

Marlink and Fraunhofer CML join to map maritime KPI data and ROI scenarios



Hamburg, 18 January 2023

Research project will analyse data collected from shipboard equipment and systems to accelerate shipowners' digitalisation efforts

Marlink, a network solutions company, has signed an agreement with leading research institute Fraunhofer CML (Center for Maritime Logistics and Services) to identify Key Performance Indicator (KPI) data to accelerate digitalisation and define the Return on Investment (ROI) scenarios for long term operational efficiency.

Within this agreement, Marlink will leverage its BridgeLink solution to deliver data from core engine room and bridge systems including VDR, ECDIS, Radar, AIS, AMS, engine control systems, cargo systems, propulsion and sensors. The outcomes will enable shipowners to better understand how to optimise voyages, reduce fuel consumption and optimise operational maintenance. Fraunhofer CML develops and optimises processes and systems for the maritime supply chain. The institute supports private and public sector clients, including ports, logistics services providers and shipping companies, implementing innovation using practice-oriented research.

The joint research project reflects the importance of data collection to the transformation needed to achieve long term efficiencies and compliance with decarbonisation targets, optimising investments to reflect vessel lifespan. To do so, shipping companies will need to shift from reactive or procedural operations to centralised and data-driven work processes if they want to maximise the expected optimisation and efficiency savings and comply with regulations and commercial terms.

Using quantitative analysis techniques and industry-specific knowledge, Fraunhofer CML will produce a unified dataset that will be used as a reference model by owners who want to improve efficiency in data-driven use cases but whose technical departments may require additional support. Feedback already collected by Marlink suggests that operators of all sizes would benefit from assistance in

gathering the harmonised data that they can use to develop a practical digital decarbonisation strategy.

The KPIs generated will be measured against a baseline of historical data which will define and set out the new data to be collected. From the data and supporting information provided, Fraunhofer CML and Marlink will produce representative data on ROI scenarios for shipowners' different use cases. Owners will use the results to make operational improvements and plan strategic investments in energy saving devices based on ship type, age and fleet profile.

"Decarbonisation is challenging for many shipping companies, as it represents a fundamental change to their operations and a transformation in their customer relationships," said Nicolas Furgé, President, Digital, Marlink. "This research project will help shipowners implement their decarbonisation and optimisation strategies and help them plan investment and make decisions on a shorter timeline."

"Fraunhofer CML has vast experience in addressing shipping industry challenges using interdisciplinary teams of engineers, economists, mathematicians, computer scientists and navigators to create customised solutions," said Dr.-Ing. Anisa Rizvanolli, Team Leader at Fraunhofer CML. "This project will fill a vital need by providing actionable KPI data that companies can adopt into their daily processes and use to plan for a low carbon future."

About Marlink

Marlink is the trusted partner in fully managed smart network solutions, based on an intelligent hybrid network and unrivalled digital solutions.

The company provides Smart Network Solutions, connecting people and assets around the globe and across all markets where conventional connectivity cannot reach or is not available. Marlink's Intelligent Hybrid Network combines global satcom and terrestrial technologies via a proprietary global infrastructure.

www.marlink.com

Fraunhofer CML

The Fraunhofer Center for Maritime Logistics and Services CML develops innovative solutions for the maritime sector and the maritime supply chain. We support companies and institutions from shipping, port management and logistics in initiating and implementing future-oriented technologies and processes.

Starting from everyday challenges, our interdisciplinary teams develop customer-specific solutions for private and public clients. In the four research fields of Maritime Logistics, Port, Shipping and Autonomous Maritime Systems, our employees transfer the latest scientific findings from the diverse research activities into practice-oriented applications. The focus is on solutions for end-to-end digitalization and process automation, service concepts, and AI-supported data analysis, as well as autonomous maritime systems and sustainable shipping. The innovative concepts are tested and improved at the CML through simulation, models and in real operation.

Fraunhofer CML was founded in 2010 as part of the Fraunhofer Institute for Material Flow and Logistics IML in Hamburg.

Contact

Claudia Bosse & Etta Weiner

Fraunhofer Center for Maritime Logistics and Services CML

Blohmstraße 32

21079 Hamburg

Germany

pr@cml.fraunhofer.de

→ [Send e-mail](#)

© 2023 Fraunhofer Center for Maritime Logistics and Services CML

[CONTACT](#)

[PUBLISHING NOTES](#) [DATA PROTECTION](#) [POLICY](#)

Fraunhofer is Europe's largest application-oriented research organization. Our research efforts are geared entirely to people's needs: health, security, communication, energy and the environment. As a result, the work undertaken by our researchers and developers has a significant impact on people's lives. We are creative. We shape technology. We design products. We improve methods and techniques. We open up new vistas. In short, we forge the future.

Fraunhofer Center for Maritime Logistics and

Services CML

Blohmstrasse 32

21079 Hamburg

Germany

is a constituent entity of the Fraunhofer-

Gesellschaft, and as such has no separate legal status.

Fraunhofer-Gesellschaft

zur Förderung der angewandten Forschung e.V.

Hansastraße 27 c

80686 München

Internet: www.fraunhofer.de

E-Mail: [info\(at\)zv.fraunhofer.de](mailto:info(at)zv.fraunhofer.de)

VAT Identification Number in accordance with

§27 a VAT Tax Act: DE 129515865

Court of jurisdiction

Amtsgericht München (district court)

Registered nonprofit association

Unsubscribe from our newsletter service.

→ [Unsubscribe](#)

→ [Unsubscribe from the entire institute](#)

→ [Tell a friend](#)

Unsubscribe from all of our newsletter services:

Please consider, that you will not receive any further mails from any Fraunhofer institution after your unsubscription.

→ [Unsubscribe from all of our newsletters](#)

Registration no. VR 4461

Copyright:

Picture: @ Adobe Stock STOCKSTUDIO, FraunhoferCML