA International Conference

IMO participated in the WISTA International Annual General Meeting and Conference held in Barcelona from 20 to 24 October, under the theme *Powering the Future of Shipping & Trade: Global Energy in Challenging Times*.

Gender equality was a central focus throughout the conference, reflecting IMO's ongoing cooperation with WISTA International to promote diversity and leadership opportunities across the maritime industry.

IMO Secretary-General Arsenio Domínguez took part in two key sessions: a roundtable on Decarbonisation: Impacts on Shipping, Cruise, and Energy Industries, and a closing fireside chat with the CEO of The American Club, Ms Dorothea Ioannou.

Importance of collaboration

S-G Dominguez emphasized the importance of collaboration among governments, shipowners and innovators to advance the maritime sector's transition toward low-and zero-carbon fuels. The conversation highlighted the importance of seafarer well-being and addressing seafarer criminalization, the challenges of recruitment and gender balance, and the role of the IMO in promoting gender equality.

IMO Deputy Director for Planning and Programming, Ms Louise Proctor, in a session on *IMO-WISTA International partnership update*, stressed that data-driven initiatives are key to designing effective policies that promote inclusivity and leadership opportunities. She commented: *'This partnership is about action, not just awareness. Together, we are building an ocean of opportunity for women in maritime.'*

Nineteen per cent of the workforce

The second IMO-WISTA Women in Maritime Survey provides the first global dataset on women's participation in both public and private maritime sectors. The survey, published in May 2025, shows that women currently account for just under 19% of

the total workforce, representing 176,820 individuals in 2024, up from 151,979 in 2021. Women make up 19% of the workforce in national maritime authorities and 16% in the private sector workforce (excluding seafarers).



At sea, however, women remain vastly underrepresented, comprising only 1% of seafarers of those who responded to the survey. Meanwhile, 5% of students pursuing seafaring degrees are women, highlighting that more women are entering maritime education than are transitioning into seafaring careers.

Next survey in 2027

The next IMO-WISTA Women in Maritime Survey will be conducted in 2027. Looking ahead to this next edition, the goal remains clear: to raise the bar for gender equality, transparency and opportunity across the global maritime community. Ms Proctor encouraged widespread participation in the forthcoming survey across the public and private sectors to provide a comparable dataset that helps us identify gaps, measure progress, and design initiatives that respond to real needs, not assumptions.

Gender matters, a strategic priority

IMO has reinforced its commitment to gender representation through a series of recent initiatives, including the Global Strategy for the IMO Women in Maritime Associations 2024-2029 (approved by the TC Committee in June 2025), the Women's Leadership and Empowerment (WLE) training course in collaboration with the World Maritime University (WMU) and WISTA International and ongoing programs such as the SMART-C Women programme. Gender matters are a strategic priority in all IMO projects and technical cooperation work.

Black Sea littoral States

BWM 2004 implementation

Littoral States in the Black Sea are stepping up implementation and enforcement of the International Convention for the Control and Management of Ships'

Ballast Water and Sediments, 2004 (BWM 2004), which aims to prevent the spread of harmful aquatic organisms through ships' ballast water.

Batumi workshop

A regional workshop held in Batumi, Georgia, from 21 to 23 October laid the groundwork for a harmonized compliance framework to protect and restore the Black Sea's marine ecosystem.

Sixteen government officials representing different maritime and environmental administrations and agencies from Georgia, Türkiye, the Republic of Moldova and Ukraine joined the event.



All had completed IMO's prerequisite e-learning course, *Introduction to Ballast Water Management and Compliance Monitoring and Enforcement*, along with preparatory surveys to tailor the training to regional needs.

Risk assessment, cooperation and more

Discussions covered risk assessment, contingency planning, exchanging best practices and cooperation among littoral States, with particular focus on the roles of flag, port, and coastal States as defined under BWM 2004.

A field visit to the Port of Batumi demonstrated inspection and sampling procedures, highlighting the importance of national legislation in ensuring effective implementation and enforcement.

IMO's ITCP

The workshop was delivered as part of the IMO's Integrated Technical Cooperation Programme (ITCP), organized in collaboration with the Maritime Transport Agency of Georgia. It followed an earlier assessment of IMO's interventions in the region and progress made by littoral States in ratifying and applying BWM 2004.

Outcomes from the workshop will guide future capacity-development activities and reinforce the commitment of Black Sea States to sustainable management of marine ecosystems.

First IMO maritime technical workshop

IMO in partnership with the Regional Cooperation of Maritime Authorities (ROCRAM*), delivered the first Regional Technical Workshop on Various IMO Subjects held in Lima, Peru from 20–21 October.

In conjunction with the XXIV Regular Meeting of ROCRAM and hosted by the Government of Peru through the Peruvian Navy, the event gathered maritime administrations from across Latin America and the Caribbean to strengthen technical capacity, enhance regional cooperation and advance the implementation of IMO instruments.

Importance of regional collaboration

Opening the workshop, Commander General of the Peruvian Navy, Almirante Federico Javier Bravo De Rueda Delgado, highlighted the importance of regional collaboration and technical exchange in ensuring safe, secure and environmentally sustainable maritime operations.

ITCP**

Head of IMO's Latin America and Caribbean Section, Mr Carlos Salgado reaffirmed the Organization's support for regional priorities under the Integrated Technical Cooperation Programme (ITCP) for 2026–2027 and beyond.

Audit Scheme IMSAS†

Over two days, participants discussed ITCP priorities, regional engagement with IMO's Technical Cooperation Committee, tools for ratifying and implementing IMO instruments, post-audit management under the IMO Member State Audit Scheme (IMSAS), performance assessment criteria and monitoring tools, and capacity-building needs.



Technical presentations by the IMO Secretariat were complemented by Member State contributions, including a case study from Venezuela on national efforts to implement IMO instruments through tailored strategies and inter-agency cooperation.

Joint regional action proposed

The workshop concluded with a roundtable on human resource development, where participants proposed a joint regional action plan aligned with IMO's capacity-development framework.

A milestone in IMO engagement

This inaugural event marks a milestone in IMO's engagement with the region, reaffirming its commitment to inclusive technical assistance and multilateral cooperation. The outcomes will inform future IMO capacity-development initiatives.

ROCRAM

ROCRAM members include Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Ecuador, Mexico, Panama, Paraguay, Peru, Uruguay and Venezuela.

* <https://tinyurl.com/4sb6we9x>

** <https://tinyurl.com/bdz3xpsn>

† <https://tinyurl.com/yc4wdwwf>

Too clever by half

By Michael Grey, IFSMA Honorary Member

It was exciting news, demonstrating that the dear old shipping industry was up there with the white heat of technology burning bright. This was the mid-1970s, with the space race attracting all sorts of attention, while we were building 30 knot 2000teu containerships and wondering what to do with quarter-million dwt tankers that suddenly became redundant. So when a Japanese team announced that it proposed to send a bulk carrier across the Pacific Ocean with nobody aboard it at all, there were some positive headlines at last.

The scheme, which was largely stimulated by the extreme reluctance of young Japanese to seek a career at sea rather than as a “salaryman”, appeared ambitious. The idea, illustrated by an imaginative artist, showed a “mother” ship in the centre of a fleet of robot vessels (autonomy as a description had yet to be invented). The only necessary manpower would be aboard Mother, which represented a tremendous saving on sailors. It certainly caught the public imagination, and in the event, it proved a practical proposition although rather less spectacularly, as a single voyage, of a single robot vessel, accompanied by the escorting vessel a few miles astern, was eventually accomplished. And then; silence.

This, we were given to understand, was because the technology which enabled this startling voyage was made instantly redundant by a neat bit of domestic legislation and a few strokes on a Parliamentary pen, which facilitated the employment of foreign crew members on Japanese ships. So, the robots were replaced with flesh and blood people, who were only too happy to seek employment afloat. And pursuing this theme further, as the possibilities of foc operations

registered more widely, it became possible to register beneficially owned Japanese ships in helpful places like Panama, precluding the need for any rare and more expensive officers on board. And by then, the shipping world and his wife had cottoned to the wheeze, with the brown envelopes dropping on the doorsteps of seafarers in the traditional maritime nations where, given the chance, they might have wished to remain at sea.

These historical musings came to mind reading about the progress artificial intelligence is apparently making in navigation and ship systems in general. At least one supposes this is AI, which seems to be given credit for an awful lot, these days. Was not the old “Iron Mike” which replaced the tedious job of steering by hand, artificial intelligence? It is not an entirely stupid question. We are told that it is possible to send large ships on oceanic voyages with autonomous systems so integrated that not only are they safe from traffic, shoals and all the hazards of the briny, that they can operate with an optimum fuel consumption to arrive precisely when they are needed off the pilot grounds. Cameras, radars and other AI assisted devices, it is suggested make the human watchkeepers unnecessary, enabling them to get on with other more mundane tasks aboard.

Nobody says this in public, but one might assume that this could be a step in the road to completely autonomous operation, with a riding crew swinging aboard by chopper as the ship heaves over the horizon. It might even be some justification for all those expensive man-hours on IMO committees, considering the implications of maritime autonomy. One does not wish to be too negative about all this exciting development, but as a natural pessimist, it is not difficult to conjure up plenty of “what if?” scenarios. Just today there was a chilling paper on the vulnerability of the shipping industry to hacking, cyber attacks and all forms of electronic interference, which to some of us deserves rather more attention than clever gear to ensure you arrive on schedule. That’s what we navigators did in the old days and we only had our sextants.

Then there is the old truism about the reliability of machinery afloat, in a nasty, hostile environment and the need to spend a great deal in stopping the build-up of corrosion and grease. Stuff happens when it is least expected and any marine engineer will confirm that breakdowns occur more regularly than some think, regardless of the sophistication of the installed equipment. Perhaps, one might suggest maliciously, because of it.

This article was first published in *The Maritime Advocate Online* No 892 of 3 October 2025 and appears here by kind permission of the author and of the editor.

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

Sydney by satellite

Sydney, located on Australia’s south-eastern coast, is the country’s [most populous](#) city*. It is built around a spectacular natural harbour, which has shaped its development and identity.

The city is famous for landmarks, including the Sydney Opera House and Harbour Bridge, as well as its beautiful beaches such as Bondi and Coogee.



Image credit: European Union, Copernicus Sentinel-2 imagery.

The European Union©

With the Pacific Ocean to the east and the Blue Mountains to the west, Sydney provides a mix of urban life and natural beauty. Sydney is also the location of the 2025

[International Astronautical Congress](#)**, which took place from 29 September to 3 October.

This image, acquired by one of the Copernicus Sentinel-2 satellites on 21 September 2025, shows Sydney from above.

The Copernicus Sentinel satellites provide essential data on the state of urban and coastal areas around the world, providing key insights to better protect these important ecosystems.

* <https://tinyurl.com/bdacadhe>

A brief corporate video by the Port Authority of New South Wales is to be found here: <https://tinyurl.com/4wkvaau>

** <https://www.iac2025.org/>

IALA – China MSA cooperation

MoU renewed

It has been reported that IALA and China Maritime Safety Administration (China MSA) have strengthened cooperation on Education and Training for Aids to Navigation (AtoN).

From 21 to 27 September, the IALA World-Wide Academy (WWA) actively contributed to several training activities in Wenzhou and Shanghai, supporting China Maritime Safety Administration

(China MSA) in fostering international cooperation and advancing maritime navigation safety.

Delivery of AtoN course modules

The Academy participated in the delivery of Modules 2 and 3 of the Level 1.1 AtoN Manager Course, organized jointly by China MSA (Shanghai & Wenzhou), the China MSA AtoN Training Center in Wenzhou, and JiMei University in Xiamen, with seventeen participants from thirteen countries.

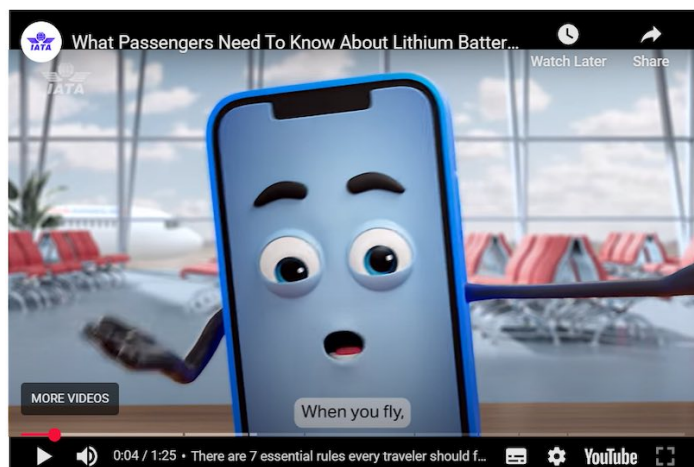


In parallel, another WWA team delivered the full Level 1.2 AtoN Master Course for senior managers, hosted by China MSA in Wenzhou, gathering seventeen participants from twelve countries.

The IALA World-Wide Academy sponsored seven of these thirty-four participants.

VTS Operator training

The Dean of the Academy, Vincent Denamur, also joined the final evaluation and closing of a VTS Operators' Training held in Shanghai for the benefit of Indonesia.



A highlight of this China Week was the renewal of the MoU between IALA and China MSA, signed in the presence of the IALA Secretary-General and the Executive Director General of China MSA.

This milestone reflects the shared commitment of China and IALA to building capacity and enhancing global cooperation in maritime navigation.

Illustrations per www.iala.net

IALA ©

Windpower and the IMO Net-Zero Framework

What is at Stake

An opinion by BAR Technologies

On 13 October BAR Technologies joined calls for the IMO to formally recognise wind propulsion as a cornerstone of its Net-Zero Framework (NZF), ahead of the MEPC 2nd Extraordinary Session (MEPC/ES.2) running at IMO from 13 to 17 October.

In a statement issued on 13 October BAR Technologies indicated that forthcoming decisions could determine whether the sector accelerates toward meaningful decarbonisation or stalls in delay and uncertainty.

Technology providers, sustainability advocates, and industry coalitions are reported as being united in the belief that consistent recognition of wind energy, as championed by the International Windship Association (IWSA www.wind-ship.org), is essential to achieving a practical and equitable pathway to net-zero emissions.

The IWSA's submission to MEPC/ES.2 emphasises: *'Wind is free at source and the only truly zero-emission energy available at scale to the global fleet today.'*

By systematically integrating wind within the NZF, ISWA believes IMO can deliver a framework that is neutral, transparent, and fair, positioning wind alongside alternative fuels and energy efficiency solutions.

Why wind must be treated consistently

The NZF has the potential to act as a global signal providing certainty to unlock finance, accelerate innovation, and scale proven technologies. But that power depends on consistent accounting across the sector. Without it, distortions in technology uptake, compliance, and funding allocation could slow the pace of progress.

As IWSA notes, consistent treatment of wind is a litmus test for the IMO's commitment to technology and energy-source neutrality.

Building a framework that works

The workload to implement the NZF is significant. From lifecycle assessments and compliance guidelines to pricing mechanisms and the design of the fund, the path forward demands clarity and cohesion. Apparently Member States are even weighing the creation of a dedicated GHG subcommittee to manage the scale of tasks. Such a situation makes it all the more important to get the foundation right—ensuring wind propulsion is integrated from the outset, not treated as a late-stage addition.

A practical path forward

As discussions intensify, industry consensus is emerging around several key principles:

- **Neutrality, Not Exceptions** – Wind must be recognised as a zero-carbon energy source, with full inclusion in intensity and compliance frameworks.
- **Data and Verification** – IWSA proposes streamlined methods to capture and validate wind energy contributions through the IMO Data Collection System.
- **Fair Access to Funding** – Wind propulsion should be proportionately rewarded within the NZF Fund, supporting early fleet-scale adoption.
- **Scalability and Co-benefits** – Wind delivers fuel savings, operational resilience, and immediate emissions reductions—available for both newbuilds and retrofits.
- **Maintain a Global Lane** – A unified NZF is far more effective than fragmented national regimes, ensuring competitiveness and clarity for all actors.

Industry alignment with IMO goals

Organisations across the maritime sector are known to be working to deliver technologies that reduce emissions now, technologies that maintain vessel performance and commercial viability. Wind-assist solutions, already proven and deployable at scale, offer a reliable and complementary path alongside emerging fuels.



John Cooper, CEO of BAR Technologies, commented: *'As a company delivering scalable, commercially*

ready wind propulsion solutions such as WindWings® and AeroBridge®, we see every day the real-world impact these technologies can have in reducing emissions.

'But without consistent recognition at the regulatory level, adoption will be slower and the cost of transition higher. The IMO has a golden opportunity to show global leadership by embracing wind within the NZF. We can accelerate the path to maritime decarbonisation.'

The IWSA's proposal gives the IMO a clear roadmap to ensure wind's contribution is properly accounted for, enabling faster emissions reductions at lower cost and establishing wind as a permanent partner to the fuels of tomorrow.

A clear call to action at MEPC/ES.2

During the Second Extraordinary session of MEPC industry stakeholders urged delegates to:

- Adopt the Net-Zero Framework and confirm the October implementation timeline.
- Ensure consistent treatment of wind energy across standards, compliance tools, and fund allocations, in line with the IMO's neutrality commitments.
- Allocate resources to support implementation, including a GHG subcommittee if necessary.

BAR Technologies indicated during MEPC/ES.2 that if integrated properly, wind propulsion can convert today's headwinds into tomorrow's momentum.

Chinese containership reaches UK via Arctic in record time

Implications for Cape routing

By Terry Hutson *Africa Ports & Ships Durban*

A Chinese-operated container vessel has completed a landmark transit from East Asia to Europe via the Arctic, bypassing traditional routes through the Suez Canal and around the Cape of Good Hope.

The voyage was completed in a remarkable 20 days, less than half the normal transit time between China and Northern Europe. The development can carry significant implications for global liner services, including trades touching South Africa.

The Panamax-class *Istanbul Bridge*, operated by Sealegend Shipping, arrived at the Port of Felixstowe on 13 October following a 20-day voyage from Ningbo-Zhoushan via Russia's Northern Sea Route (NSR). The 7,500 nautical mile passage marks the first liner-type container service from China to the UK via the Arctic, shaving more than 50% off the typical transit time through the Suez Canal, which spans 11,000 nautical miles and often takes 40–50 days.

Sealegend has branded the service 'China-Europe Arctic Express', leveraging the vessel's Ice-1

classification to navigate independently without icebreaker support. The crossing of the NSR took just five days at an average speed of 17 knots, aided by minimal ice coverage late in the summer season.

The Liberian-flagged *Istanbul Bridge* (IMO 9200811), carrying up to 4,843 TEU, having completed cargo working at Felixstowe by the following day steamed to the port of Hamburg where she was due on 15 October.

The voyage was timed to precede the seasonal surge of Asian goods into European terminals ahead of year-end holidays.

While the operator touts reduced emissions and faster supply chain turnover — claiming a 40% reduction in required inventory and lower capital costs — environmental groups have raised concerns over black carbon emissions, particularly if heavy fuel oil was used. Compliance with the IMO's Polar Code remains unverified.

On the other hand, the ship will emitted carbons into the atmosphere for just 20 days compared to more than double that through the Indian and Atlantic Oceans as well as the Mediterranean Sea.

The Arctic route remains niche, with approximately 100 transits in 2024 compared to 13,000 through the Suez Canal.

However, activity is growing. At least three other box carriers were active on the NSR during the *Istanbul Bridge's* voyage, and Chinese operator NewNew Shipping has deployed five vessels in the region this summer, aiming to exceed its 2023 record of 13 Arctic sailings.

The first full container transit of the NSR occurred in 2018 with Maersk's feeder-class *Venta Maersk*. Since then, Western operators have largely withdrawn from the route, citing environmental and geopolitical concerns, leaving Chinese carriers to expand their Arctic footprint.

For South Africa, the strategic shift raises questions about future volumes rounding the Cape. Also whether that really matters. Should Arctic transits become more frequent — especially amid uncertainty around the Suez Canal's reopening — regional ports may see reduced traffic from Far East – Europe and East Coast USA trades.

Africa Ports & Ships will continue monitoring developments in Arctic navigation and their ripple effects on Southern Hemisphere routeing.

Sidebar: Who Is Sealegend Shipping?

Sealegend Shipping Co., Ltd. is a Chinese maritime logistics company that has emerged as a key player in Arctic container navigation. Though little known in Southern Africa, the firm is making headlines with its pioneering 'China-Europe Arctic Express' service — a liner-type route connecting East Asia to Northern Europe via Russia's Northern Sea Route (NSR).

Strategic Role

- Operator of the *Istanbul Bridge*, the Panamax-class Ice-1 rated containership that recently completed a record 20-day voyage from Ningbo-Zhoushan to Felixstowe via the Arctic.
- Route Branding: 'China-Europe Arctic Express' — a new service aimed at reducing transit times and inventory costs for shippers.
- Fleet Capability: Operates ice-class vessels capable of independent Arctic navigation without icebreaker escort.

Service Footprint

- Core Routes: Southeast Asia, East Asia, and Northern Europe.
- Arctic Expansion: Among the few Chinese operators actively developing liner services through the NSR, alongside NewNew Shipping.
- Port Calls: Recent voyages include Felixstowe, Rotterdam, Hamburg, and Gdansk.

Environmental Positioning

- Efficiency Claims: Shorter Arctic transits reduce emissions and supply chain lag
- Compliance Questions: Fuel type and adherence to IMO's Polar Code remain unverified, raising concerns among environmental advocates.

Market Outlook

- Emerging Arctic Operator: Sealegend is part of a growing cohort of Chinese firms expanding into polar waters as Western operators retreat.
- Potential Impact: Increased Arctic traffic may divert volumes from traditional Cape and Suez routes — a strategic concern for South African ports.

Editorial note

This text first appeared in *Africa Ports & Ships* (www.africaports.co.za) on 14 October 2025 and appears here by kind permission of the Editor

Africa Ports& Ships ©

CSIRO to study deep dwellers of the Coral Sea

News from Australia's Commonwealth Scientific Industrial Research Organisation (CSIRO) in early October was that scientists on board its research vessel (RV) *Investigator* were preparing to conduct a dedicated deep-sea survey of marine life in the Coral Sea Marine Park, off the coast of Queensland.

It is understood that this new research voyage will use RV *Investigator's* extensive suite of scientific equipment including deep towed camera, eDNA sampler, trawls and sleds to explore biodiversity and better understand ecological changes.

The research was to be led by CSIRO with support from Parks Australia, Bush Blitz and The Nippon Foundation-Nekton Ocean Census, and in collaboration with a network of leading museums, universities and research institutes.

Generating vital data

Voyage Chief Scientist Dr Will White from CSIRO said the 35-day research voyage would generate vital data and samples that will inform future conservation of benthic (on or just above the seafloor) communities and increase Australia's knowledge of marine ecosystems and biodiversity in the region.

In advance of the voyage he commented: *'The benthic zone is the ecological region at the interface of the ocean and the Earth's crust, so it means we will be exploring the deepest habitats where some of the most interesting and least known species of fish and invertebrates live.'*



'These include fish without eyes, swimming sea cucumbers, deep-sea corals and many species perhaps never before seen by human eyes.'

'With the help of an expert team of scientists, CSIRO technicians and crew on board, our goal is to learn more about what's in the Coral Sea Marine Park and discover and describe as many new species to science as we can.'

'This work will allow us to better understand what lives within the park, how unique and connected different marine species are, and ultimately how we can ensure long-term protection of this biodiversity.'

The team prepared to map the seafloor in high resolution using RV *Investigator's* advanced multibeam echosounders which will help improve marine park managers' understanding of underwater habitats.

Coral Sea Marine Park of 989,836 km²

The Coral Sea Marine Park is the largest marine park in Australian waters, covering 989,836 km² and protecting vast reef areas, and 67 cays and islets. It is part of a network of 60 Australian Marine Parks managed by Parks Australia that cover around 43%, or 3.8 million km², of Australia's marine environment.

Branch Head of Parks Australia's Marine and Island Parks, Shaun Barclay, said voyages such as this are vital to the ongoing understanding and protection of habitats and the many species that call Australian Marine Parks home.

He added: *'Parts of the Coral Sea Marine Park are largely unexplored, making this voyage a true frontier of marine biodiversity discovery.'*



'This is a collaborative effort between multiple partners and experts, and we hope to see some amazing discoveries.'

'Information collected on this voyage will be vital to adding to the understanding of Australian Marine Parks and will assist Parks Australia in managing the Coral Sea Marine Park through evidence-based decision making.'

Scientists on board will also conduct regular live crosses to schools around the country, supported by Bush Blitz, to showcase what working as a researcher at sea is like.

To advance knowledge of Australia's deep-sea environments

Following the voyage, the data and specimens collected will be used by a team of national and international scientists to advance knowledge of Australia's deep-sea environments and to support marine park management and future research.

This research is supported by a grant of sea time on RV *Investigator* from the CSIRO Marine National Facility which is supported by the Australian Government's National Collaborative Research Infrastructure Strategy (NCRIS).

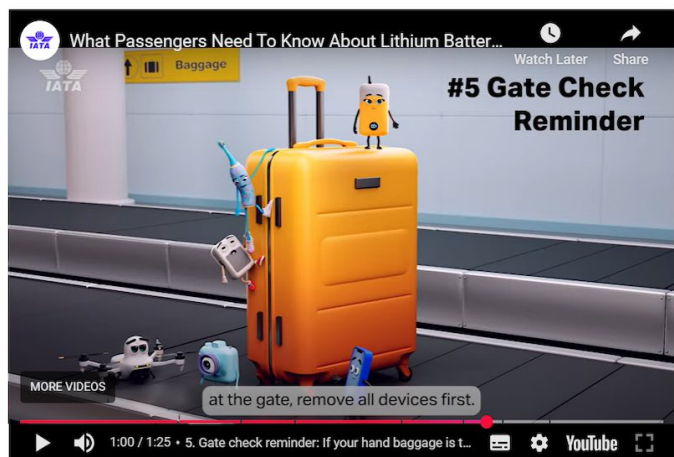
Illustrations per CSIRO ©

IATA launches global campaign

Helping travellers fly safely with lithium batteries

On 15 October from Xiamen, PRC, the International Air Transport Association (IATA) launched **Travel Smart with Lithium Batteries**, a global safety campaign that gives travellers seven simple rules for carrying mobile phones, laptops, power banks, and other lithium-powered devices safely when they fly.

This campaign will run on IATA's website and social channels and is available as white-label assets for airlines, airports, and other partners across the travel ecosystem.



To quote Nick Careen, IATA's Senior Vice President, Operations, Safety and Security: *'Lithium-powered devices are safe when handled properly, but they can pose a risk if damaged or packed incorrectly.'*

'As more travellers fly with these devices, our Travel Smart with Lithium Batteries campaign will help airlines educate their passengers on the simple rules they must keep in mind when travelling with the electronic devices that have become an essential part of their daily lives.'

Travellers are carrying more devices but with incomplete knowledge

A recent IATA passenger survey found that most travellers fly with lithium-powered devices:

- 83% of travellers carry a phone
- 60% carry a laptop
- 44% carry a power bank

While 93% of travellers consider themselves knowledgeable on the rules for carrying lithium-powered devices (including 57% rating themselves as very familiar with the rules), critical misconceptions persist:

- 50% incorrectly believe it's OK to pack small lithium-powered devices in checked luggage.
- 45% incorrectly believe it's OK to pack power banks in checked luggage.
- 33% incorrectly believe that there are no power limits on power banks or spare batteries.

Seven simple safety rules

The campaign assets highlight seven simple rules every traveller should follow:

- **Pack light:** Only bring the devices and batteries you really need.
- **Stay alert:** If a device is hot, smoking, or damaged, tell the crew (or airport staff) immediately.
- **Keep devices with you:** Always carry phones, laptops, cameras, vapes (if allowed) and other battery-powered items in your hand baggage, not in checked baggage.
- **Protect loose batteries:** Keep spare batteries and power banks in their original packaging, or cover the terminals with tape to prevent short-circuits.
- **Gate check reminder:** If your hand baggage is taken at the gate to go in the aircraft baggage hold, remove all lithium batteries and devices first.
- **Check battery size:** For larger batteries (over 100 watt-hours, such as those used in larger cameras, drones, or power tools), check with your airline as approval may be required.
- **Check airline rules:** Always confirm your airline's policies, as requirements may differ in compliance with local regulations.

Industry-wide rollout

The multilingual campaign will be rolled out through digital assets that airlines and other partners can adapt and share with passengers, ensuring consistent safety messaging across the industry.

A short, animated video, designed to make the rules simple, engaging, and easy to remember, can be used by airlines and airports on their digital and social channels.

Campaign assets will also be available to media and other entities in the aviation value chain to help educate travellers on flying safely with their lithium-powered devices.

IATA's animated video

To watch the IATA animated video readers are invited to use the link here: <https://tinyurl.com/56nk4amh>

Common devices that use lithium batteries

Many travellers do not realize just how many everyday devices contain lithium batteries.

Beyond mobile phones and laptops, lithium batteries power a wide range of personal and travel items including tablets, e-readers, wireless headphones, smartwatches, fitness trackers, cameras, portable speakers, power banks, handheld gaming consoles, and electronic styluses.

They are also found in everyday personal-care items such as electric toothbrushes, shavers, and hair-straighteners, as well as in e-cigarettes, handheld fans, torches, medical devices such as hearing aids and glucose monitors, and compact tools or gadgets, for example screwdrivers and laser pointers.

Illustrations per IATA ©

By Michael Grey, IFSMA Honorary Member

High Northern latitudes have been the focus of maritime attention of late, with a containership turning up in Felixstowe 20 days after leaving her final loading port in China. Smart going, one might suggest, with the incident-free passage of the 4843teu ice-classed Istanbul Bridge being accomplished without icebreaker escort on the Northern Sea Route, at 17 knots.

Ice experts will point to the intervention of some luck in this, as the behaviour of the summer ice is notoriously unpredictable. Nevertheless, some 20 containerships have made the passage this season, along with bulkers and tankers, with several of the latter not being ice-classed, which understandably causes some concern. The passage from China of the ice-strengthened Thamesborg, on the western route north of Canada, did not enjoy the same good fortune, with the ship, heavily aground since September 6, finally being refloated more than a month later. This has been a major salvage job in one of the world's most remote places, involving an Estonian icebreaker hauled all the way from the Baltic, with the cargo being offloaded into other specialist tonnage. Luck was on the salvor's side with the weather it seems.

Had the rescue been delayed experts will point to the intervention of some luck in this, as the behaviour of the summer ice is notoriously unpredictable. Had the rescue been delayed, the returning ice might have seriously compromised the operation. But the most significant ice-related news has been the authorisation of President Trump to the dramatic expansion of the US Coast Guard's Arctic Security Cutter fleet, with up to 11 of these being built, and with some evident urgency. Four will be constructed by Rauma in Finland, with the technology being exported to the US shipbuilder Bollinger, and the Canadians (who will share the designs) in on the deal, which, so the President suggests, was concluded after a round of golf with the President of Finland.

The new rapid-fire programme is a curious contrast to the decades of delay and indecision over the replacement of the ageing ice-capable assets of the USCG, which have been on their last legs for years. With the Coast Guard always seeming to be playing second fiddle to other defence-related expenditure, and their own domestic responsibilities increasing, it has taken the evident impatience of President Trump to get some traction on Arctic capabilities. Why now, after all these years? Certainly, Canadian ship construction having been accelerated will have irritated the President, after all the jibes about the "51st state", along with reciprocated cracks about the US being only able to invade Greenland during the summer months.

More seriously, the reinforcement of the Russian heavy icebreaker fleet and the activities of Chinese research vessels in the Bering Straits and off the coast of Alaska clearly has been something of a goad to presidential patience. It might also fit with the ambition to revitalise the US shipbuilding sector. The grounding

of the Dutch cargo ship in the NW Passage is a reminder that these waters are poorly surveyed and that any voyage in these latitudes is not without risk. Both east and west passages have seen their share of casualties over the years and despite the confident assertions of the climate scientists that the icecaps are melting, the ice is unpredictable from one season to the next. Insurers will be nervous. The saving in sea miles seems so attractive, but the fact that so few ships have attempted to use these routes demonstrates that it is not for the faint hearted.

Those of a certain age might remember the spectacular voyages in 1969 of the tanker Manhattan, which after being expensively converted to a sort of ice class, with a massive new bow and other reinforcements, made the voyage from the Atlantic to Prudhoe Bay in Alaska to collect a symbolic barrel of North Slope oil, before triumphantly returning. It might also be recalled that in the 1960s our friends the climate scientists were signalling that there was a new era of "global cooling" beginning and that large tracts of Canada were confidently expected to become uninhabitable. That may have been discouraging to some. The Manhattan voyage was supposed to usher in a new age of Arctic trade and transport, but, despite grand plans for submarine gas carriers and exciting mineral exploitation, the polar waters have been mostly left untroubled by marine activity, other than by a few specialists. The North Slope oil, it will be recalled, travels less dramatically by pipeline. Now, these inhospitable latitudes have become inextricably linked with great power rivalries and global instability, political ambitions and military capabilities. Whatever the models of the climate scientists might suggest this time around, the Arctic is likely to attract even more attention, for good or ill, than it has in the past.

This article was first published in *The Maritime Advocate Online* No 893 of 18 October 2025 and appears here by kind permission of the author and of the editor.

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

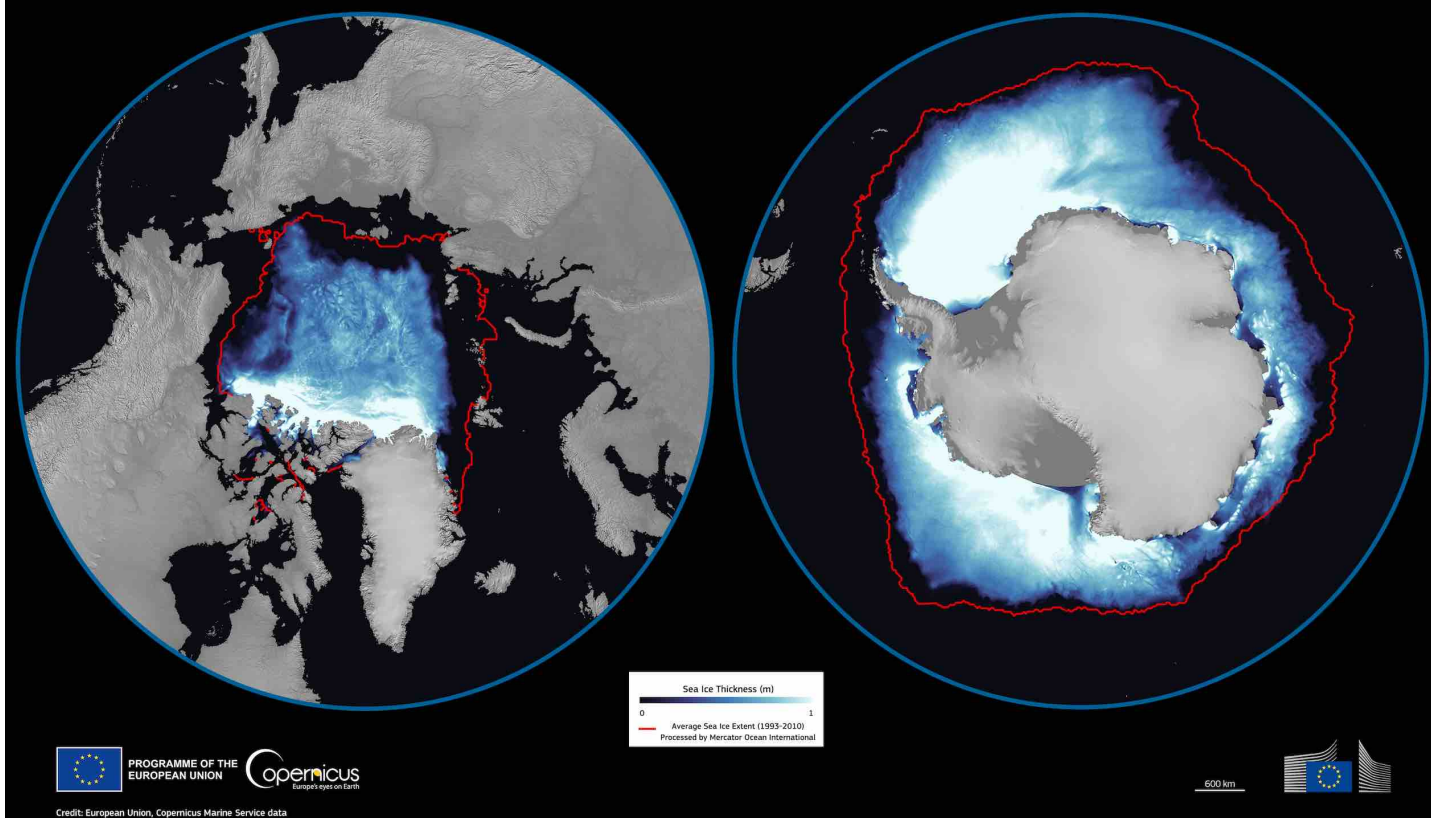
Arctic and Antarctic sea ice by Copernicus

Each September marks the end of the polar summer in the Arctic, when sea ice reaches its annual minimum extent. At the same time, the Antarctic emerges from the austral winter, reaching its annual maximum sea ice extent. These cycles are essential to the Earth's climate system, illustrating how each hemisphere responds to seasonal heating and cooling.

September data

In September 2025, Arctic sea ice reached its seventh-lowest minimum on record at 4.18 million km², while Antarctic sea ice peaked at 17.31 million km², the third-lowest maximum since 1993.

Both figures rank below the 1993-2010 average, in line with the broader trend observed in polar sea ice loss in the last decade, according to Mercator Ocean International's analysis of Copernicus Marine Service data.



This data visualisation is based on Copernicus Marine Service data.

Seen here the left panel shows Arctic sea ice on 8 September 2025, when it reached its annual minimum extent. The right panel displays Antarctic sea ice on 20 September, when it reached its maximum extent for the year.

Ten-Oh

Japan's first hydrogen-fuelled tug

ClassNK reported from Tokyo on 17 October that it has added Japan's first hydrogen-fuelled tugboat *Ten-Oh* to its register.

Built by Tsuneishi Shipbuilding Co Ltd the vessel was developed and built under the Nippon Foundation Zero Emission Ships Project, a grant programme by The Nippon Foundation aimed at developing ships with zero CO₂ emissions.

Based on discussions among the parties involved during the planning stage of the vessel, ClassNK reviewed the safety requirements and countermeasures for hydrogen-fuelled ships by applying Part GF of its *Rules and Guidance for the Survey and Construction of Steel Ships*.

These reviews focused on issues such as preventing explosions caused by the high ignitability of hydrogen and mitigating the potential impacts of hydrogen fuel leakage on crew members and the environment.

On completion of the necessary surveys in line with

The Copernicus Marine Service provides high-resolution data on the extent and thickness of global sea ice. This data is crucial for monitoring the impacts of climate change at both poles.

Credit: European Union, Copernicus Marine Service Data

EU ©

the relevant class rules and so forth ClassNK added the vessel to its register on 9 October 2025.

Going forward, ClassNK will continue to support the safe operation of the vessel through surveys in service, and furthermore, support industry's effort toward decarbonisation through utilizing the knowledge and experience gained from the surveys for keeping its guidelines up to date and contributing to establishment of the appropriate international standard.



Hydrogen-fuelled tugboat *Ten-Oh*.
Illustration reproduced by courtesy of Tsuneishi Shipbuilding Company ©.

USCGC *Waesche* returns to California

Multi-mission Arctic patrol

Demonstrating US commitment to a strong and free Arctic

It was announced by the US Coast Guard from home port Alameda, California, on 22 October that USCGC *Waesche* had returned on 10 October concluding a 105-day Arctic deployment spanning over 21,000 nautical miles.

Safeguarding US sovereignty

Waesche's deployment underscored the Coast Guard's commitment to safeguarding US sovereignty, enforcing border control, and ensuring national security in the strategically vital Bering Sea, Arctic Ocean, and along the US - Russia Maritime Boundary Line.

Throughout the three-and-a-half-month deployment, the crew integrated operations with US Northern Command (NORTHCOM) and US Alaska Command (ALCOM), conducting national defence operations and enforcing maritime laws to safeguard national sovereignty in an increasingly geostrategic Arctic.

The Arctic, a national priority

To the US the Arctic is a national priority. The US Coast Guard remains steadfast in its commitment to protecting US interests in the Arctic and ensuring the safety and security of Alaska's maritime borders and approaches.

Five China-affiliated research vessels operated in the Arctic region over the summer, and *Waesche* was one of several Coast Guard assets deployed to the Arctic to control, secure, and defend U.S. territory and sovereign interests.

Operation Frontier Sentinel: responding to adversaries

In August, *Waesche*'s crew responded to the People's Republic of China Research Vessel *Zhong Shan Da Xue Ji Di* as it was transiting north in the Chukchi Sea above the Arctic Circle, after passing through the Bering Strait. *Waesche* and the CCG *Healy* patrolled the Arctic Ocean in September supporting Operation Frontier Sentinel, an operation that responds to adversaries operating in and around Alaskan and US Arctic waters, before responding to China's research vessels in the region.

Here the US Coast Guard's responses are intended to counter malign activities, defend sovereign interests, and promote maritime conduct consistent with international law and norms.

USCG the only US surface presence in the Arctic

The Coast Guard is the only US surface presence in the Arctic and works in conjunction with US Northern Command and Alaskan Command to constantly

monitor foreign vessels operating in and near US waters in support of US homeland defence and security operations.

While deployed to the region, *Waesche* served as a Forward Afloat Staging Base during NORTHCOM's Exercise Arctic Edge 2025, executing a complex, multi-agency assault of a mock target of interest. The operation showcased seamless integration between *Waesche*, Coast Guard Maritime Security Response Team West, US Navy SEALs, and the Alaska Air National Guard to rapidly respond to domestic threats.

Joint US/RCN operations

Waesche conducted joint operations with ALCOM and the Royal Canadian Navy frigate HMCS *Regina*, demonstrating interagency coordination and a shared commitment to regional security during a joint patrol. The exercise included a passenger exchange, a mock boarding, cross-deck hoist operations with *Regina*'s CH-148 Cyclone helicopter, air support from a US Coast Guard C-130J Hercules fixed wing aircraft from Air Station Kodiak and a Royal Canadian Air Force CP-140 Aurora.



Illustration USCG ©.

Waesche's CO Captain Tyson Scofield commented: 'This deployment was a resounding success, proving the concept of expeditionary logistics in the Northern Frontier and solidifying our partnerships with the Joint Force and key allies.'

'The underway replenishment with *Asterix* and the successful barge fuelling in Kotzebue represent a significant leap forward in our ability to sustain operations in the Arctic.'

'Our integration with the Royal Canadian Navy, ALCOM, and NORTHCOM highlights the importance of peace through strength to maintain an Arctic free of adversarial coercion.'

Waesche successfully conducted the Coast Guard's first-ever fuelling at sea in the Alaskan theatre with the Royal Canadian Navy replenishment oiler MV *Asterix* – accomplished in 6-8 foot seas with sustained 30-knot winds. Additionally, *Waesche* fuelled north of the Arctic Circle, extending Coast Guard operations into the remote Arctic environment.

Exchanges with Canadian counterparts

Waesche's crew conducted professional exchanges with Canadian counterparts, including HMCS *Max Bernays* in Dutch Harbor, and hosted personnel from the National Oceanic and Atmospheric Administration (NOAA) law enforcement division, and Russian and Mandarin interpreters, further enhancing the cutter's operational capabilities and regional understanding. Coast Guard Cutter *Healy* joined *Waesche* for a joint Maritime Boundary Line (MBL) patrol as well.

The Legend-class of USCG cutter

Commissioned in 2010, *Waesche* is one of four Legend-class national security cutters homeported in Alameda. National security cutters are 418-feet loa, 54-feet wide, have a top speed of over 28 knots, a range of 12,000 nautical miles, endurance of up to 90 days, and can hold a crew of up to 170. Advanced technologies of the national security cutter class ships are designed to support operations and missions throughout the Pacific.

Deficiencies in CO₂ fire-extinguishing systems

A reminder

DNV has recently identified cases where CO₂ fire extinguishing systems had multiple-depleted CO₂ cylinders, potentially compromising fire safety and vessel integrity.

DNV identified two primary contributors to this issue:

- **Incorrect use of ultrasonic liquid level gauges**

Level gauging at temperatures exceeding the manufacturer's instructions on maximum temperature (CO₂ cylinder temperature) gives unreliable readings. At elevated temperatures, CO₂ converts into a supercritical fluid state, and the cylinder no longer has a liquid level to measure.

- **Bursting disc material**

The second issue relates to the material used in the CO₂ cylinder valve bursting disc, to date an issue only observed in systems supplied by NK Co., Ltd. from South Korea up to 2016.

As highlighted in the corresponding Marshall Island Maritime Safety Advisory No. 14-23, (indicated below) service experience has shown that bursting discs made of copper are prone to fatigue failure.

Recommendations

To mitigate these risks, DNV has recommended taking the following actions:

- Ensure the latest version of the CO₂ user manual is on board and followed.
- Use approved service suppliers and within the applicable regulatory intervals.

- Only use ultrasonic level gauges within the temperature range specified by the manufacturer for the liquid level test of CO₂ cylinders.

References

Republic of the Marshall Islands Maritime Administrator issued on 18 September 2023 Marine Safety Advisory No 14-23 to Owners/Operators, Masters, Nautical Inspectors, Recognized Organizations with the subject: **FAILED BURSTING DISCS IN CARBON DIOXIDE FIRE-EXTINGUISHING SYSTEMS.**

The document is available here: <https://tinyurl.com/4eh93tme>

Hydrogen-fuelled tanker *Kikou Maru*

Zero-emission accelerating ship finance

Under zero-emission accelerating ship finance which is jointly operated by Development Bank of Japan Inc. and ClassNK, ClassNK evaluated the hydrogen-fuelled demonstration large oil tanker *Kikou Maru* owned by Uyeno Transtech Ltd.

The evaluation result was the highest rating of "S," and DBJ provided financing to Uyeno Transtech. Notably, this case marks the first instance of utilizing such a programme for a coastal vessel.

Contributing to the transition to decarbonisation

In the shipping industry, where environmental regulations are becoming stricter as the industry moves towards decarbonisation, ClassNK evaluates ships based on a comprehensive scoring model jointly developed with DBJ from the perspective of decarbonisation, environmentally friendly performance, and innovation, and DBJ provides investment and financing. The programme supports initiatives that contribute to the transition to decarbonisation from both IR and financial perspectives.



Tanker *Kikou Maru*

Image per Class NK ©

Uyeno Transtech has been involved in the marine transportation of petroleum and petrochemical products since its establishment and has recently focused on achieving zero emissions in the maritime industry through the development of next-generation fuel supply vessels.

Demonstration voyage in 2026

Kikou Maru is a 5,000KL hydrogen fuel-ready electric propulsion oil tanker built at the Nagasaki Yard of Fukuoka Shipbuilding Co., Ltd., and delivered in October 2025. In 2026, the ship is scheduled to conduct one of the world's first demonstration voyages using hydrogen fuel, as part of a subsidized project under the Nippon Foundation's Zero Emission Ships project.

Points considered

The following points were highly evaluated in this assessment of the ship:

- As a hydrogen fuel-ready vessel, development of the ship involved not only a concept design for the use of hydrogen but also the design and equipping of a hull structure intended to satisfy requirements related to hydrogen fuel tank and compartments for tank installation.
- Fuel consumption is optimized through the installation of lithium-ion batteries.

As a result, *Kikou Maru* received an "S" rating, the highest rank in the programme, recognizing it as a ship with exceptionally high decarbonisation, environmental consideration, and advanced performance, acknowledging that significant environmental-related investments have been made.

Through the expansion of the programme, DBJ and ClassNK will support shipping and shipbuilding companies' efforts to contribute to the transition toward decarbonisation and work together to accelerate the transition toward decarbonisation in the entire maritime industry.

Plastic waste solutions in the Indo-Pacific

Australian-backed innovators pitch

Entrepreneurs across the Indo-Pacific throughout October showcased their breakthrough solutions to combat plastic waste at a series of multi-city forums.

Government support

Supported by Australia's national science agency CSIRO and Australia's Department of Foreign Affairs and Trade (DFAT) under the Mekong-Australia Partnership, the series of Demo Days was held in Indonesia, Vietnam and Thailand.

Pitching solutions

The Demo Days provide the opportunity for innovators to pitch their solutions to plastic waste to industry experts, investors and potential partners. Their goal: to scale up solutions and transform the way plastics are designed, used and recovered in one of the world's fastest-growing regions.

A mounting global challenge

Plastic waste is a mounting global challenge. Each year, more than 400 million tonnes of plastic are produced, a figure that is expected to double by 2040, * with devastating consequences for marine life, communities and economies.

Demo Days are the flagship annual event as part of CSIRO's Indo-Pacific Plastics Innovation Network (IPPIN) Accelerator+ Program.

In 2025, 27 teams took part in the programme have been supported to develop solutions that range from next-generation recycling systems, biodegradable alternatives and circular business models paving the way for sustainable and inclusive innovation.

Comment

Ms Andrea Sosa Pintos, IPPIN Program Director, said the Demo Days are proof of the power of collective action: *'The IPPIN Program drives real-world solutions. These Demo Days are about showcasing what's possible when science, entrepreneurship and international partnerships come together across countries.'*



Natalie Kikken / CSIRO ©

She added: *'By working together across borders, we can accelerate innovation that makes a real difference for people, industries and the environment.'*

Since 2022, the IPPIN Program has already supported more than 165 entrepreneurial teams across the region, connecting them with markets, investors and technical expertise to develop ideas into impact.

In conclusion Ms Pintos said: *'From small community-led ideas to scalable technologies, we are seeing breakthroughs that can change the trajectory of plastic waste in the Indo-Pacific.'*

Connecting 4,000+ entrepreneurs

The IPPIN Program has connected more than 4,000 entrepreneurs, researchers, industry leaders and policymakers across 15 countries.

Through initiatives such as the IPPIN Program, CSIRO and DFAT, alongside government partners across Thailand, Vietnam and Indonesia, are proving

that innovation and collaboration are essential tools in building a more sustainable future.



Natalie Kikken / CSIRO ©

For more information

To learn more about IPPIN's impact readers are invited to use the link here:

<https://ippin.org/our-impact/>

* <https://tinyurl.com/bdex2mkb>

Norwegian Customs Service

New patrol vessels

VIKING Life-Saving Equipment a supplier of high-performance boats for professional applications, has signed a contract with Tolletaten (the Norwegian Customs Service) to deliver a new fleet of advanced patrol and fast response craft.

The new boats will strengthen Tolletaten's maritime capabilities and support its law enforcement and inspection duties in Norwegian waters. The contract further reinforces VIKING's position as a trusted partner to Nordic authorities and maritime professionals worldwide.



VIKING Norsafe Munin 1400

Image credit: Tolletate ©

The agreement covers the delivery of four VIKING Norsafe boats including one Marathon S-900, powered by twin 350 HP Mercury engines, and three Munin S-1400 patrol boats, each equipped with triple 500 HP Mercury engines.

Combining speed, control and endurance, the boats are purpose-built for demanding professional operations. Deliveries are scheduled for 2026 and 2027, with options for additional vessels. The total

contract value is approximately NOK 43 million (US\$4.3 million).

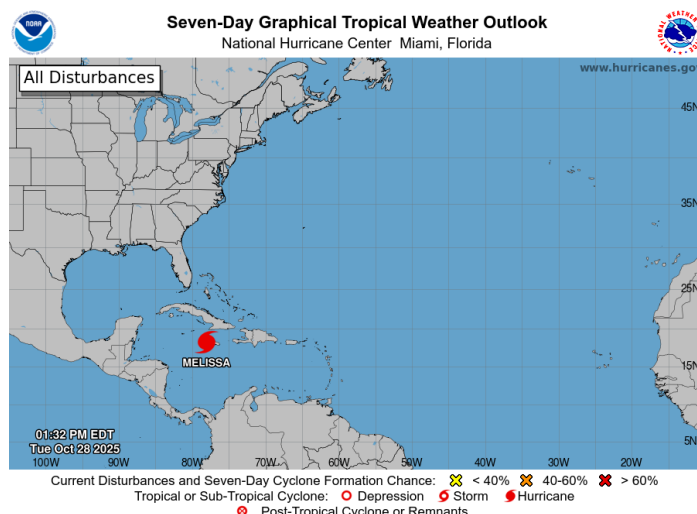
Designed for speed, control and reliability, the VIKING Norsafe Marathon and Munin series are purpose-built for professional maritime operations. Their advanced hull designs, combined with powerful Mercury propulsion systems, ensure rapid acceleration and precise manoeuvring in challenging sea conditions. Both models feature shock-mitigation technology and flexible deck layouts to support maritime law enforcement and patrol operations, where endurance and crew safety are paramount.

The boats will be built at VIKING's production facilities in Arendal, Norway, combining Norwegian design heritage with world-class safety and performance standards.

Hurricane Melissa

EU Copernicus satellites acquire imagery

After forming in the central Atlantic Ocean at the end of October 2025, Hurricane Melissa underwent rapid intensification as it moved westward across the Atlantic, reaching Category 4 status with sustained winds of 225 km/h.



National Hurricane Center Miami, Florida, graphic as at 28 October 0132p.m. EDT, per www.nhc.noaa.gov

The storm then began to move west-north-west, passing through the Greater Antilles and severely affecting the Dominican Republic, Haiti, Jamaica, and eastern Cuba, causing at least four casualties (per news as at 27 October / 0949 GMT).

This image, acquired by one of the Copernicus Sentinel-3 satellites on 26 October shows the eye of Hurricane Melissa approximately 175 km south of Kingston, Jamaica.

Copernicus Sentinel data is crucial for assessing the environmental impacts of tropical storms. After landfall, this data can be used to map flooded areas, monitor coastal erosion, and evaluate damage to ecosystems and land use, helping to support recovery operations and long-term climate resilience.

ClassNK issues AiP

From Tokyo on 22 October ClassNK reported that it had issued an Approval in Principle (AiP) for the Samsung Remote Operation Center (SROC), a shore-based remote monitoring system developed by Samsung Heavy Industries Co., Ltd., and a certificate handover ceremony was held in KORMARINE 2025.

Developing safety standards

ClassNK is involved in various demonstration projects and continuously works to develop necessary safety standards in order to support the development and implementation of automated/autonomous operation technologies from a safety perspective.

Guidelines issued

Based on these experiences, ClassNK released its *Guidelines for Automated/Autonomous Operation of ships* which comprehensively summarizes the requirements for each stage of conceptual design, design development, installation, and maintenance during the operation of automated/autonomous operation technologies.

This guidelines document also set out the requirement of the specific safety requirements for remote operation systems and their specific safety evaluation methods.

Safety review

For the concept design of SROC, ClassNK conducted its safety review based on the requirements of *Guidelines for Automated/Autonomous Operation on ships* and examined the risk assessment through HAZID involving relevant stakeholders. Having confirmed its compliance with the requirements, ClassNK issued the AiP.

ClassNK will continue to improve the environment for the use of automated/autonomous operation technologies by providing standards for advanced initiatives and technological verification.

Approval in Principle (AiP)

At the initial stage of designing or before the specific target ship to be implemented is decided, the design is examined based on the existing regulations such as international conventions and ship classification rules, and an Approval in Principle (AiP) is issued as proof of conformity with requirements.

It also prevents rework of regulatory aspects in the post-process, shortens the examination time at the time of class registration, and can be used as a technical basis for external appeal of the design status.

DMAIB Marine accident report on collision, 19 July 2023



Background

Murcia Maersk is a 399.00 metre loa Danish-registered container ship that was constructed in 2018. At the time of the accident it was owned, managed, and operated by Maersk A/S, and was engaged in a Far East Asia–Europe service route, calling at fixed ports according to a pre-determined schedule.

On 15 July 2023, *Murcia Maersk* departed Shanghai for a five-day passage to Tanjung Pelepas, Malaysia. A total of 25 crewmembers of various nationalities, were on board.

BD-30947-TS was a 13.50 m Vietnamese fishing vessel of wooden construction that was constructed in 2000. The fishing vessel operated primarily in the South China Sea, transiting between various fishing grounds, with squid as its primary target species. The vessel departed Vung Tau, Vietnam, on 5 July 2023 for a planned voyage of approximately 20 days. The crew comprised one skipper, who was also the vessel's owner, and five fishermen.

The collision

On 19 July 2023 at 0600, *Murcia Maersk* was underway in the South China Sea, approximately 190 nm south of Vietnam, on a south-westerly course (215°). The ship was operating at nearly full service speed of approximately 21 knots in an effort to make up for previously lost time and reach Tanjung Pelepas according to schedule. The chief officer was on watch, and as daylight had not yet broken, an able seaman (AB) was also present on the bridge, in accordance with the bridge watch schedule.

Overnight, wind conditions had increased from a strong breeze to gale force, accompanied by wave heights of approximately three metres. Occasional drizzle had begun to intensify into heavy tropical rain showers, which reduced visibility to less than 0.5 nm. As the rain showers were intermittent, visibility fluctuated accordingly. During periods of reduced visibility, the chief officer monitored the traffic situation using the S-band radar located on the starboard side of the central navigation console. Meanwhile, the AB maintained a visual lookout through the forward bridge windows and reported any observations to the chief of officer. At the same time and within the same area of the South China Sea, the crew of *BD-30947 TS* had completed cleaning their fishing nets. The vessel was underway towards the next fishing ground at an approximate speed of 4 knots. The skipper was on

watch in the wheelhouse, while the remaining five crewmembers were playing a game of cards in a cabin aft of the wheelhouse.

At 0645 *Murcia Maersk* was transiting an area with moderate traffic, consisting primarily of fishing boats and cargo ships. The vessel was passing through a heavy rain shower, and visibility had again deteriorated significantly, requiring the chief officer to rely on radar for vessel detection and collision avoidance.

The chief officer continuously monitored radar and AIS targets to assess the traffic in the vicinity. At 0647, a radar alarm indicated a close-quarters situation with the vessel *Hua Zang Za 50* in about 9 minutes. After analysing the situation, the chief officer made a minor course alteration by dialling the autopilot to port at 0655 to pass astern of the closing vessel and to navigate through other vessel traffic ahead.

At 0656, the *Hua Zang Za 50* was within in a distance of 2 nm, but no longer a dangerous target due to the course alteration. Instead, a new dangerous AIS-target with the auto-generated name 123456 was flashing, indicating a close quarter situation in 14 minutes. 123456 was displayed in *Murcia Maersk's* heading line in a distance of 5.29 nm. The chief officer adjusted the course ten degrees to starboard to pass ahead of 123456.

At 0701, the master arrived on the bridge of *Murcia Maersk* in readiness for a daily meeting with the chief officer, chief engineer, and second engineer at 0710, to coordinate the day's activities. The master greeted the chief officer, and they briefly discussed the prevailing rain showers and limited visibility. Visibility had decreased to approximately 0.25 nm. Simultaneously at 0701, the AB saw a fishing vessel close ahead and alerted the chief officer, who was occupied with the conversation with the master. At 0702, the AB repeated with an emphasis to gain the chief officer's attention. The chief officer acknowledged the AB's message and assuming the AB had observed *Hua Zang Za 50*, he replied that he was aware of the vessel. The AB clarified that the observed vessel was very close on the port bow. At this point, both the chief officer and the master realised that *Murcia Maersk* was in a critical close-quarters situation with an unknown vessel, but now it was visually lost due to container stacks on the foredeck obstructing the bridge team's forward line of sight close to the bow.

The chief officer immediately ordered a switch to hand-steering. As the fishing vessel was no longer visible, the bridge team was uncertain as to where the vessel was now located. The master ordered the rudder hard to starboard in an attempt to avoid a potential collision. This resulted in a 37 degree turn to starboard which was achieved at 0706, 3 minutes and 14 seconds after the order was given and the turn initiated.

On board *BD-30947-TS*, the crewmembers in the aft cabin of the wheelhouse suddenly observed a large blue ship side approaching at close range, rendering no time to react before the collision occurred.

Following the impact, *BD-30947-TS* capsized. Some of the crewmembers managed to abandon the vessel and hold on to fishing net buoys floating adjacent to the capsized fishing vessel.

On *Murcia Maersk*, the master ordered the AB and chief officer to the bridge wings to look for the observed vessel, while the master held the wheel. From the starboard bridge wing, the chief officer spotted a vessel, but he was unable to determine whether the vessel was harmed. The master asked the AB and chief officer about the characteristics of the observed vessel, but neither had been able to detect colours or anything else identifying the vessel, but it was not exhibiting navigational lights. The chief officer called the dayman on the radio and ordered him to arrange crewmembers to keep lookout from the cargo deck. Meanwhile, the master noted the position and ordered a reduction in speed and for the ship to be turned back to investigate. The bridge team was uncertain whether they had collided with the observed vessel or had managed to avoid it, as no audible noise was heard or vibration felt. Nothing was seen of the fishing vessel either visually from the bridge wings or by radar. Several fishing vessels were observed in the vicinity of the presumed collision position, and the bridge team remained uncertain whether one of them was the vessel previously sighted.

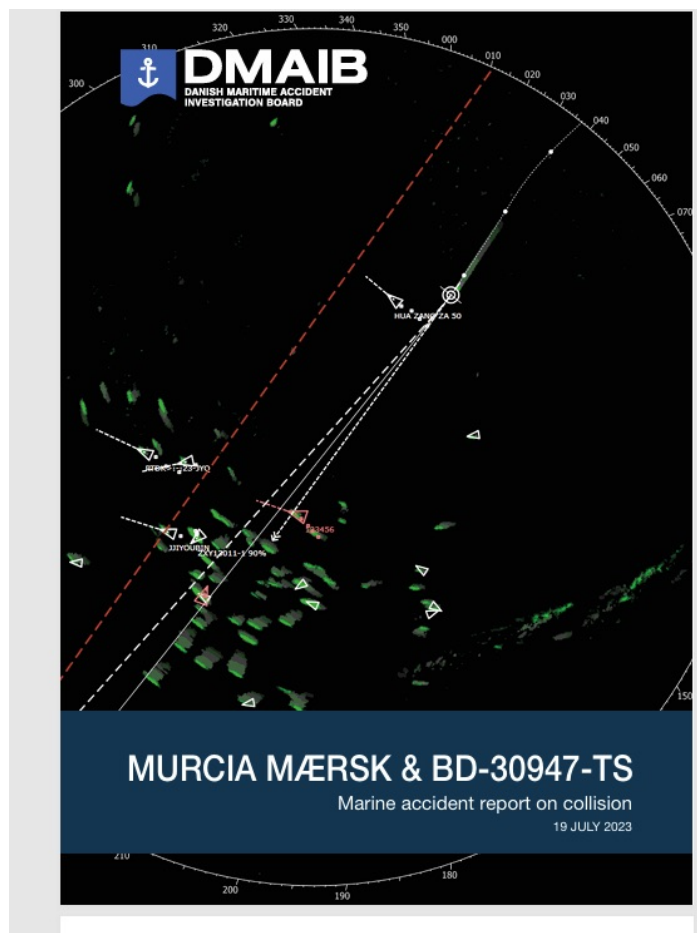
The rescue

At 0719, the lookout on the bridge observed a capsized vessel on the sea surface and notified the master. The bridge team subsequently identified three persons in the water. Immediately, the master raised the man overboard alarm and announced over the public address system, that there were persons in the water on the ship's port side and ordered the crew to their muster stations as fast as possible.

Murcia Maersk's crew launched lifebuoys towards the persons in the water and pre-pared to launch the lifeboat. However, *Murcia Maersk* was still making significant speed through the water when the persons overboard were first observed, and a further turn was required to get close to them. Although the lifeboat was ready for deployment at this point, the master assessed that launching it in wave heights of approximately 3 m posed an unacceptable level of risk to the crew, due to uncertainty regarding whether the lifeboat could be safely manoeuvred and recovered in such sea conditions.

At 0729, the master transmitted a MAYDAY on VHF channel 16, requesting immediate assistance for a man overboard situation. Two nearby vessels responded and proceeded towards *Murcia Maersk* to assist. In the meantime, *Murcia Maersk's* crew attempted to prepare alternative means of recovery, including rigging the gangway and the line-throwing apparatus. However, the use of the gangway required close proximity to the persons in the water, and the master was concerned that the vessel's thrusters would not be capable of maintaining position against the prevailing wind forces acting upon the vessel's windage area. Due to the risk of the vessel drifting and endangering the persons in the water, this approach was aborted.

Approximately one hour after the MAYDAY call, the oil/chemical tanker *Royal Diamond 7* arrived at the scene and successfully recovered the three persons from the water, while *Murcia Maersk* provided a lee to support the rescue operation. The rescued persons reported that three additional crewmembers, including the skipper of *BD-30947-TS*, remained in the water. This information was relayed to Maritime Rescue Coordination Centre (MRCC) Vung Tau, which subsequently assumed coordination of the SAR operation. The container vessel *CMA CGM George Forster* arrived shortly after and assisted *Murcia Maersk* and *Royal Diamond 7* in the search for the remaining persons.



About DMAIB

This public body investigate accidents on Danish and Greenlandic ships, and accidents on foreign ships in Danish and Greenlandic water. It also investigates serious accidents related to commercial diving.

The goal with investigation is to clarify the accidents, and to provide education about safety at sea. The investigations do not take the place of punishment or suppose judiciary activities.

The Danish Maritime Accident Investigation Board's investigations set out to answer three, fundamental questions:

- **What happened?**

The course of the accident is described in a factual, chronological storyline.

- **How did it happen?**

The technical circumstances of the accident are mapped as to:

- **Why did it happen?**

Based on an analysis of the accident's timeline and the technical specifications, it is determined how the accident happened.

The Danish Maritime Accident Investigation Board investigates approximately 110 accidents yearly, where 10 of these investigations are published as sea accident reports or as investigation résumés. Furthermore, the board's employees are hosting 20-30 lectures yearly about different topics on safety at sea, and general safety and accident theoretical subjects.

Acknowledgement

The title of the relevant DMAIB report is: *Murcia Maersk and BD-30947-TS - Collision on 19 July 2023* and the text here above has been prepared with grateful thanks to the Danish Maritime Accident Board's investigation.

Late News



Vessel equipped with *Wing Wings*®.

First Dual-Fuel LNG Tankers with WindWings® Secure SOLAS Approval from the Marshall Islands Flag



USCG *Storis*.

USCG ©

Newest Coast Guard Icebreaker completes inaugural patrol