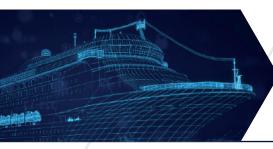




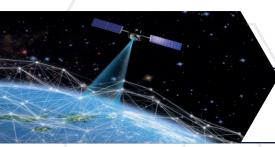
SEASTREAM



PORTSTREAM



SHIP=COK



SATSTREAM

Master your fleet with our advanced Maritime solutions

With the Fifth Industrial Revolution looming, Sync Lab meets the needs of the Maritime Market by leveraging the over twenty years of experience as a System Integrator and operating in the sector through a specialized Division with a decade of expertise that offers advanced solutions for the Maritime industry.

Sync Lab solutions lead towards the adoption of new technologies and are designed to transform production systems and guide industry companies towards Digital Transformation. Through the use of network data and analytics, we support maximum efficiency for administrative, logistics, naval, terminal and port operations.



SEASTREAM

worldwide need to equip themselves with Fleet Operation Center (FOC) systems and their related Fleet Control Rooms, a requirement that is also present in regional contexts. These systems allow for the monitoring of the fleet, increasing navigation safety, reducing costs, and optimizing resources.

Shipping Companies that manage fleets SeaStream is the platform designed to improve and make operational activities more efficient for the departments of shipping companies and other operators in the Maritime market. SeaStream services implement:

> Fleet Operation Center (FOC) to monitor fleets worldwide, increase safety, reduce costs, and simplify management through a complete and efficient Control Room.



Route

eRoute is the SeaStream Module that works as a Route
Management tool and allows for the construction, management, and sharing of ship routes. Route planning is one of the first steps in route management and involves the use of key information to determine the most efficient and economical route between two ports.



eTrack

eTrack is the solution that provides advanced real-time fleet tracking functionalities for complete support of daily shipowner operations. Common practice in modern maritime industry, these technologies allow to improve vessel safety, fleet management, and maritime transportation security.



eBridge

The SeaStream application remotely controls the Command Bridge displays such as Radar, ECDIS, Conning and more, providing crucial support to ship crews in monitoring and managing navigation operations.





eReport

eReport is the Report

Management application that
allows for secure and efficient
management of the daily
exchange of ship to shore
reports, contributing crucially to
effective onboard operations
management.



Elemetry

Telemetry is the vendor free application of the Suite that allows for real-time monitoring and storage of data detected on board, supporting shipping companies in the constant monitoring of their ships' performance and in improving operational efficiency.



e**Carbo**n

eCarbon is the solution for managing carbon emissions in the maritime sector, offering advanced tools for ship monitoring and environmental performance optimization. Using sophisticated algorithms and real-time data, eCarbon enables shipping companies to identify improvement areas and take proactive measures to reduce carbon emissions.







eTrack

Real-time tracking of the maritime fleet allows fleet managers to monitor the location of ships, their routes, speed, and other critical information in real-time. This data can be used to optimize routes and operations, improve trip planning, reduce downtime, and enhance transportation safety.

Real-time fleet tracking

The chance of using real-time tracking of the fleet allows Fleet Management to have greater visibility on the movements of the ships, improving their ability to make informed decisions and manage the fleet efficiently.

E-track allows for real-time (or near real-time) tracking of the fleet's ships, associating advanced functionalities to support the daily operation of the shipowner:

- real-time and worldwide location of the fleet's ships;
- reconstruction of the route followed by a ship within a definable time interval;
- visualization of the fleet on electronic nautical charts;
- worldwide marine weather forecasts.

1 Visualization on map of the updated ship position

2 Configuration (maps, timezone, areas of interest, more)



4 Ship research

5 Details ship information access











Weather forecast







eTelemetry

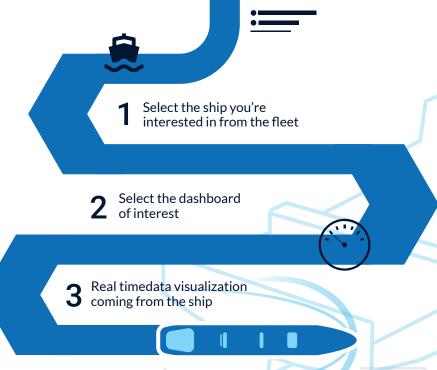
Telemetry tools in the maritime sector have become increasingly important in recent years, allowing shipping companies to constantly monitor the performance of their ships and improve operational efficiency, from optimizing fuel usage to reducing greenhouse gas emissions.

Telemetry tool to improve performance
Telemetry in the maritime sector
represents an important tool for
improving operational efficiency and

safety of ships, while reducing costs and harmful emissions. Companies that adopt such tools can benefit from greater visibility and control over their fleets, improving their overall performance and competitiveness in the market.

As a vendor-free application that allows real-time monitoring and archiving of onboard data, which can be used for reports or statistics, eTelemetry enables the visualization of:

- Navigation data Generator parameters
- Automation data Fuel tank levels











Dashboard Engines







eRoute

Fleet real-time tracking allows fleet managers to monitor location of ships, their route, speed, and other critical information in real time. This data can be used to optimize routes and operations, improve trip planning, reduce downtime, and enhance transportation safety.

Route Management and efficiency

Route management in the Maritime Industry is one of the key activities to ensure safe and efficient transportation of goods and people on the world's seas: is a complex process that involves several factors, including route planning, navigation, safety, and compliance with regulations.

One of the main needs of shipping companies is to define the "best" routes

to follow. e-route allows the construction, management, and sharing of ship routes. It implements the following functionalities:

- construction of a route by inserting waypoints;
- modification and deletion of a created route:
- import of a route from external sources (ECDIS and third-party software) and its modification;
- export of a created or modified route;
- construction of a line (service) as a sum of legs;
- creation, modification, and deletion of areas of interest (ECA, SECA) and POIs;
- checks and notifications to be associated with the constructed routes.

Route construction by entering way points

2 Route optimization: evaluation of the route basin on weather forecast

3 Route editing and deletion

4 Route import from external sources (ECDIS and third party SW) and editing



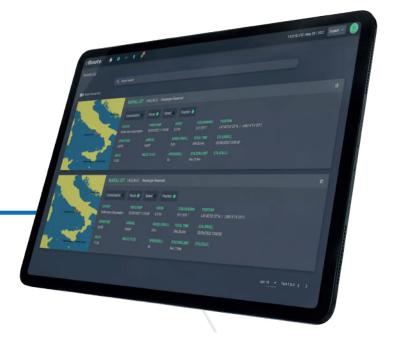
5 Export of an edited or brand new route

6 Creation of a service as a sum of sea routes

7 Creation, editing and deletion of areas of interest (ECA, SECA) and POI



Active Routes





Route Construction







eReport

Report management involves the creation, transmission, reception, and storage of reports by both the ship and the shore. Reports can cover various information such as the ship's position, weather conditions, cargo status, the presence of any hazards, and much more.

Report Management for the centrality of ship to shore report.

A fundamental element of communication between a ship and the shore in the maritime sector, the sharing of "ship to shore" reports is crucial for ensuring navigation safety and effective

management of onboard operations.

The creation, transmission, reception, and storage of reports by both the ship and the shore are key elements in onboard Report Management. Reports may concern various information such as the ship's position, weather conditions, cargo status, potential hazards, and much more.

eReport is the SeaStream application for Report Management, which enables the secure and efficient management of daily ship to shore report exchanges. Report data is stored and managed by Data Analytics modules.

Ground operator

- Select the ship of interest in the fleet
- 2 Select the type of report recieved by the ship
- 3 Data visualization in tabular or graphic format

On-board operator

- Report drafting
- 2 Sending the report to the ground department









Report Drafting







e**Bridge**

The remote control of the bridge displays such as radar, ECDS, and conning offers many advantages in the maritime industry. Thanks to this technology, operators can monitor and manage navigation information from remote control stations throughout the ship, improving safety, efficiency, and crew productivity.

Bridge Video Remote control

Modern technology has revolutionized the way ship crews can monitor and manage navigation operations. One of the most significant developments in this field is the remote control of bridge displays such as radar, ECDS (Electronic Chart Display and Information System), and conning, which allows operators to monitor vital navigation information remotely.

eBridge is the vendor-free application of the SeaStream suite, which aims to remote control the video of the ship's Bridge. In particular, it allows:

- the live display of images from Bridge video sources and onboard cameras:
 - Radar ECDIS Conning Engine room display the recording of videos;
 - the download of videos of pre-set or pre-defined duration.



2 Select the display for the real-time visualization

3 Access to recordings archive

4 Download the recordings of interest









Bridge Display





SEASTREAM







The maritime sector is under increasing pressure to reduce environmental impact. eCarbon is the solution for managing carbon emissions in the naval industry, offering advanced tools for ship monitoring and environmental performance optimization. Utilizing sophisticated algorithms and real-time data, eCarbon enables shipping companies to quickly identify improvement areas and take proactive measures to reduce carbon emissions.

The web application is designed to forecast and verify the Carbon Intensity Indicator (CII), an operational index introduced by the IMO under Marpol Annex VI& "Initial Strategy."

eCarbon adheres to IMO guidelines MEPC 338(76), 352(78), 353(78), 354(78), and 355(78) and

operates both standalone and integrated with other Sync Lab solutions, like log books and fleet operation centers (FOC). Designed to manage and monitor carbon emissions, eCarbon offers a cloud-based environment for onshore offices and an onboard environment for crew members.



Accurately calculate the CII for each voyage.

2 Generate detailed carbon emission reports.

Intuitive interface and real-time monitoring tools.

Ensure compliance with IMO and international carbon emission regulations.



CII Simulation





CII Real



