

45th ANNUAL INTERFERRY CONFERENCE



SANTANDER, SPAIN • OCTOBER 2-6, 2021

THE FUTURE IS FERRIES



CONFERENCE GUIDE









CHRISTOPHE MATHIEU CEO, Brittany Ferries

WELCOME BACK

Dear friends, colleagues and industry partners,

It's great to be back. Since the last Annual Interferry Conference, so much has happened. And so much has been negative.

We could dwell on the last two years, but I believe now is the time for all of us to look to a brighter future. Our sector is vibrant, exciting and challenging. From innovation in fuels and engine technology, to digital tools that help us deliver a truly modern customer experience, ferry businesses are moving forward.

We're all working on new projects. Perhaps what we've missed more than anything in the last 24 months is the opportunity to share these experiences, to explore ideas and to face challenges together. And of course, to meet old friends and colleagues face-to-face. That's why I am so proud to welcome you to this year's event here in the beautiful capital of Cantabria.

Our mission at Brittany Ferries is to reveal fabulous destinations we serve in Spain, Ireland, the UK and France. And an arrival into Santander reveals a taste of what the region known as "Green Spain" has to offer.

Snow-capped Picos de Europa mountains, miles of holiday makers waving from golden beaches and a vibrant town hosting the Centro Botin, just a stone's throw from the ferry port. Santander is truly a gateway to a world of gastronomy, culture and experiences that extends all the way from southwest France to the north of Portugal.

So, after a packed conference programme, I encourage you to explore!

CHRISTOPHE MATHIEU

President, Interferry

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The Customer Journey continues...



Carus has stayed true to its customer centric vision and taken giant leaps forward since the last Interferry conference in London. Much of what was presented two years ago is now a reality.

The onboard solution, which supports everything from high-end retail, fine dining, bars and fast-food restaurants is now live with several clients.

The functionality for reservations has expanded to serve the fully digitalized ferry operator's needs, providing digital cabin keys, mobile check-in, additional self-service modules, access control to services onboard and of course, enhancements to the lookand-feel for an even better customer experience.

The Ferry Market Post-Covid

The pandemic has and will continue to reshape our lives and the ferry industry. We must achieve more with fewer resources. At the same time our industry has a golden opportunity to attract a new customer segment that used to travel by air.

Many ferry operators have, in the past five to ten years, switched their focus from passengers to cargo, but the trend is now turning back to focus on the onboard experience for passengers. To do this there has to be a clear focus on the full customer journey.

The whole passenger experience must be digitalized and seamless. Travelers should be able to pre-order all components of the planned journey, including what to do or what to eat onboard, and avoid having to queue in lines at any point before and during the journey.

Carus can seamlessly connect the whole journey experience, so when a passenger has ordered for example a buffet lunch onboard, he can, using his smart phone, access the restaurant contactless and queue-free.

This whole process brings with it a completely new infrastructure where the reservation information must be available onboard during the trip. Systems to support the whole customer journey are provided by Carus!

A Future-proof Digital Operation

Contactless, queue-free and self-service are kev-words for the future of travel. This fits in well with Carus' fully automated checkin flows both for foot passengers, vehicles and cargo.

Freight and passenger vehicles are measured, weighed, and classified automatically before arriving at the check-in barrier, and by reading the license plate with an ANPR camera (Automatic Number Plate Recognition) the check-in process is complete.

Carus has created an ID control feature for self-service check-in that has been approved for inter-EU ID verification to check the identity of truck drivers. Next in line is the opportunity for electronic COVID-passes that are planned by various authorities.

Carus is so much more than just a reservation system. With our product portfolio extending to the full customer journey, you are working with a well-positioned partner for the future.

carus.com



CAVOTEC

We connect the future.

Cavotec is a leading cleantech company that designs and delivers connection and electrification solutions to enable the decarbonization of ports and industrial applications. Backed by more than 40 years of experience, our systems ensure safe, efficient and sustainable operations for a wide variety of customers and applications worldwide.

TWO OF OUR NEXT GENERATION SOLUTIONS FOR CLEANER PORTS:

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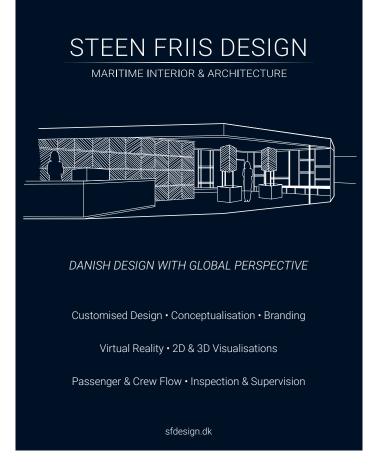


When you're keeping the world moving, every minute matters. This is why the new MoorMaster NxG still cuts mooring times to seconds, but now offers quicker installation, smarter operation and more productivity than ever.

It's time to take charge and transform the way we power ports & ships. Cavotec now supports ports and ship liners through the entire ShorePower journey with modern design solutions that blend seamlessly in to public environments.

Connect here to find out more www.cavotec.com





Five lessons to learn on hydrogen as ship fuel

A consortium of 26 leading companies and associations has published a handbook for hydrogen-fuelled vessels to shed light on the most pressing issues surrounding hydrogen as ship fuel. Explore the key takeaways of the DNV-led MarHySafe project.

Green hydrogen could play a crucial role in the maritime industry's journey towards decarbonization. Produced through electrolysis, H2 is free of carbon emissions and could be widely available across the globe in the future — as a marine fuel or a key enabler for synthetic fuels. Many in shipping recognize hydrogen's potential, but the barriers to implementing H2 technology are substantial. Led by DNV, a consortium of 26 partners and observers have come together in the MarHySafe joint development project (JDP) to address the challenges surrounding hydrogen operations: safety and regulations. With Phase 1 complete, the consortium has published the Handbook for Hydrogen-fuelled Vessels, which creates a roadmap towards safe hydrogen operations using fuel cells. The handbook will be updated continually as the second phase of MarHySafe progresses. Here are five lessons learnt so far.

Knowledge gaps: More testing needed on the safety aspects of handling, storage and bunkering hydrogen

Testing and modelling needs to be fine-tuned to hydrogen's unique properties and safety considerations. There are uncertainties about the behaviour of cryogenic hydrogen (LH2), as well as thresholds when detonations occur. "Experiments on cryogenic (liquid) hydrogen, commissioned by the Norwegian Public Roads Administration and carried out at the DNV Spadeadam Research and Testing Centre in the UK, yielded valuable learnings for the handbook," says Asmund Huser, Senior Principal Specialist, Quantitative Analysis at DNV.

"These experiments provided important knowledge on how LH2 behaves in leakage scenarios in typical ship design with enclosed spaces and during bunkering of LH2, giving confidence in the mitigating measures in the design of maritime hydrogen arrangements," says Kolbjørn Berge, Head of Green Shipping Innovation and New Technologies at the Norwegian Maritime Authority. A key takeaway is that future modelling needs to better account for the detonation risk if there is a leak. "A high-speed jet-like release of hydrogen in a large room, for example, may not disperse evenly. Such an inhomogeneous release may result in concentrated pockets of H2 that have a higher risk of detonation. We need rigorous safety measures to avoid this," Asmund Huser explains. What size and layout do these spaces need to have? Where do the fans or ventilation shafts or detectors need to be located? These are some of the design considerations that can make a big difference in case of a leak. Dedicated large-scale testing will be needed when this industry scales up.



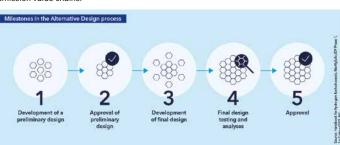
Safety: Hydrogen's unique properties make it very different from natural gas

Experience of working with natural gas can be very useful for starting hydrogen operations in shipping. But there are considerable differences between these different fuel types, and onboard configurations that work for natural gas may become dangerous to use for hydrogen. This is because of hydrogen's unique properties: H2 is the lightest of all atoms, making it harder to contain, and it can embrittle materials that would be safe to use with natural gas. For example, hydrogen requires certain types of steel and welded connections rather than fittings. H2 also ignites more easily than natural gas and has a wider flammability range. "Most of the hydrogen technology we expect to see on board ships will have already been used in other applications such as cars, trucks and other modes of land-based transport and storage. So, we don't have to start from scratch. Some of the challenges include adapting this technology to the marine environment and making it safe to use in varying environmental conditions, in smaller spaces, and when personnel cannot be evacuated as easily as on land," says Gerd Petra Haugom, Principal Consultant Environment Advisory at DNV and Phase I Project Manager for MarHySafe.

Fuel system: Use hydrogen in its pure form when possible

Powering vessels with hydrogen can be done via combustion engines, blending hydrogen in with other fuels, or storing it in a liquid organic solution or as ammonia. The most common

and greenest way of generating power from H2 is using hydrogen fuel cells. This is also what the MarHySafe project has focused on. Each energy conversion step in a value chain represents energy losses. This makes hydrogen especially relevant as a range extender and a supplement for use cases within coastal and short-sea shipping, when battery electric solutions are not possible or feasible, for example due to a lack of local grid capacity. Using hydrogen directly, whenever possible, may reduce the energy losses that happen during the conversion process from hydrogen to other fuels, and be a preferred option to introduce zero-emission value chains.



Framework: The Alternative Design process is currently the best approach

The Alternative Design process is a risk-based approval process for novel ship designs that cannot be approved with the current prescriptive regulations and need safety optimization. The process is in line with SOLAS Chapter II-2 and is described in the IMO Guidelines for the Approval of Alternatives and Equivalents (MSC.1/Circ. 1455). The approval is evaluated in line with the goals and functional requirements of the International Code of Safety for Ship Using Gases or Other Low-flashpoint Fuels (IGF Code, Part A). "The Alternative Design process requires a significant effort from the projects leading the technology development. The project owners have to actively demonstrate how the hazards and consequences of the design are managed by applying risk-based design instead of demonstrating passive compliance with prescriptive rules. This may seem arduous, but it is the best tool we currently have to help projects materialize," says Mónica Álvarez Cardozo, Senior Engineer Piping Systems & Alternative Fuels at DNV Maritime. "Hydrogen is a new technology in a new environment, so a risk-based design process is needed to keep personnel, assets and the environment safe." The MarHySafe handbook examines the Alternative Design process in detail, offering interpretations that fulfil the varying expectations of Flag States and providing guidance on how to navigate requirements as efficiently as possible.

"One of our main aims in the MarHySafe JDP is to build a foundation of knowledge that can be used for developing rules for hydrogen in the future," says Gerd Petra Haugom. Currently there are too many knowledge gaps to draft rules, "but the more we know, the closer we get to changing this. In Phase II, we will start proposing input to early requirements."

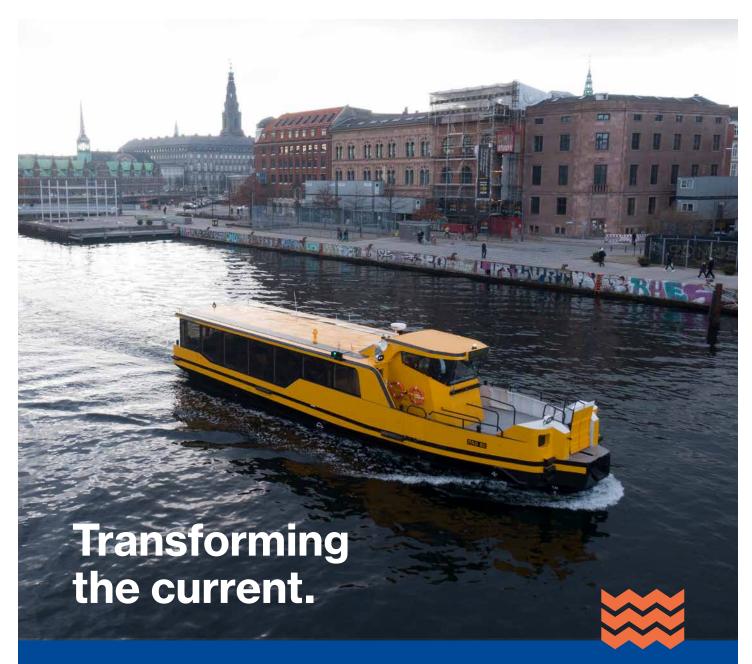
Implementation: Scaling up hydrogen operations will be a challenge

Moving hydrogen as a fuel from land-based applications to maritime is no small feat. With the IMO's regulatory framework, class rules and different interpretations from Flag States and ports to consider, navigating the regulatory landscape is challenging to say the least. The MarHySafe handbook offers a comprehensive overview of the regulatory environment. "In the absence of definitive rules, it is all the more important for the industry to come together and learn from existing projects. We need to make sure that any future requirements account for all necessary safety and operational aspects, ensuring that the technology can be developed on a large scale," says Nathaniel Frithiof, Senior Consultant Environment Advisory at DNV and Project Manager for Phase II of MarHySafe.

Author: Nathaniel Frithiof, Senior Consultant in Maritime Environmental Technology







The spark has been lit and the charge towards electrification has begun.

The Damen electrification philosophy encompasses so much more than just the vessel. Our approach represents a holistic process covering the entire process of establishing and operating an electric vessel, efficiently, economically and cleanly.

Pictured here:

Damen Ferry 2306 E3



Find out more on **Damen.com**



From humble roots to greener routes



In 1967 a farmer from Brittany named Alexis Gourvennec gathered local organisations and politicians to drive forward an ambitious project. His goal: to enrich an impoverished region, by overhauling infrastructure and trading directly with partners in Ireland and England.

As part of the project a deep-water port was developed in Roscoff. A ship was chartered and its first departure left France for Plymouth on 2 January 1973, the day after Britain joined the EEC. It carried a cargo of cauliflowers and artichokes.

From these humble beginnings Brittany Ferries was born. The company opened to passenger traffic and expanded routes rapidly. Then in 1978 it became a tour operator.



Today, Brittany Ferries proudly serves freight and passenger traffic. This complementary mix reinforces the demands that ferry companies alone can serve. The largest employer of French seafarers, it is also still largely owned by the farming cooperative that launched the business, supported by local regions.

Its mission is to reveal fabulous destinations in Spain, Ireland, the UK and France. One of these is Green Spain, with ports of Bilbao and Santander serving as the gateway. Snow-capped Picos de Europa mountains, sweeping golden beaches, the famous Camino de Santiago and vibrant cities of culture promise so much to travellers.

It's not surprising that three new ships reflect this treasure trove of experiences. *Galicia* (launched in December 2020), *Salamanca* (2022) and *Santoña* (2023) deliver a taste of what's to come for passengers even as they sail towards their destination.

But these ships are also a statement of intent – a commitment to a brighter, cleaner future. Serving UK-Spain routes, *Salamanca* and *Santoña* will powered by liquefied natural gas (LNG). Two LNG-electric hybrid vessels for France-UK routes will follow shortly thereafter.

And so from humble roots to greener routes, Brittany Ferries is ready to sail towards tomorrow.









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Safe, efficient and sustainable ferry operations

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We are continuously strengthening our portfolio of the potential of ferries and ultimately enable more sustainable operations. abb.com/marine



Future-ready Fast Ferries: Developing pathways to Zero Emissions

Fast ferries are both highly energy intensive and weight sensitive. Vessel designers. engine OEMs and operators have already pushed the limits of efficiency gains to minimize fuel costs and emissions from the current generation of diesel powered vessels. The incredible gap between the energy density of diesel to that of zero carbon alternatives such as hydrogen, ammonia or batteries has left many wondering; can the fast ferry sector decarbonize without compromising on speed? Austal's answer is YES and we believe the future of a net zero fast ferry, built from green aluminium and powered by zero emission energy, is closer to becoming a reality than most realise.



Like most other industry sectors the decarbonisation solution for the ferry market begins with "electrify everything". Renewable electrons from new battery plus solar and/or wind generation are now the cheapest source of energy in most parts of the world [Ref 1]. This trend is driving a rapidly declining cost for powering non-diesel vessels, either by charging on-vessel batteries directly or refueling on renewable "e-fuels" whose production starts with the electrolysis of water to make hydrogen.

Propulsion by electric motors also makes for simpler, more reliable vessels that are much lower cost to maintain through life. Operators of smaller ferries can benefit from the advantages of electrification today with battery powered vessels such as Austal's VOLTA range.

The low (relative to diesel) energy density of batteries means recharging must occur at every jetty stop and hence for larger, faster vessels on longer journeys current battery technology provides insufficient on-vessel energy storage. While battery technology is improving rapidly there will be many routes and vessels for which it remains infeasible for the foreseeable future.

For larger vessels, zero emission electrification is made possible today with fuel cells powered by "green hydrogen" produced through electrolysis. For shorter routes or where turn-around times allow for intra-day bunkering, compressed hydrogen can suffice but longer routes on larger, faster vessels will require liquid hydrogen. Currently green hydrogen is expensive and availability is logistically constrained but this is set to change as Europe and other regions invest heavily in electrolyser capacity [Ref 2].

- Lazard.com | Levelized Cost of Energy and of Storage

Operators of larger vessels looking to replace existing diesel vessels today, for whom the current economic and logistical challenges of hydrogen make a zero emission vessel infeasible in the near term, have two alternative paths to a low carbon future. Both Paths maximize the potential upgradability of the vessel in years to come to meet increasing CII requirements and ultimately achieve zero

Path 1 – the mechanical drive-train. Vessel propulsion is through mechanical coupling to engines capable of blended fuel combustion today, including hydrogen with either diesel or LNG. In the future these engines are re-rated to burn 100% hydrogen or an e-fuel such as green ammonia to achieve a net zero emission vessel, though after treatment of the exhaust will still be required.

Path 2 – the electric drive-train. Vessel propulsion is through electric motors powered by a combination of shore-charged batteries and on-board combustion generators. In the future the installed battery capacity is progressively increased as battery (and shore charging) technology improves and the onboard power generation is transitioned to hydrogen fuel cells or combustion of an e-fuel.

An electric drive-train vessel will have higher upfront capex as well as shoreside investment requirement but provides immediate operational and reliability benefits as well as zero emissions whilst in port. Ultimately in the zero emission future state the greater efficiency of electric motors powered by batteries and fuel cells should result in a lower absolute energy requirement and hence operational cost through Path 2 than Path 1.



Finally emissions embodied in the manufacture of the vessels can also be radically reduced. Aluminium has long been the fast ferry sectors material of choice from which to fabricate highly efficient hull forms. This is set to continue in a low carbon world with the emergence of cost competitive "green aluminium" [Ref 3], made with low cost renewable electrons and also providing the opportunity for recycling at end of life.

The future of the high speed ferry industry comes in the form of fast, net zero emission, highly efficient aluminium multi-hull vessels. That future is now.

For more information on the Volta range of ships, see the Austal team at Interferry 2021 (Exhibition Stand #18), email sales@austal.com or visit us online at www.austal.com.



3. Green Aluminum is Competitive Today. It's Time to Start Transforming | BloombergNEF (bnef.com)

DECARBONISING FERRIES WILL TAKE MORE THAN TECHNOLOGY





Read more at www.wartsila.com/ferry

In the years to come, the focus will be on developing more hybrid solutions, and designing integrated systems and fuel-agnostic engines to handle clean fuels. Whether through retrofits, life cycle solutions or newbuilds, Wärtsilä can help you on the path towards complete decarbonisation having the widest portfolio to support you.



GOLD SPONSOR ARTICLE • DAMEN

The future is ferries





No-one knows commercial waterways better than the Dutch, living as they do in a country that is famous for having intensively used its rivers, canals and coastlines for centuries for commerce of all types. Damen, as the Netherland and Europe's leading shipbuilding and repair group, has many years of experience in the design, build and maintenance of ferries of all classes. Today it applies the latest technologies to offer a full range of ferries from 135-metre plus RoPax vessels down to 18-metre water buses, with a complete range of Car Ferries, Fast RoPax, Fast Passenger, Hop-on / Hop-off, Canal Cruise and River Cruise vessels in between.

Leading the way in electrification

Ferries have a leading role to play in the maritime sector's drive towards sustainability and zero emissions. Not only do they often cross relatively short distances, they also frequently operate not only to and from but also within densely populated urbanised areas. This makes them ideal for electrification as they can play a highly visible role in reducing emissions and their batteries can be regularly recharged during each embarkation / disembarkation.

Damen has been playing a leading role in making electrification a commercially-viable option for ferries for some years now, building its all-electric and hybrid ferries as part of its E3 programme – Environmentally friendly, Efficient in operation and Economically viable. Working with a range of partners it has been developing both the onboard and shoreside systems required to make electrification a mainstream option.

WORKING WITH PUBLIC AUTHORITIES

Foot passenger ferries

Many projects of this type are led by city and regional authorities, and Damen has been working with cities around the world to help them to diversify their public transport provisions on to their waterways. Since 2017/18 the Belgian city of Antwerp has been served by five Damen's DWBu 2407 Hop-on Hop-off ferries. Fully electric, they have capacity for 120 passengers and 20 bicycles at speeds of up to 20 knots.

In July 2020, Damen delivered seven 2306 E3 all-electric water buses to Arriva Denmark for operations in Copenhagen. The 23-metre vessels carry up to 80 passengers each and feature an advanced design and sophisticated remote monitoring systems. Damen also acted as the complete solution provider for

the ferry network, exploring options for the provision of waterside electricity supplies and providing a central point where all partners involved in the project came together to fulfil their individual roles in alignment with one another.

Most recently, in November 2020, Damen Shipyards signed a contract with the Dutch ferry joint venture Aqualiner-Swets for a total of nine electric passenger ferries to operate between Rotterdam and the Drecht cities. Six of them will be hybrid (but conversion-ready to fully electric) Waterbuses to serve the fast ferry Intercity routes. The remaining three vessels will be City Ferries and fully electric from the start of service in 2022.

Road Ferries

On a much larger scale, this September two Damen Road Ferries, one 68-metre, 42 vehicle, 300 passenger 6819 E3, and the other a 98-metre, 83 vehicle, 400 passenger, 9819 E3 design, arrived at Lake Ontario, Canada. Ordered by Ontario's Ministry of Transport, these fully electric vessels are the centrepiece of an ambitious project that involves Damen designing and overseeing not only the installation of the necessary transmission infrastructure at each of the four ferry docks, but also the complete rebuild of those docks to accommodate the new vessels plus the onshore electrical equipment. The systems will also utilise load displacement and peak-shaving technology to achieve maximum efficiency and minimal costs.

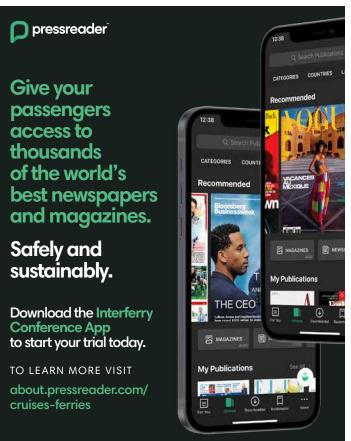
Meanwhile, on Canada's Pacific coast, Damen is midway through a six-vessel order for BC Ferries, with the third of six, 81-metre, Damen Road Ferries 8117 E3, are now in operation. These are beginning their lives with hybrid propulsion so that BC Ferries can make immediate progress towards its goal of improving environmental performance, however they have been designed so that full electric propulsion can be implemented in the future. Each ferry carries up to 300 passengers and 47 cars.

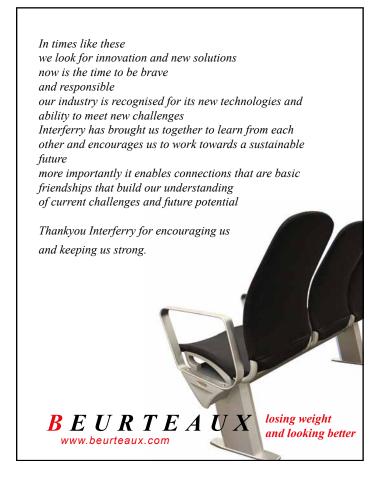
The future of ferries is electrification

The electrification of ferries is no longer just a prospect for the future; it has arrived. The evidence can be seen at Damen where electric ferries of all sizes are being designed, built and put into service along with their shoreside infrastructure. Proven, cutting-edge vessels featuring the entire spectrum of current propulsion options, from diesel-electric with on board power generation to fully electric using a shore-based power source, can today be found all over the world.

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Inmarsat ORCHESTRA, the communications network of the future





CONNECTIVITY IN HARMONY

This is a dynamic and exciting time for Inmarsat. With strong growth across our markets we have focused our strategy on driving growth, innovation and customer centricity. In July we announced ORCHESTRA, which will bring together our existing geosynchronous (GEO) satellites with new low Earth orbit satellites (LEO) and terrestrial 5G into an integrated, high-performance network. In essence we are leaping over competing systems by redefining what and how global, mobile services can be delivered to customers.

ORCHESTRA is a unique strategic response to the trends we have been tracking across our customer segments, whose business requirements are mobile-centric and extremely demanding. We are seeing digitalisation gather pace across passenger, merchant and leisure industries, delivering efficiency gains, enhanced passenger and crew experience and new revenue growth opportunities. During the pandemic, we saw an increased demand for connectivity as ship owners and operators increasingly adapted to remote access and remote ways of working to cope with restrictions around physical interaction with their vessels.

We expect to invest initially around \$100m for ORCHESTRA over 2021-2026. As we already have global coverage through our GEO network, we will deploy LEO as a small additional constellation that layers high capacity over high demand areas such as corridors at sea and offshore. Terrestrial 5G will add ultrahigh capacity at high demand hot spots (such as ports, airports, straits, sea canals), supplemented by dynamic wireless mesh networking to extend high performance reach. In essence every vessel equipped with ORCHESTRA 5G will add an additional node to the dynamic mesh, ensuring we deliver more capacity as demand grows.

ORCHESTRA will open up many new opportunities that were unattainable in the past. For example, it will support near-shore navigation for self-driving ships, a new generation of emergency maritime safety services, better services for coastal ships and smart passenger ships. Over our history Inmarsat has always been able to provide customers with the right technology at the right time. With ORCHESTRA, we will deliver technology innovation that anticipates the needs of our customers into the future.

In August we announced Inmarsat ELERA, a key component of ORCHESTRA that builds on Inmarsat's number one position in Mobile Satellite Services (MSS). ELERA is a springboard to innovate, accelerate and expand ground-breaking use cases on land, sea and air. An evolution of Inmarsat's world-class L-band network, ELERA incorporates innovations from higher speeds to smaller, lowcost terminals and our previously announced Inmarsat-6 satellites, the first of which will launch by end of 2021.

NEW REPORTS ON FERRY DIGITALISATION, CREW WELFARE AND **MARITIME SAFETY**

Our research programme broke new ground in 2021. Working with JG Maritime Solutions Ltd we conducted pioneering first hand research with ferry operators to explore their strategies driving investment in connectivity and digitalisation technologies. Among the key findings of our Ferry Digitalisation Report, were that Customer Experience is twice as much (40%) the primary strategic driver, over and above Revenue Generation, Operational Efficiency and Digitalisation of Technology (all 20%). The prize for ferry operators is that enhancing customer experience can unlock growth in ancillary revenues worth billions of dollars.

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A thought-provoking study, A Fair Future for Seafarers? by maritime innovation consultancy Thetius, takes a view of the shipping industry to 2050. The report suggests pandemics may become more common, predicts that crew safety, fatigue and harassment issues are likely to persist and foresees potential growing problems of seafarer abandonment and criminalisation. In the context of such bleak scenarios. Thetius highlight technologies that are critical for crew welfare, including crew connectivity and telemedicine for intelligent fatique management.

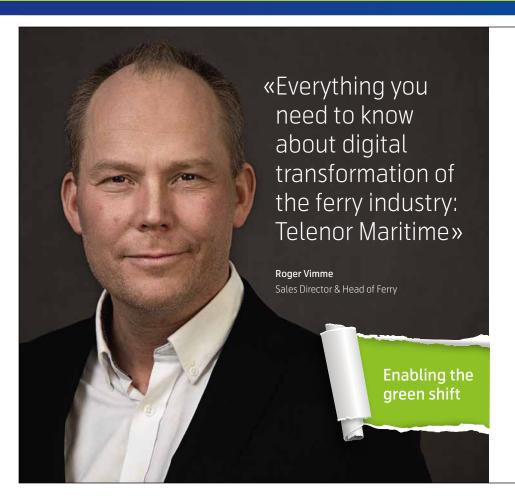




Our report The Future of Maritime Safety was based on exclusive analysis of Global Maritime Distress and Safety Services alerts, sent free via the Inmarsat network from vessels worldwide between 2018 and 2020. Our intent in publishing and sharing safety information is to create a level playing field for the entire maritime industry to identify weak spots and solutions, allocate resources and measure progress towards proactive safety.

VISIT US AT INTERFERRY 2021

The Inmarsat team would love to chat with you at Interferry 2021 in Santander. Come to our Ferry Digitalisation presentation from the conference stage on Tuesday and drop by our stand #20 in the Exhibition Hall. We will be inviting attendees to take part in our next phase of ferry industry research and we want your input to help us shape that research to address your own priorities.



Our purpose at Telenor Maritime is to drive the digital transformation at sea. It means strengthening your ability to increase profit while at the same time helping you to make your business greener, smarter and more efficient.

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Leading the digital transformation at sea

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PROVEN AROUND THE WORLD With our uncompromising standards, putting performance and endurance at the heart of everything we do, HamiltonJet deliver world-leading waterjet systems trusted around the world.

Rolls-Royce's *mtu* solutions help shipping sector achieve climate targets



Rolls-Royce business unit Power Systems is taking concrete steps towards a climate-neutral future with its solutions brand **mtu**. Under the program Net Zero at Power Systems the company has decided to cut greenhouse gas emissions by 35% by 2030 compared to its 2019 level through the use of new net zero and zero carbon technologies. "We are re-aligning our strategy towards eco-friendly energy and propulsion systems and already see these explicitly as growth opportunities for our business," says Andreas Schell, CEO of Rolls-Royce Power Systems.

A key element in achieving these goals is the certification of the most important mtu engine products, which will run on sustainable fuels from as early as 2023 and then be successively brought into use. The certification means that the new generation of mtu Series 2000 and 4000 engines will be qualified to run on second-generation bio-fuels and E-fuels. The engines are used in a wide variety of applications and are very popular with commercial shipping customers.

Besides using sustainable fuels, the Rolls-Royce business unit is also building on new technologies such as CO2-free fuel cell systems. From 2025, these will be used in power generation solutions at first. On top of that, development engineers are also working on engines powered

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by hydrogen and methanol as well as on concepts for decentralized Power-to-X systems. Other sustainable solutions such as battery energy storage systems, hybrid propulsion systems for marine (yacht) and rail applications and microgrids already feature in the Power Systems portfolio for environment-friendly power solutions.

Rolls-Royce discussed the urgently needed transformation to more climate-friendly shipping earlier this year with its customers and partners: More than 2000 participants from industry, politics and trade media attended the *mtu* Virtual Marine Summit in May. "The great response showed us how important the topic of climate change and climateneutral solutions are to our partners in the shipping industry," said Denise Kurtulus, Vice President Global Marine at Rolls-Royce Power Systems. "We will only find solutions together, with the interaction of propulsion manufacturers, ship owners, shipyards and politicians. That is why we are so keen on finding and creating opportunities for the exchange between all relevant players," said Kurtulus.

Rolls-Royce Power Systems experts are at Interferry 2021 and can be met for further information and discussions at Booth 24.



LOWER EMISSIONS MORE POWER IT WORKS.

We develop new propulsion systems that make your vessels cleaner and stronger at the same time. So you can transport more passengers on the world's most regulated waters. Whatever your needs, we provide solutions that work. Visit us at: Interferry October 2-6, 2021 Santander Conference Center



Rauma Marine Constructions – where cutting-edge, eco-friendly technology meets centuries of shipbuilding tradition



At Rauma shipyard, cutting-edge innovations intertwine with a long heritage in shipbuilding and craftsmanship. In August 2021, the shipyard delivered the world's most environmentally friendly car and passenger ferry. Although Rauma Marine Constructions stands in a long line of tradition, each new vessel is individually tailored to meet the buyer's needs.

The long shipbuilding traditions in Rauma shipyard date back to the 16th century. For decades, the shipyard has been a leading specialist in building and servicing car and passenger ferries, icebreakers and defence vessels.

Now in charge of the shipyard, Rauma Marine Constructions (RMC) relies on the same winning formula in leading the way to the future. What's more, state-of-the-art solutions in energy efficiency and propulsion systems are now among the company's top competences.

In August 2021, the shipyard handed over to Wasaline the world's most environmentally friendly car and passenger ferry in its category, *Aurora Botnia*. Her leading position is already under threat: next year, Rauma shipyard will complete another RoPax ferry, Tallink Silja's 212-metre newbuild *MyStar*, which will be among the most eco-friendly ferries in the world as well. Both *Aurora Botnia* and *MyStar* are powered by liquefied natural gas (LNG) or biogas (LBG) and able to operate emission-free when approaching or departing from harbour by utilising batteries.

Even after these two projects, the shipyard will continue to work in full swing. Next year, the shipyard will start building two car and passenger ferries for Tasmanian TT-Line Company. Alongside the ferries, a fleet of multipurpose corvettes will be built for the Finnish Defence Forces.

Handcrafting state-of-the-art vessels

Shipbuilding at Rauma shipyard is no mass-production. Each vessel is individually tailored to meet the buyer's needs. Moreover, RMC builds its vessels – highly advanced with cutting-edge technology – by hand.

Among the shipyard's strengths is the ability to adopt new technological innovations. RMC works in close cooperation with industry players such as institutions of higher education and technology suppliers.

Sustainable innovation is becoming increasingly important as the world faces climate change, which is why sustainability runs through

the production chain at Rauma shipyard. Designing and building low-emission vessels is at the core of RMC's sustainable operations. What's more, RMC has been granted environmental, quality and health and safety certifications.



$RMC's \, network \, model \, guarantees \, operational \, competitiveness \,$

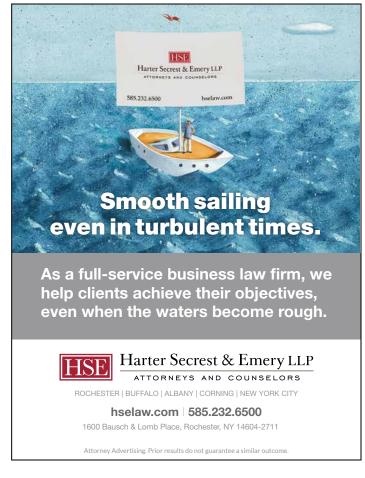
The total value of RMC's orders is currently EUR 1.6 billion. The latest vessels in the order book will be delivered to the customers in 2026.

RMC's business model makes use of its partner companies' networks. Acting as the main operator, RMC has around 200 shipbuilding specialists on its payroll, but with the partner companies included, the shipyard's total workforce can exceed one thousand people. The network model enables agile operations in a highly cyclical sector and guarantees stability and competitiveness for the shipyard also in the years to come.









A fresh perspective on custom maritime seating and furniture solutions



In today's world the passenger experience is all important. From the moment they book their passage, to being welcomed on board, through the journey to their destination and final disembarkation, the passenger experience is key in the perceptions they form of the ferry service they are travelling with. Contented passengers travel with you again and recommend their preferred ferry services to others.

A great passenger experience is intrinsically intertwined with the comfort and safety they travel with on board. And quality seating and furniture play a big part in this.

UES Marine, formerly UES Seating, understands this. It's been delivering solutions to the transportation industry since 1904. Executive Chairman of UES International, Alex Morcos says; "The UES Marine name encompasses all our bespoke offerings as a designer, manufacturer and installer to the maritime sector. It represents our indoor and outdoor seating ranges, our furniture and cabinetry offerings, our hardware and insulation fitouts, as well as our installation and maintenance programs".

What makes UES Marine unique is its strong customer and passenger focus. With decades of industry experience, it designs and builds custom marine seating and furniture solutions that provide an improved onboard experience for passengers. The experienced team at UES Marine take the time to analyse and understand a project, working collaboratively with the customer to make sure all aspects of the requirements are covered. This means they can then design, manufacture and install the best solution possible to meet the project's needs and exceed passenger expectations.

A great example is the evolution of the LUXForm Voyager Luxury Passenger Seat and LUXForm Haven First Class Seating Pod. Both these solutions evolved from specific customer requests. UES Marine, in collaboration with the customer, developed a lie-flat seat for offshore transfers on a 10+ hour commute

"Thus, the first and only luxury marine lie-flat seat was launched."

UES Marine's fresh perspective when approaching new projects was also demonstrated on the recent Staten Island Ferry project of new 'Ollis Class' ferries for the City of New York. The iconic Staten Island Ferries are considered critical maritime infrastructure, transporting millions of residents and tourists every year. The ferries' seats are a centerpiece of the exterior and cabin aesthetics, as well as the passenger experience.

"UES Marine took the time to understand the Staten Island Ferry operations and the preferences of the ridership."



The custom designed solution captures the spirit of the original 'Kennedy Class' ferries, preferred by passengers, and delivers on the stringent comfort, engineering, safety, security and maintenance requirements of the operators. As the retired Deputy Commissioner of Ferries for the NYC Department of Transportation, James C. DeSimone, noted; "I was extremely pleased that UES was the preferred seating vendor for the 'Ollis Class' ferries for the City of New York. They put a lot of time and effort into understanding the Staten Island Ferry operation and the preferences of the ridership. Their passion in designing the best product possible to meet the customer's needs comes across loud and clear"



This fresh perspective on custom maritime seating and furniture solutions comes from the conviction that UES Marine has in its products and support for the maritime industry. Bespoke seating and furniture solutions, customer care, specialised installation services and industry first product warranties mean customers get the best outcomes and passengers experience a comfortable and safe journey.

marine

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Find out more about the future of net zero fast ferries at Interferry 2021 or visit **austal.com/future-ready**



Austal has embarked on the journey to zero emissions with the VOLTA range of electric ferries.







Wärtsilä integrated solution powers the *Eleanor Roosevelt* – the world's first fast ferry with natural gas engines

WÄRTSILÄ

This summer, sun-seeking tourists looking for a fast ferry service between Dénia, mainland Spain, and Palma and Ibiza in the Balearic Islands will be able to make the trip on a pioneering vessel that combines high speeds with comfortable, eco-friendly operation. The *Eleanor Roosevelt* is the world's first fast ferry to be powered by dual-fuel engines that can run on LNG – part of a Wärtsilä integrated solution that combines gas-powered operation with axial flow waterjets and an LNGPac storage and supply system, helping the vessel to ferry passengers more sustainably at high speeds.



Spanish ferry company Baleària's commitment to environmental operation has already made it the first operator in Spain to power all its vessels with natural gas. The latest addition to the fleet is the *Eleanor Roosevelt* — the world's longest high-speed catamaran and the first fast ferry to operate on LNG fuel. The innovative vessel operates on four highly efficient Wärtsilä 31DF dual-fuel engines, four Wärtsilä axial flow LJX1500SRI waterjets, and a Wärtsilä LNGPac fuel gas storage and supply system. The 125-metre ferry can carry 1,200 passengers and 450 cars — or 500 metres of trucks plus 250 cars — traveling at a service speed of 35 knots and a top speed of more than 40 knots, with storage tanks that give the ferry a range of 400 nautical miles.

Sun, speed and sustainability

Discussions about the *Eleanor Roosevelt* began in 2017, centring on how best to design a ship that ran on LNG but didn't sacrifice high speed. Baleària also wanted the design to prioritise customer comfort and service reliability. "By working together from the design phase, we could incorporate all of Baleària's wishes and requirements together into one integrated design," explains Jesus Puelles, General Manager Spain & Portugal, Marine Power Sales, Wärtsilä. "High efficiency, reduced operating costs and environmental sustainability were key design values, along with optimised performance for both speed and seakeeping. Using LNG fulfils Baleària's commitment to the environment, keeps the company ahead of new pollutant gas reduction regulations and ensures the vessel is ready for green future fuels and highfuels."

No smoke to block the sunshine

Wärtsilä's engines, combined with the LNGPac fuel gas storage and supply system, meet Baleària's environmental and performance requirements and when running on LNG can give a reduction in fuel cost of 35-40% compared to diesel operation. The superior efficiency of the engines together with the lower cost of LNG help to considerably reduce the OPEX of the vessel. They also produce no smoke at any load or

when starting, which was a key goal to ensure the wellbeing of both ferry users and those who work and live in the harbour area. "The Wärtsilä 31DF represents a new generation of medium-speed engines that offer high efficiency and excellent emissions performance," points out Puelles. "These four-stroke engines have the best fuel economy of any engine in the class, while maintaining outstanding performance across the complete operating range. Because the engines are designed to operate with longer overhaul intervals, the *Eleanor Roosevelt* benefits from increased earning potential and reduced spend on maintenance and dry docking."

"Each year the Eleanor Roosevelt will reduce CO2 emissions by approximately the same amount as eliminating more than 8,900 conventional passenger cars or planting almost 27,000 trees. We are very happy – together with Wärtsilä we have achieved a world first"

Mr. Adolfo Utor, President of Baleària

Island hopping in comfort

Wärtsilä waterjets are usually driven by high-speed engines, which have a higher maintenance cost and higher emissions. "For the Eleanor Roosevelt, it was important to Baleària that we use medium-speed engines as they are more efficient with fewer cylinders, leading to lower maintenance costs and lower emissions levels," explains David van Luijtelaar, Global Sales Manager Waterjets, Wärtsilä. "The Wärtsilä waterjets are axial flow, which reduces the installation footprint by 25%



on average and gives a higher power-to-weight ratio, ensuring they fit optimally in the narrow catamaran hull. Wärtsilä axial waterjets also significantly decrease the weight of the installation by up to 20% compared to non-axial jet designs. The waterjets heavily contribute to passenger comfort levels because there is less vibration and noise — in fact, at speeds over 20 knots, noise and vibration are reduced by over 50%."

All Wärtsilä waterjets have an inboard mounted thrust bearing. "This means that the thrust bearing is not within the water flow of the jet, meaning there is never any risk of oil leaking into the water, making it an environmentally friendly solution." "Usually the equipment that makes the jets steer and reverse is located outside the vessel and is exposed to sea water," explains van Luijtelaar. "This means

it can be difficult to maintain and repair. Baleària have chosen the 'inboard hydraulics' option and installed them inside the vessel, which allows early and easy detection of possible oil leakage." The Wärtsilä waterjets team is also continuously working on innovative smart solutions that will open up new possibilities for Wärtsilä's new and existing customers.

Support from design to optimised maintenance

In April 2021, Wärtsilä signed a Wärtsilä Optimised Maintenance Agreement with Baleària, covering the Eleanor Roosevelt for 10 years. The agreement covers all Wärtsilä equipment and provides the security and assurance of technical support on site. "Because safety spare parts stock is included in the agreement, Baleària can ensure vessel reliability while having financial certainty about the cost of spares — including delivery and fitting," explains Elwin Wilbrink, General Manager Agreement Sales Europe & Africa, Wärtsilä.



Also included in the agreement is Wärtsilä Expert Insight with remote operational support, which uses machine learning and advanced system monitoring to predict problems before they occur, reducing downtime and increasing vessel availability. Measuring equipment and sensors have been installed onboard the ship, making it possible to monitor real fuel consumption and calculate the efficiency of the engines. This allows Baleària to use accurate data to make better informed decisions.

A new standard for high-speed ferries

With excellent environmental credentials, lower lifecycle costs and a high degree of passenger comfort, the *Eleanor Roosevelt* has set a new standard for high-speed ferries. "Wärtsilä's unique integration capabilities and high-performance portfolio were important to both Baleària and the Armon shipyard, as were the ongoing service agreement and our commitment to support across the lifecycle of the vessel," shares Puelles. "Together we have achieved an innovative world first – the longest ever high-speed Ro-pax catamaran and the first fast ferry to operate on LNG."

"Our commitment to natural gas is a key element of our wider goal to be both socially responsible and economically profitable. The Eleanor Roosevelt is our seventh ship to be powered by LNG, which reduces CO2 emissions by 30% and NOx by 85%."

Mr. Adolfo Utor, President of Baleària



45th ANNUAL INTERFERRY CONFEREN

SANTANDER, SPAIN • OCTOBER 2-6, 2021

THE FUTURE IS FERRIES







SATURDAY • OCTOBER 2

9:00am - 4:30pm*

PRETOUR • CABÁRCENO NATURE PARK

SUNDAY • OCTOBER 3

9:30am - 5:00pm*

THE CARUS CUP • REAL GOLF DE PEDREÑA

9:20am - 4:30pm*

PRETOUR • CANTABRIAN SHORE EXCURSION

7:00pm - 10:00pm*

SUNDAY EVENING WELCOME RECEPTION AT THE PALACE OF

LA MAGDALENA

CONFERENCE DAY 1 • MONDAY • OCTOBER 4

9:00am - 9:15am

SESSION 1 • OPENING CEREMONIES

Mike Corrigan – Interferry, Canada

Christophe Mathieu – Brittany Ferries, France Gema Igual Ortiz - Santander, Spain

9:15am - 9:30am

SESSION 2 • BRITTANY FERRIES

Christophe Mathieu - Brittany Ferries, France

9:30am - 9:45am

SESSION 3 • CURRENT HAPPENINGS AT INTERFERRY

Mike Corrigan – Interferry, Canada

9:45am - 10:30am

SESSION 4 • KEYNOTE: THE EUROPEAN FERRY MARKET AND

PROSPECTS FOR RECOVERY

Becrom Basu - L.E.K. Consulting, UK

FLASH PRESENTATION • DNV

10:30am - 11:00am **COFFEE BREAK**

11:00am - 11:30am

SESSION 5 • REGENT FLYING FERRIES

Billy Thalheimer - REGENT, USA

11:30am - 12:00pm

SESSION 6 • NYC FERRY PROJECT

Cameron Clark - Hornblower Group, USA

FLASH PRESENTATION • CARUS

12:00pm - 1:30pm

LUNCH

FLASH PRESENTATION • RAUMA MARINE CONSTRUCTIONS

SESSION 7 • SPANISH FERRY MARKET AND SHORTSEA SHIPPING

Elena Seco – Spanish Shipowners Association, Spain

Pilar Tejo – Shortsea Promotion Centre, Spain

SESSION 8 • SHOOTING FOR THE MOON... BUT LANDING ON MARS

Luis Garcia – VIDA by ERZIA, Spain

2:15pm - 2:35pm

SESSION 9 • GREENER SOLUTIONS FOR HIGH-SPEED FERRIES

Luke Pretlove – Austal, UK

2:35pm - 2:55pm

SESSION 10 • SUSTAINABLE FERRIES

Håkan Enlund – Rauma Marine Constructions, Finland

FLASH PRESENTATION • UES MARINE

2:55pm - 3:20pm COFFEE BREAK

3:20pm - 3:40pm

SESSION 11 • ATTRACTING CUSTOMERS AND STAYING SAFE: INTELLECTUAL PROPERTY AND DATA PROTECTION

Anne Downey - HSE, USA

3:40pm - 4:00pm

SESSION 12 • COMPLIANCE: MITIGATING EXPOSURE TO CYBERCRIME

Clair Womersley – HFW, UK

4:00pm - 5:00pm

SESSION 13 • FERRY LEADERS PANEL 1

Torben Carlsen – DFDS, Denmark Mark Collins - BC Ferries, Canada Carl Hagman – Stena AB, Sweden Spiros Paschalis – Attica Group, Greece Patty Rubstello – Washington State Ferries, USA

FLASH PRESENTATION • WÄRTSILÄ

5:15pm - 8:30pm*

MONDAY EVENING NETWORKING RECEPTION ON BRITTANY FERRIES' PONT-AVEN FOLLOWED BY A HARBOUR CRUISE ON **BOARD LOS REGINAS**

CONFERENCE DAY 2 • TUESDAY • OCTOBER 5

8:45am - 9:15am

SESSION 14 • INTERFERRY REGULATORY UPDATE

Johan Roos – Interferry, Sweden

9:15am - 10:15am

SESSION 15 • ZERO EMISSIONS SOLUTIONS (TERMINALS)

Moderater: Mark Collins - BC Ferries, Canada

Ferry Terminal Electrification Challenges

Andrew Bennett - KPFF Consulting Engineers, USA

Time to Take Charge: Maximising Efficiency with Automated Mooring and Charging Solutions

Laurent Dupuis – Cavotec, Italy

Current Direct Project: Battery Swapping for Ferries

Yannis Kalenteridis – Rhoé Urban Technologies, Greece

FLASH PRESENTATION • DAMEN

10:15am - 10:45am **COFFEE BREAK**

10:45am - 12:15pm

SESSION 16 • ZERO EMISSIONS SOLUTIONS (SHIPS)

Moderator: Mark Collins - BC Ferries, Canada

Decarbonising Maritime Will Take More than Technology

Stefano de Marco – Wärtsilä, Italy

Future Fuel Mix for Ferries: Where Does Hydrogen Fit In? Sami Kanerva – ABB Ov. Finland

The Future of Zero-Emission Marine Propulsion

Mark Kammerer – Ballard Power Systems, Germany

Batteries and Hybrids Solution for Maritime

Jose Allona – DNV, Norway

FLASH PRESENTATION • MTU

12:15pm - 1:30pm

1:30pm - 1:40pm

SESSION 17 • INTERFERRY AGM

Mike Corrigan – Interferry, Canada

Christophe Mathieu – Brittany Ferries, France

FLASH PRESENTATION • AUSTAL

1:40pm - 2:00pm

SESSION 18 • RESPONSIBLE CABIN DESIGNS

Anders Ørgård – OSK Group / Steen Friis Design, Denmark

2:00pm - 2:20pm

SESSION 19 • THE SUSTAINABLE CUSTOMER EXPERIENCE

Nikolay Malyarov – Pressreader, Canada

2:20pm - 2:40pm

SESSION 20 • ATTRACTING TOMORROW'S CUSTOMERS AND **MONETISING THE CUSTOMER BOOKING JOURNEY**

Yiannis Maglaras - Ticknovate, UK

2:40pm - 3:00pm

SESSION 21 • FERRY CONNECTIVITY STUDY

Peter Broadhurst - Inmarsat, UK John Garner - JG Maritime Solutions, UK

FLASH PRESENTATION • INMARSAT

3:00pm - 3:30pm COFFEE BREAK

3:30pm - 3:45pm

SESSION 22 • HUMAN FACTORS INTEGRATION INTO SYSTEMS DESIGN AND OPERATIONS

Dr. Maria Carrera – World Maritime University, Sweden

Mary Ann Pastrana – Archipelago Philippine Ferries, Philippines

3:45pm - 4:45pm

SESSION 23 • FERRY LEADERS PANEL 2

Georges Bassoul – Baleària, Spain Morgan Mooney - FRS/San Juan Clipper Ettore Morace – Trasmed, Spain John Napton – Condor Ferries, UK Mauricio Orozco – Ultramar, Mexico

FLASH PRESENTATION • MERCY SHIPS

4:45pm - 5:00pm

SESSION 24 • CLOSING CEREMONIES

Mike Corrigan – Interferry, Canada

Christophe Mathieu – Brittany Ferries, France

David Sopta – Jadrolinija, Croatia

David Gudgel – FRS Clipper, USA

Patty Rubstello - Washington State Ferries, USA 5:00pm - 6:00pm

HAPPY HOUR

7:00pm - 11:00pm FAREWELL DINNER • HOTEL REAL

WEDNESDAY • OCTOBER 6

Three hour tour with four departure times* **TECHNICAL TOUR • ASTANDER SHIPYARD AND ERZIA SANTANDER TELEPORT**

Group A Hotel Real - Departure 7:30am

Group B Hotel Sardinero – Departure 7:15am

Group C Hotel Real - Departure 9:30am Group D Hotel Sardinero - Departure 9:45am

*Check the conference app for complete event times, transportation information and conference updates.

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BRONZE





HAPPY HOUR





pressreader

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Conference Venue Map with Sponsor Exhibit Locations

Be sure to visit Brittany Ferries, Carus and DNV at their exhibition stands located in the lobby entrance next to registration!

1. Shippax

2. LIKNOSS

3. Sterling Plan B Energy Solutions

4. Aeronet Global Communications

5. ALU Design

6. Sea Machines Robotics

7. E-dea

8. Astican and Astander9. Kongsberg Maritime

10. REGENT Craft

11. Cavotec

12. Telenor Maritime

13. Hamilton Jet

14. Hogia

15. Damen Shipyards

16. UES Marine (a)
17. UES Marine (b)

18. Austal

19. Wärtsilä

20. Inmarsat

21. CBG Systems

22. Stena RoRo

23. VIDA by ERZIA

25. 110/10;

24. MTU

25. AYRES Composite Panels

26. Volvo Penta

29. Adonis HR

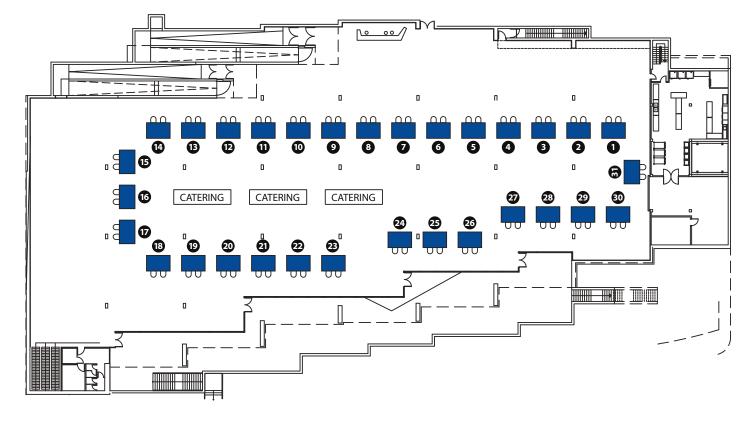
27. Rauma Marine Constructions

28. ELKON

30. FGV Europe

31. Mercy Ships – Interferry's Charity of Choice

Santander Conference Center Venue Exhibition Space Floorplan and Booth Location





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cummins.com/industries/marine/passenger













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Rauma Marine Constructions is a shipbuilding company that represents strong Finnish traditions in the ferry industry.

We are a forerunner in eco-friendly solutions. Each vessel constructed or serviced by us is designed, engineered and built to be more ecologically efficient than its predecessor. In addition, we invest in R&D and in the implementation of environmentally-friendly and fuel-efficient concept solutions. We like our shipbuilding passion and expertise to be of great benefit to all, so that we all will be able to enjoy clean and healthy oceans in the future.

Together with our partner network, we both build modern ships and refurbish old vessels using the latest cutting-edge technology. Newly-built vessels include car and passenger ferries that connect countries, state-of-the-art research vessels, multi-purpose icebreakers for Polar conditions, as well as Coast Guard patrol vessels and ships for the Finnish Navy.

Read more about us: www.rmcfinland.fi



Speakers and Moderators



JOSE ALLONA • DNV, NORWAY

SESSION 16: Batteries and Hybrids Solution for Maritime

Jose Allona, Naval Architect, by the "Highest Technical School of Naval Architecture and Marine Engineering (ETSIN)", of the Polytechnic University of Madrid (1974-1979). He has more than 40 years of professional experience in the Maritime and Offshore sector, both in the area of structural design, as well as in inspection and project management. His present position is Business Development Manager for Spain, as Senior Principal Surveyor of DNV.



GEORGES BASSOUL • BALEÀRIA, SPAIN

SESSION 23: Ferry Leaders Panel 2

Georges Bassoul joined Baleària at the end of 2019 as its General Manager. Bassoul holds a degree in Civil Engineering from the ESTP and a Masters in Strategic Management from the HEC Business School, both in Paris, and he has completed the Top Management programme at the IESE School. His extensive professional career spans companies such as Arthur D. Little, Inditex and Pikolinos.



BECROM BASU • L.E.K. CONSULTING, UK

SESSION 4 KEYNOTE: The European Ferry Market and Prospects for Recovery

Becrom Basu is a Partner in the Transport and Logistics practice at L.E.K. Consulting, based in London. He advises transport operators, governments, and investors on a broad range of commercial issues including strategic reviews, business planning, M&A, forecasting and regulatory support. Recently he has advised European ferry operators on strategic matters relating to post-pandemic planning, passenger forecasting, freight and pricing strategies and has assisted infrastructure funds to make significant investments in the ferry sector. Becrom is a graduate of University College London and holds an MBA from INSEAD.



ANDREW BENNETT • KPFF CONSULTING ENGINEERS, USA

SESSION 15: Ferry Terminal Electrification Challenges

As a waterfront planner and project manager, Andy brings 34 years of experience in waterfront development, waterborne transportation planning, and integrated vessel/shore system design. His background in planning, management, design, and construction of ferry systems ranges from single vessel education/tour vessels to 15-vessel high-speed ferry systems. Responsibilities have included contract negotiation, schedule development, RFP preparation, capital and operating cost estimates, regulatory compliance, sensitivity studies, route planning, vessel acquisition, terminal planning, and system integration.



PETER BROADHURST • INMARSAT, UK

SESSION 21: Ferry Connectivity Study

Peter started his career at Inmarsat in 2014 as Vice President of Service Delivery for the Maritime business unit, where he was responsible for leading the development of products and services from conception and implementation, through to launch and life cycle management. Peter was instrumental in the launch of Inmarsat's high-speed broadband service Fleet Xpress launched in March 2016. With over 25 years' experience in the maritime industry, Peter began his career at sea as a Radio Officer, before running his own business and working for a maritime distributor. Peter then spent 15 years with Sea Tel Inc., / Cobham SATCOM as Vice President of Sales and Marketing where he was responsible for overseeing and managing global sales, support, marketing, training and product management.



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TORBEN CARLSEN • DFDS, DENMARK

SESSION 13: Ferry Leaders Panel 1

Torben Carlsen was appointed President & CEO of Danish Ferry & Transport Group DFDS from 1 May 2019. He joined the company in 2009 as CFO and was, among other things, responsible for DFDS' acquisition of Ferry and Transport Group Norfolkline in 2010 as well as other acquisitions, digitisation of DFDS and major change projects. Torben has a broad and international managerial background, with leading positions in Switzerland and the USA, primarily within the airline industry. In addition to this comes experience from private equity. He holds an MSc in Finance and various board positions in the finance and shipping industries.





Special thanks to our launch partners











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DR. MARIA CARRERA • WORLD MARITIME UNIVERSITY, SWEDEN

SESSION 22: Human Factors Integration into Systems Design and Operations

Dr. Maria Carrera works as a Research Associate at the World Maritime University (WMU) in Malmö, Sweden. She has a background in Psychology, in both clinical and industrial fields, and works in research projects with a focus on maritime human factors, wellbeing and safety. Prior to joining the WMU she was working as a freelance consultant and a research fellow of the Schumacher Institute in the field of maritime human factors, sociotechnical systems and systems thinking. She is a chartered member (CPsychol) of the British Psychological Society (BPS), member of the Chartered Institute of Ergonomics & Human Factors (CIEHF), and member of the Women International Shipping and Trade Association (WISTA).



CAMERON CLARK • HORNBLOWER GROUP, USA

SESSION 6: NYC Ferry Project

Cameron has been involved with Hornblower's business development and engineering projects over the past 17 years, including expansion of Hornblower's hybrid-electric and zero emission fleet and its operations including Alcatraz Cruises, Niagara Cruises, Statue Cruises and NYC Ferry. Spearheading Hornblower's entrance into software development Cameron assembled Hornblower Encore Studio to develop the industry's leading SaaS tours & activities booking and operating platform. Today, as Chief Strategy & Business Development Officer Cameron works to ensure the growth and long-term success of the company and its portfolio of businesses. This includes development and expansion of our Ferry & Transit Services offerings and Land Based Experiences supporting both our existing water based and overnight cruise experiences.



MARK COLLINS • BC FERRIES, CANADA

SESSIONS 13, 15, 16: Ferry Leaders Panel 1 & Moderator Day 2

Mark Collins is a long time marine executive, having held leadership positions with BC Ferries for 11 years before becoming President & CEO in 2017. He was BC Ferries' Vice President, Engineering from 2004-2012 and Vice President, Strategic Planning & Community Engagement from 2014-2017. His 38 years of marine experience also includes serving as President of Rolls Royce Marine Brazil and Rolls Royce Marine Italy, as well as several years in marine engineering on oil tankers, bulk carriers and container vessels. Mark's vision is BC Ferries as a future-oriented enterprise that is trusted and valued by communities and customers.



MIKE CORRIGAN • INTERFERRY, CANADA

SESSIONS 1, 13, 17, 23, 24: Opening Ceremonies, Ferry Leaders Panels 1 & 2, AGM, Closing Ceremonies

Mike Corrigan is CEO of Interferry, the trade association that represents the worldwide ferry industry. Mike's focus leading Interferry is to ensure that it continues to be the voice of the worldwide ferry industry in matters of safety and operational best practices, is the industry's voice with regulatory agencies such as IMO, and that the trade association's value continues to grow for existing and new members. Mike brings to his position of CEO of Interferry extensive executive experience in the ferry industry, most recently as the CEO of BC Ferries, one of the world's largest ferry operators.



STEFANO DE MARCO • WÄRTSILÄ, ITALY

SESSION 16: Decarbonising Maritime Will Take More Than Technology

Stefano de Marco is a MSc Electrical Automation Engineer, PMP certified, in Wärtsilä Italia since 1996. Employed in Production as 2-Stroke Process Development Manager, he continued his career as Production Planning Manager, then served as Marine Project Manager. He has been in the sales business for more than a decade where he has covered the position of Country Manager Italy & Balkan Area, Global Sales Director for Pumps & Valves Business, Key Account Manager. Since July 2020 is representing the Mediterranean and Atlantic Region for the Market Innovation and Globally for the Ferry Segment.



ANNE DOWNEY • HARTER, SECREST & EMERY, USA

SESSION 11: Attracting Customers and Staying Safe: The Role of Intellectual Property and Data Protection

Anne F. Downey is a Partner in the Intellectual Property Practice Group at the law firm of Harter Secrest & Emery (www.HSELaw.com). Anne represents a wide range of clients, from large multi-national companies to sole proprietors, including businesses, nonprofit organizations, educational institutions, and individuals. She assists clients with intellectual property matters and cyber issues, as well as advising business and nonprofit organizations on issues related to governance and operations. With more than 35 years of experience, and as a former business owner herself, Anne delivers thoughtful and practical legal advice in a timely, personable, and strategic manner. Anne received her J.D., summa cum laude, from the O.W. Coburn School of Law at Oral Roberts University and her B.A., cum laude, from the University of California at San Diego.









LAURENT DUPUIS • CAVOTEC, UK

SESSION 15: Time to Take Charge: Maximising Efficiency with Automated Mooring and Charging Solutions

Laurent Dupuis is VP Product Management ShorePower at Cavotec. In his role, Laurent pilots the business strategy and the product roadmap for Cavotec's ShorePower and e-vessels charging solutions. Laurent has over 15 years of experience in the electrical manufacturing industry with a diverse skillset in Innovation, Engineering, Marketing and Sales. He specializes in developing and delivering innovative, digital and energy efficient solutions to customers. Before his Product Manager role, Laurent served as Global Account Manager, Marine Segment Director and Technology & Innovation Director in a global and market leading electrical equipment manufacturer.



HÅKAN ENLUND • RAUMA MARINE CONSTRUCTIONS, FINLAND

SESSION 10: Sustainable Ferries

Håkan Enlund holds a Master of Science degree in Applied Mechanics from the University of Oulu, Finland. His career started in 1981 with the performance super yacht builder Baltic Yachts. Within the Hollming Group he was the key person in establishing the new Materials Technology Division, where he took on the management responsibility for the fairing hulls of the MIR I and II deep-sea submersible research vessels project. Håkan has in his 38-year carrier in the Ferry and Shipbuilding Industry carried management responsibilities for car and passenger ferries as well as special vessels, front-end technology development and sales. He is one of the key executive persons in Rauma Marine Constructions Oy since the new shipbuilding company's beginning in 2014.



LUIS GARCÍA • VIDA BY ERZIA, SPAIN

SESSION 8: Shooting for the Moon...but landing on Mars

Luis García is the CEO and founder of ERZIA Group, which is comprised of ERZIA Technologies, ERZIA Maritime, and Santander Teleport. Founded in 2002, the ERZIA Group is headquartered in Santander, Spain and has customers and distributors all over the world. Mr. García was born and raised in Santander and became a Telecommunications Engineer by the University of Cantabria. He then achieved a Masters in Satellite Communications by the Polytechnic University of Madrid, and a Global MBA by the IESE Business School of Navarra University. As a lifetime entrepreneur and technology lover, Luis enjoys launching new ventures related to telecommunications. He is passionate about the ocean, space, and WWII history. On the weekends you will find him sailing or visiting historic ships and museums.



JOHN GARNER • JG MARITIME SOLUTIONS LTD., UK

SESSION 21: Ferry Connectivity Study

As founding director of JG Maritime Solutions Ltd, John has provided advice to three ferry newbuild projects, new business development projects as well as conducting the surveys of ten ferry operators for the Inmarsat report. John is a former Interferry Director, the current chair of the Interferry Regulatory Committee and provides regulatory liaison on behalf of Interferry in the LASH FIRE project. John is chair of Lloyds Register Technical Committee, a member of the Supervisory Board of the UK Chamber of Shipping, a Fellow of the Nautical Institute, a Chartered Master Mariner, a Fellow of IMarEST and a Chartered Marine Technologist.



DAVID GUDGEL • FRS CLIPPER, USA

SESSION 24: Closing Ceremonies

David Gudgel is CEO of FRS Clipper in Seattle, Washington. Gudgel first joined Clipper in May 2014 as Vice President of Business Development. He then took over the role of Chief Operations Officer in 2015 and became CEO in 2017. Gudgel has been instrumental in Clipper's strategic market growth, product distribution and passenger service enhancement initiatives. For over 27 years, Gudgel has served in key roles in the Pacific Northwest, Alaska, Caribbean and Europe travel markets in cruise, transportation and international package travel segments. He has experience in both large and small organizations, starting his career with Holland America Line and working with Europe Express, an outbound tour operator specializing in custom group and individual travel.



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CARL HAGMAN • STENA AB, SWEDEN

SESSION 13: Ferry Leaders Panel 1

Carl Hagman is the CEO for shipping activities within Stena AB and in this capacity serves as the chairman of Stena Line, Stena Bulk, Stena RoRo and other Stena group shipping-related companies. Mr. Hagman joined the Stena group in 2011. He has spent his professional career in shipping, previously having held the positions of CEO in Höegh Autoliners AS in Oslo, Eukor Car Carriers Inc. in Seoul and Wallenius Lines in Stockholm. Mr. Hagman is a maritime lawyer by training with degrees from Lund and Oslo Universities. He has spent several years as an officer in the Swedish Navy and has lived over half his life in Japan and Korea.

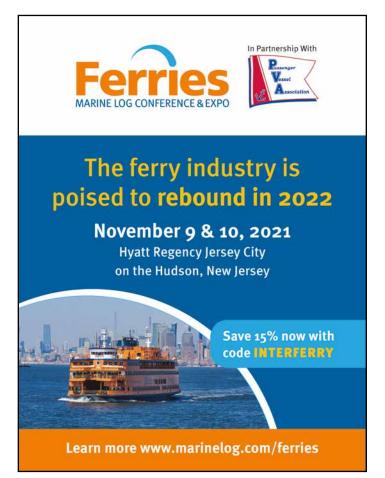


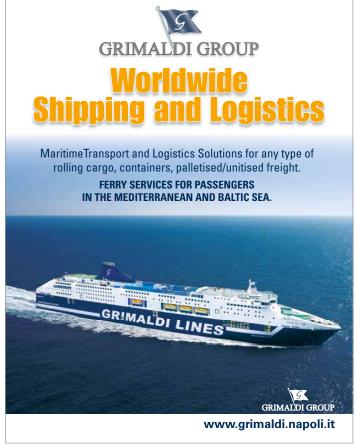
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YANNIS KALENTERIDIS • RHOÉ URBAN TECHNOLOGIES, GREECE

SESSION 15: Current Direct Project: Battery Swapping for Ferries

Yannis Kalenteridis is currently the Chief Finance Officer and a co-founder of Rhoé Urban Technologies. He oversees all finance operations, while constantly seeking growth prospects in the face of present technological trends and economic fluctuations. He has managed the cost estimation and impact assessment associated with numerous projects (e.g., an energy management database for the port of Thessaloniki, a cloud-hosted platform that helps municipal authorities issue and handle fines) and determined their financial viability. Moreover, he combines technical knowledge with sales skills to act as a contact for service demonstrations, client needs assessments and the development of technical specifications. Meanwhile, he is participating in cutting edge research activities regarding smoke control in atrium buildings and operation management of battery swapping systems.



MARK KAMMERER • BALLARD POWER SYSTEMS, GERMANY

SESSION 16: The Future of Zero-Emission Marine Propulsion

Mark Kammerer directs the Business Development and Sales activities of Ballard Power Systems for non-road motive applications in the EMEA region. He brings over 20 years of experience in the hydrogen energy sector, especially focused on PEM fuel cell and electrolyzer technologies. Mark joined Hydrogenics in Toronto after its initial public offering, where he managed the Global Sales Team and coordinated the company's expansion in Europe. Mark has a Bachelor of Applied Science in Mechanical Engineering and currently resides in Germany.



SAMI KANERVA • ABB OY, FINLAND

SESSION 16: Future Fuel Mix for Ferries: Where Does Hydrogen Fit In?

Sami Kanerva is a Senior Principal Engineer in the technology development at ABB Marine & Ports. He received the degree of Doctor in Science from Helsinki University of Technology in 2005 and since then has intensively worked on technology concepts for renewable energy and marine technology. Sami has conducted development of marine fuel cell solutions in ABB since 2017.



YIANNIS MAGLARAS • TICKNOVATE, UK

SESSION 20: Attracting Tomorrow's Customers and Monetising the Customer Booking Journey

A Software Engineer by background, Yiannis has worked in several IT sectors including Telecommunications, Tourism, Marketing, and Digital Production where he was involved in the delivery of digital solutions with immediate impact to the growth and scalability of the businesses. Yiannis founded and ran the multi award-winning mobile apps agency Ubinow. In 2016, Yiannis co-founded Flexy, a temporary workers marketplace, that streamlines the process of finding the most suitable talent for a wide variety of temporary work placements by utilising data and machine learning algorithms. Yiannis is now running Ticknovate, the award-winning SaaS ticketing platform. Yiannis has been with Ticknovate from the very start where in a typical startup founder fashion, Yiannis has been wearing many hats from writing code to onboarding new customers and promoting the business.



NIKOLAY MALYAROV • PRESSREADER, CANADA

SESSION 19: The Sustainable Customer Experience

Nothing gets past Nikolay, and in his position at PressReader, that's a good thing. His attention to detail and knowledge of the tech, travel, and publishing industries have helped turn PressReader into a profitable global business. Since 2003, Nikolay has led the expansion of the world's largest all-you-can-read global digital content platform, providing mobile access to over 7,000 newspapers and magazines to consumers and travel brands looking for new ways to build meaningful relationships with real people. His strategic vision and insightful commentary makes him a popular speaker at industry events where he shares how consumer-focused businesses can capitalize on innovative opportunities that others don't see.



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CHRISTOPHE MATHIEU • BRITTANY FERRIES, FRANCE

SESSION 1, 2, 17, 24: Opening Ceremonies, Brittany Ferries, AGM, Closing Ceremonies

Christophe Mathieu was appointed as Chief Executive Officer of Brittany Ferries in April 2016. He has worked with Brittany Ferries since 1992 in various roles including work in the Finance, Operation, Marketing and Revenue Management Departments, Group Business Controller, Strategic Development Director, Group Strategy & Commercial Director and Member of the Executive Board. Christophe has a Master in Management Science from Paris 1 University, and has completed the International Executive Program through INSEAD. Christophe has been an Interferry Board Member since 2010.



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MORGAN MOONEY • FRS/SAN JUAN CLIPPER, USA

SESSION 23: Ferry Leaders Panel 2

After seventeen years of working in the maritime industry Morgan Mooney was asked to become the CEO of CNI Newco LLC and majority owner of the M/V San Juan Clipper in May 2021. The San Juan Clipper is a US flagship providing passenger service from Seattle, WA to Friday Harbor, San Juan Island. CNI Newco LLC is a partner of FRS/Clipper. Since becoming CEO, Morgan has gained knowledge in the local environmental concerns of the Puget Sound, whale watching regulations, and other administration duties. Morgan gained her maritime experience at her family's business, Fire Island Ferries, Inc. She currently manages Fire Island Ferries' various social media platforms as the Media Director, oversees insurance claims and policies, and is an active captain aboard the fleet's passenger ferries.



ETTORE MORACE • TRASMED, SPAIN

SESSION 23: Ferry Leaders Panel 2

Ettore has a long history in the maritime shipping industry. He received his education at the Maritime College of Naples and he began his career with Alisur S.A., a shipping company based in Spain. Among other positions, he has also worked as Fast Ferry Manager of Flebasa, was Managing Director of all the shipping companies within the Rodriquez Group and in 1999 he co-founded Balearia, a shipping company based in Denia, Spain where he was Member of the Board and General Manager of Operations from January 2018 to April 2020. He is currently the Managing Director of Trasmed GLE SL, a shipping company within the Grimaldi Group that is based in Valencia, Spain. He is also Managing Director and founder of Malta Shipbroker International Ltd, a brokerage company based in Malta.



JOHN NAPTON • CONDOR FERRIES, UK

SESSION 23: Ferry Leaders Panel 2

John Napton was appointed CEO of Condor Ferries on 1 July 2021. Previously being with Brittany Ferries since 1990 in various roles including Finance and Operations, latterly being Director of Brittany Ferries UK & Ireland.



ANDERS ØRGÅRD • OSK GROUP / STEEN FRIIS DESIGN, DENMARK

SESSION 18: Responsible Cabin Designs

Anders Ørgård is Chief Commercial Officer of OSK Group comprising OSK-ShipTech A/S and Steen Friis Design A/S, a leading Danish marine consultancy group specializing in innovative ferry designs and ship interiors. He spends the majority of his time advising shipowners on Fleet Strategy, Concept Development and Technical Advisory on tender processes and negotiation of newbuilding projects. Anders holds a master's degree in Naval Architecture and Engineering from the Technical University of Denmark and is a specialist in the field of RoRo and RoPax ferries, innovative concept designs, passenger flow, and on-board experience economy.



MAURICIO OROZCO • ULTRAMAR, MEXICO

SESSION 23: Ferry Leaders Panel 2

Mauricio Orozco is President of the Ultramar / Aquaworld Group in the state of Quintana Roo, México. In mid-1989 he joined his brother Germán to be part of Aquaworld as Vice President and was responsible for maintenance and operations of their fleet. In 2003 Germán and Mauricio started Ultramar, a passenger ferry corporation. Mauricio has been a hands on person and has been involved in the design, construction and operation of their vessels. The fleet has grown from one monohull with a 350 passenger capacity to a fleet of 23 monohulls and catamarans, capable of transporting more than 7,523 passengers in one seating. Germán and Mauricio formed UltraCarga in 2018, which owns and operates RoRo Ferries, and currently provides service to two runs in the Yucatan Peninsula of México.



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GEMA IGUAL ORTIZ • CITY OF SANTANDER, SPAIN

SESSION 1: Opening Ceremonies

Gema Igual Ortiz is the Mayoress of Santander. She worked in private companies and was manager of the Association of Young Entrepreneurs of Cantabria until her incorporation as councillor of Santander City Council in the areas of Tourism and Festivities in 2003. She was Councillor for Tourism and Institutional Relations from 2007 until November 2016, when she became Mayor of Santander, becoming the first woman to hold this position, which she retained after winning the May 2019 elections. Since December 2016 she has been a member of the Governing Board of the Spanish Federation of Municipalities and Provinces (FEMP) and in September 2019 she was appointed deputy spokesperson of the Grupo Popular party in this body. She has held the vice-presidency of the Spanish Network of Smart Cities (RECI) since February 2020.



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SPIROS PASCHALIS • ATTICA GROUP, GREECE

SESSION 21: Ferry Leaders Panel 1

Spiros Paschalis is the CEO and an Executive member of the Board of Directors of Attica Group, a leading maritime group based in Greece that operates 32 vessels in the Greek domestic market and on the Greece-ltaly routes through the brands of SUPERFAST FERRIES, BLUE STAR FERRIES and HELLENIC SEAWAYS. He is also the General Manager of AFRICA MOROCCO LINK (AML) operating since June 2016 connecting Morocco and Spain. He is the VP of the Greek Passenger Shipping Association (SEEN) participating as an elected member of the board of directors since 2009. He is a member of the Hellenic Chamber of Shipping representing the Passenger Shipping sector.



MARY ANN PASTRANA • ARCHIPELAGO PHILIPPINE FERRIES, PHILIPPINES

SESSION 22: Human Factors Integration into Systems Design and Operations

Mary Ann Ibuna Pastrana is the EVP-Treasurer of APFC, owner and operator of the Fastcat fleet and CAPP Industries Inc., a bulk material trader. She is also the President of Archipelago Philippine Seafarers Training Institute, a maritime training center to educate, train and upgrade the skills of seafarers, Scorpio Transport and Manning Services, an overseas manning agency. Ms. Pastrana has a post-graduate diploma in Executive Maritime Management from the World Maritime University, is currently enrolled in Masters in Maritime Education & Training at the Philippine Merchant Marine Academy of the Philippines, Vice President of Women In Maritime Philippines, Board Member of Entrepreneurs Organization Philippines. She sits in the advisory council of Philippine National Police Maritime Group and the World Ferry Safety Association.



LUKE PRETLOVE • AUSTAL, UK

SESSION 9: Greener Solutions for High Speed Ferries

Luke Pretlove (Austal) is a naval architect with over 16 years' experience in high speed ferry design and aluminium shipbuilding. He is based in the UK, and is a senior member of Austal's R&D department, which is focused on decarbonisation, advanced hull forms, motion control, manufacturing efficiency, autonomy and data science.



JOHAN ROOS • INTERFERRY, SWEDEN

SESSION 14: Interferry Regulatory Update

Johan Roos is Interferry's Director of Regulatory Affairs. Previously he was Director of Sustainability with Stena Rederi AB. He holds a Masters Degree in Environmental Sciences from the University of Gothenburg, Sweden. In the year 2000, Johan left DNV to join Stena Line, the ferry operator, to develop environmental management systems internally. From 2006-2011 he was in charge of sustainability issues for all of Stena's shipping activities. Johan works in close relation with the European Community Shipowners Association and the International Chamber of Shipping and represents Interferry at the International Maritime Organization.



PATTY RUBSTELLO • WASHINGTON STATE FERRIES, USA

SESSION 13: Ferry Leaders Panel 1

Patty Rubstello serves as the head of the largest ferry system in North America. With 30 years at the Washington State Department of Transportation, Patty oversees a fleet of 21 vessels and ten routes which normally serve around 24-million customers a year. Commuters in the Seattle area and tourists and locals in isolated island communities all depend on the economic lifeline the system provides. Patty's experience in design, construction, planning, traffic operations and tolling help ensure this critical marine highway continues to serve the people of Washington State. Patty is also a licensed civil engineer, and a member of Women in Transportation (WTS).



ELENA SECO • SPANISH SHIPOWNERS' ASSOCIATION (ANAVE), SPAIN

SESSION 7: Spanish Ferry Market

Mrs. Elena Seco joined the Spanish Shipowners' Association (ANAVE) in 1996 and has taken different positions on the Association until her nomination as Director General in August 2020. Mrs. Seco holds a M.Sc. (1995) in Naval Architecture and Marine Engineering from the Polytechnic University of Madrid and a Master of Advanced Studies. Currently she is also Assistant Professor of Shipping Economics and Shipping Law at Madrid Polytechnic University.



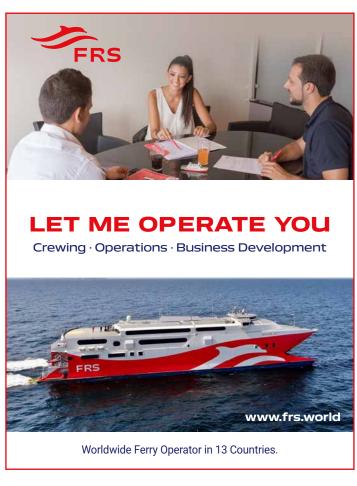
DAVID SOPTA • JADROLINIJA, CROATIA

SESSION 23: Ferry Leaders Panel 2

David Sopta is president of the management board of Jadrolinija, Croatia's largest passenger shipping company with a 100 year long tradition. He graduated as a Master of Science in Mechanical Engineering and has finished Postgraduate study from the Faculty of Economics and Business. During his professional career David was Deputy Minister in Croatian Ministry of Foreign Affairs. He was also a Board Member of Croatia's largest insurance company. David has substantial experience in business development and corporate management and brings a high sense of initiative and entrepreneurship.









PILAR TEJO • SHORTSEA PROMOTION CENTRE SPAIN (SPC SPAIN), SPAIN

SESSION 7: Shortsea Shipping

Pilar has been Technical Director for SPC-S since 2011. She is a Naval Architect from UPM and Master in Shipping from I.M.E.-UPC. She has developed her professional career in the field of transport and logistics, carrying out various management positions both in the field of public administration and in the private sphere. As an expert in port areas, logistics and maritime transport, Pilar has led many projects on port strategies, development of Port Logistic Activity Zones, analysis and strategies in intermodal and maritime transport, especially in Shortsea Shipping lines. Pilar teaches postgraduate courses, is a speaker at various forums, and is a member of several professional groups in the field of transportation and engineering.



BILLY THALHEIMER • REGENT, USA

SESSION 5: REGENT Flying Ferries

Billy founded REGENT after years spent as an aerospace program manager, business development leader, and multidisciplinary aerospace engineer. During his time at Aurora Flight Sciences, Billy was responsible for developing new programs in vehicle design and technology maturation to support Boeing's portfolio of future air mobility solutions. He additionally led technical program execution, financial management, and strategy for electric aircraft programs; and worked as an air vehicle conceptual design engineer, leading design and performance modeling for Boeing's electric air taxi vehicle. Billy holds a BS and MS from MIT's aerospace engineering program where he satisfied his passion for the water as a varsity sailor.



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CLAIRE WOMERSLEY • HFW, UK

SESSION 12: Compliance – Mitigating Exposure to the Rise in Cybercrime Events

Claire is a leading practitioner in crisis management response and is currently managing high profile and complex litigation on a number of matters for the travel and container shipping sectors that have attracted significant media attention and associated reputational risks. As a Master Mariner who spent nine years at sea navigating large passenger vessels and ro-ro ferries, Claire brings a wealth of insight, knowledge and 'hands on' experience to the cases she has the conduct of. In addition to her case work, Claire is an active participant in various industry forums supporting the travel industries such as Interferry, CLIA, the UK Chamber of Shipping and the Mission to Seafarers, she is also a champion for diversity and inclusion including most recently supporting the Aspiring Solicitors Group in their International Women's Day event.





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BoCS Consulting AB, SWEDEN Briggs Marine & Environmental Services, UK Brookes Bell Safety at Sea Ltd., UK Elomatic Consulting & Engineering Oy, FINLAND

Glosten Associates, USA International Marine Consultants Ltd., CANADA

International Maritime Services Pty Ltd (IMS), AUSTRALIA JG Maritime Solutions Ltd., UK KPFF Consulting Engineers, USA Live Business, UK Peters & May Ltd., UK PSM Ventures, CANADA Shipshape Consulting, UK

SHIPBROKERS

Alta Shipping Brokers, S.L., SPAIN
Brax Shipping HB, SWEDEN
BRS Barry Rogliano Salles, FRANCE
IBS Global, AUSTRALIA
Jensen & Partners A/S, DENMARK
Linnhe Shipping & Trading Co Ltd, UK
Maatsuyker Limited, UK
Macholl & Specht GmbH, GERMANY
Malta Shipbrokers, Malta
Mason Shipbrokers, UK
Navitaship ApS / Trollship ApS, DENMARK
Nordvik Shipping, SWEDEN
Pinnacle Marine, USA
Simsonship AB, SWEDEN

PUBLISHERS

Baird Publications, AUSTRALIA
Direct Public Relations, UK
International Cruise and Ferry Review / Tudor
Rose, UK
Marine Log, USA
PressReader, CANADA
Shippax Information, SWEDEN

FINANCIAL, INSURANCE, & LEGAL

A/S Global Risk Management Ltd., DENMARK Hannaford Turner LLP, UK HFW, UK HSE Law, USA The Shipowners Protection, UK The Standard Club, UK

INFORMATION TECHNOLOGY

Adonis, NORWAY Carus Ferry AB Ltd., FINLAND Connexionz Smart Transit Solutions, USA Direct Ferries, UK E-Dea S.p.A. Transport Technology, ITALY ERZIA Maritime, SPAIN Exis Technologies, UK Hogia Ferry Systems, FINLAND Liknoss Group, GREECE Marine Learning Systems, CANADA Nextrasoft Ltd., UK Pharos Data Ltd., UK Pivotel America Inc., US Rhoé Urban Technologies, GREECE Specto Remote, NORWAY Surikat AB, SWEDEN Telenor Maritime, NORWA Ticknovate FNGLAND Vesseltracker, GERMANY

AGENCIES

Asta Adria, MACEDONIA Viamare All Year Travel, GREECE

CLASSIFICATION SOCIETIES

Bureau Veritas Marine & Offshore SAS, FRANCE DNV, NORWAY/GERMANY Lloyd's Register, UK RINA Services. ITALY

ASSOCIATIONS

Australian International Marine Export Group, AUSTRALIA Canadian Ferry Association, CANADA Danish Car Ferry Association, DENMARK Danish Transport & Logistics Assoc., DENMARK Discover Ferries, UK Ferry Shipping Summit B.V., NETHERLANDS

Ferry Shipping Summit B.V., NETHERLANDS Green Marine, CANADA International Transport Workers' Federation, UK International Zinc Association, USA

Mercy Ships, USA Passenger Vessel Association, USA Philippine Interisland Shipping Association, PH

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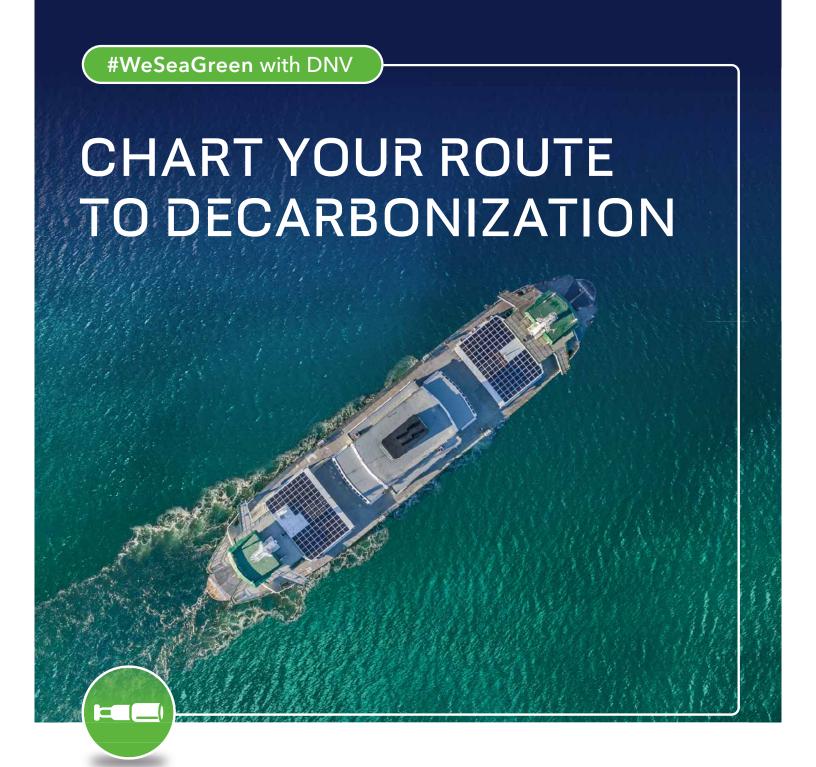








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