

All-in-One Marine Data Solution

CONNECT THE SEA AND THE PEOPLE

mapsea **NAVIGATIO**

Real-time safety portable navigation

Vessel Prediction
Route Planning/Monitoring
Alert Look-around



mapsea **CONNECT**

Real-time global safety fleet monitoring

Route import | ETS | Carbon credit



mapsea, A New World bridging the Oceans and Humanity.

As everyone becomes interested in the world beyond Earth, we venture into the unexplored realm of the oceans, which comprise 71% of the land.

We Encompass

71%

Sustainable Maritime

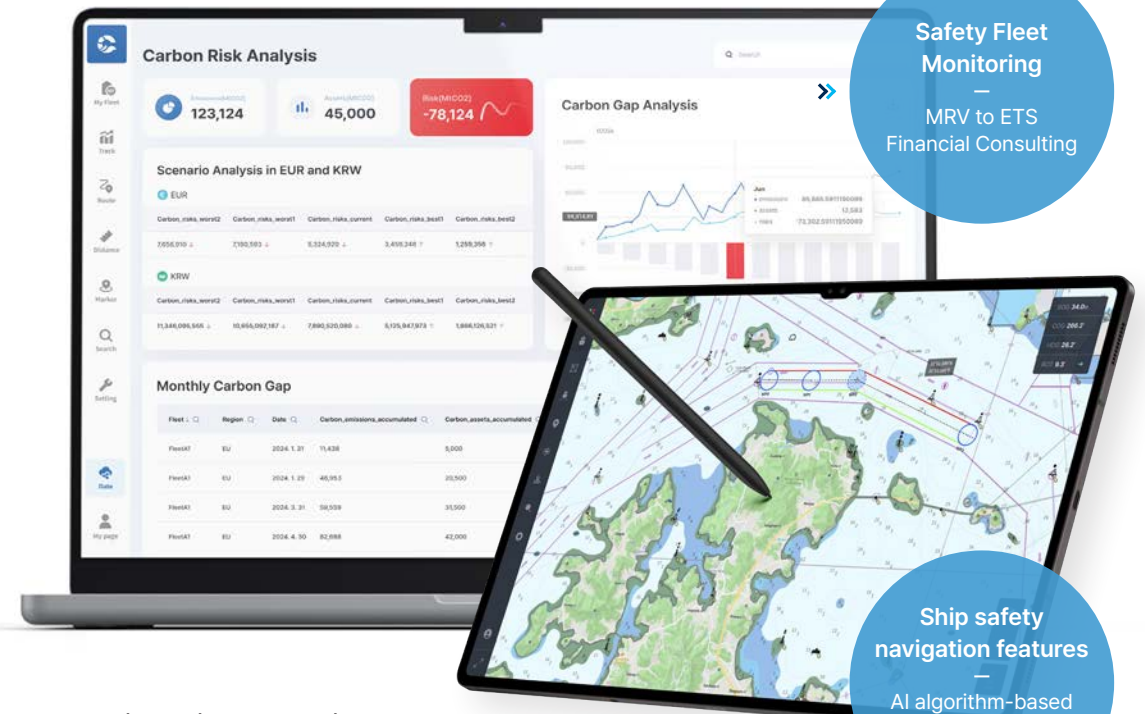
IT



mapsea **CONNECT** | mapsea **NAVIGATION**

Real-time All-in-one solution for the safety and sustainability of ships

From safe ship operations to carbon emission reduction and carbon credit financial consulting, we provide an all-in-one solution for the sustainability of the maritime industry



MRV to ETS Financial Consulting

Our All-in-one solution streamlines ship carbon trading operations based on maritime big data.

2020

- Awarded the Minister of Oceans and Fisheries Award
- Designated as an Ocean Star Company (expected to reach 100 billion KRW in sales) by the Ministry of Oceans and Fisheries the Ship and Ocean Plant Research Institute (KRISO)
- Received technology guarantee and venture company certification from the Korea Technology Finance Corporation
- Selected for the Credit Guarantee Fund's Start Up Nest

2021

- Awarded first place in the Deregulation Zone for Unmanned Vessels by the Small and Medium Business Administration
- Received the Public Data Incheon Port Authority Award
- Selected for the IBK Start-up Factory

2022

- Awarded the Minister of SMEs and Startups Award
- Selected in the Financial Services Commission's Top 1000 Innovative Companies
- Included in the Fly Asia Awards Top 50
- Selected for Google For Startups

2023

- Awarded the Minister of Science and ICT Award
- Received the Enterprise Singapore Best Enterprise Award from the Ministry of Trade and Industry, Singapore
- Established Mapsea Corporation Zweigniederlassung Deutschland in Germany
- Conducted R&D in Deep-tech TIPS (Technology Incubation Program for Startup)

2024

- Awarded the Minister's Prize for Excellence in Data Voucher from the Ministry of Science and ICT
- Won the IoT Innovation Grand Prize and Impact Award at Singapore Infineon The Tech Spark 2024
- Signed MOU with Korea Shipmasters' Forum and SK Telink

mapsea RESEARCH FIELD

Marine Big Data



- Leveraging global maritime operational data, we provide information for more efficient and safer navigation.
- Through the development of anomaly detection and collision risk identification algorithms, we offer real-time alerts of potential dangers during navigation.
- Considering safety, time, and fuel efficiency, we suggest optimized routes to our users.

Voyage Optimization



- Analyzes ship performance and predicts the optimal route in real-time using Kalman filter and statistical analysis methods.
- Recommends safe and efficient routes by comprehensively analyzing weather, surrounding ship traffic, and maritime objects.
- Provides real-time AIS data based on Spire dynamic data and the latest official nautical charts to set the optimal route.

Situational Awareness



- We automatically detect maritime objects around vessels and promptly alert users to potential hazards.
- Utilizing multiple cameras mounted on the vessel and mobile devices, we enable quicker and more accurate object identification than human judgment.
- Detected object information is integrated with other features to provide a variety of additional functionalities.

Patent



mapsea CONNET



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D7BK / 440027000

>CH TXG 2024-02-08 10:00

Position	35°31.9440'N 35°31.9440'N
SOG / COG / HDG	15 kt / 359° / 359°
Status	At anchor
Vessel type	-

To my vessel
Detail

Prevention of safety incidents and carbon emission management based on real-time global vessel monitoring

- ✓ Real-time monitoring of vessel positions and movements on land and sea
- ✓ Possession of a comprehensive global nautical chart database Effective vessel management and marine accident prevention
- ✓ Integrated carbon management solution from carbon emission monitoring to financial consulting

mapsea NAVIGATION



Real-time Marine Data Solution

- ✓ Flexibility with SW-based remote updates and free utilization
- ✓ Provision of officially certified electronic nautical charts from the server
- ✓ Ensures real-time vessel monitoring and position accuracy

mapsea Pilot Plug



- ✓ 100m* wide reception range
- ✓ Accurate navigation with real-time AIS data extraction
- ✓ Easily connects with various portable devices
- ✓ Uses durable plastic recycled from marine debris

THE SPECIFICITY OF mapsea SOLUTION

Comparison with "B" Service

"B" Service	VS	mapsea SOULTION
Hardware/Software Focused	Service	Software Focused
Bi-Monthly Updates	Update	Constant Updates
Optimal Routes, Collision Risk Alerts, etc.	Main Features	Real-Time vessel Analysis, Optimal Routing, Object Recognition, etc.
Non-Detachable and Non-Portable	Portability	Portable as a Based App Service
Unavailable	Waterproof	Compatible with the IP68 Water and Dust Resistant Galaxy Tab S9
Non-Detachable and Non-Portable	Portability	Portable as a Based App Service
Available (After July 2023 Ver)	Fish Detection	Planned for the 3Q of 2024
Provides AIS Data	AIS Information	Provides Spire's AIS Data
Takes more than 3 months.	A/S	Quick action is possible due to server updates and improvements.
Not usable on land.	Expandability	Usable on land

Comparison with "R"/"K" Plotter

"R"/"K" Plotter	VS	mapsea SOULTION
Hardware Focused	Service	Software Focused
Inconvenient	Update	Constant Updates
Non-Detachable and Non-Portable	Portability	Portable as a Based App Service
Available	Waterproof	Compatible with the IP68 Water and Dust Resistant Galaxy Tab S9
Available	Fish Detection	Planned for the 3Q of 2024
Not Reflected in the Software	AIS Information	Provides Spire's AIS Data
Varies by Device	GPS Information	Mobile Device GPS Usable
Takes more than 3 months.	A/S	Quick action is possible due to server updates and improvements.
Not usable on land.	Expandability	Usable on land

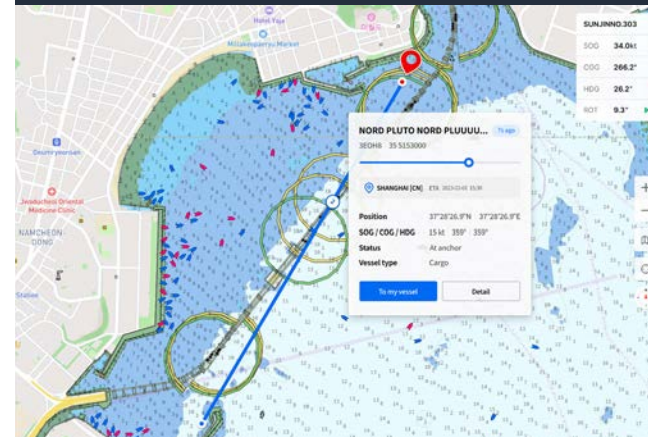
"V", "M" and other vessel tracking services.

"V", "M" and other vessel tracking services	VS	mapsea SOULTION
Displays vessels up to 16 hours prior.	Real-Time vessel display	Real-Time vessel display (with Spire)
Tracking only	Additional features	ETA information, hazardous object distance measurement, warning alerts, etc.
For vessel tracking and management.	Utilize	Ship tracking and management, navigation assistance, piloting, etc.

WHY mapsea SOLUTION?

Real-Time Capability

Provides land and sea safety monitoring and carbon emission management services using Spire's global real-time AIS data.

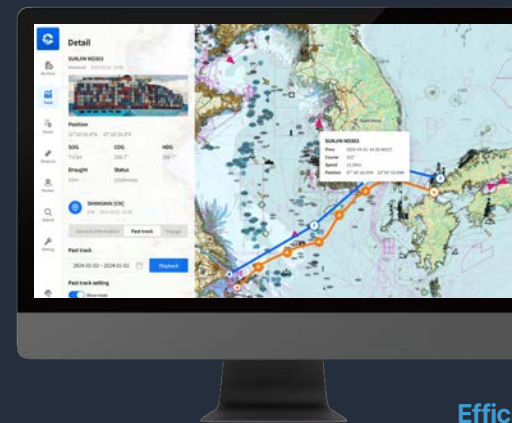


Convenience

Available as software, it can be used in various environments from land control to offshore navigation without the need for expensive equipment.

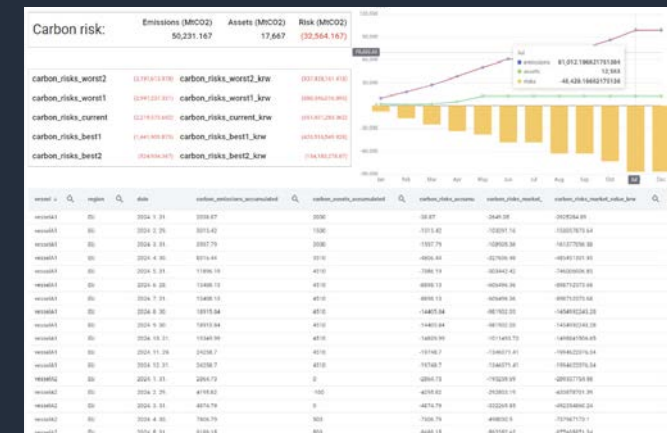
Reliability

Assists safe navigation decisions based on the latest official UKHO S-57 charts, which are automatically updated for free.



Efficiency

Enables efficient operations by integrating carbon emission management and carbon finance consulting based on accurate data.



mapsea
CONNECT

Simultaneous monitoring
of land and sea

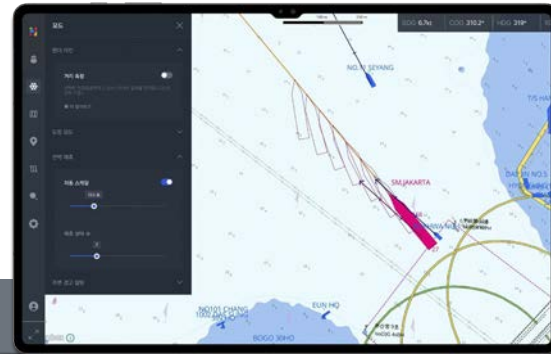
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NAVIGATION

mapsea NAVIGATION MAJOR FEATURES



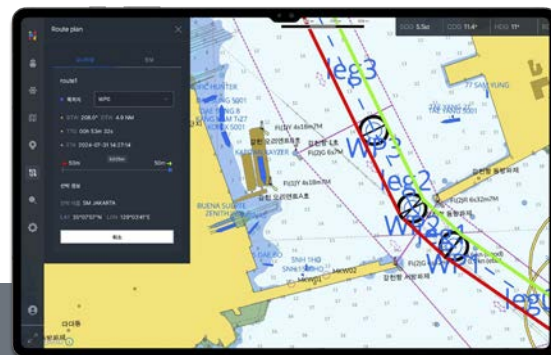
Fender Lines

- Detects and provides guidance on objects in close proximity to the vessel.
- ROT (Rate of Turn) information allows for the assessment of the vessel's angular velocity per minute.



Vessel Prediction

- Predicts navigation routes to assist in safe and rapid voyages.
- You can freely set the route prediction time and the number of vessels displayed to your preferred values.



Route Planning

- You can set your desired navigation route on the map.
- When entering the circular range of a set waypoint (WP), you will receive an alert.



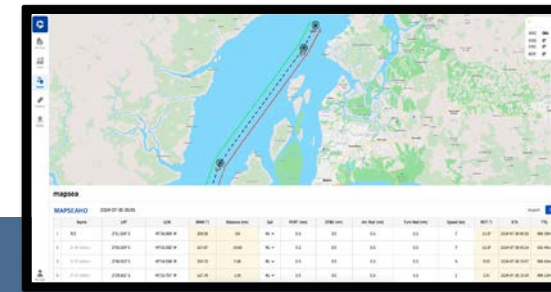
Alert Look-around

When a vessel enters the designated safety range, a collision warning sound and a warning window will appear.

Upcoming Major Features for Update

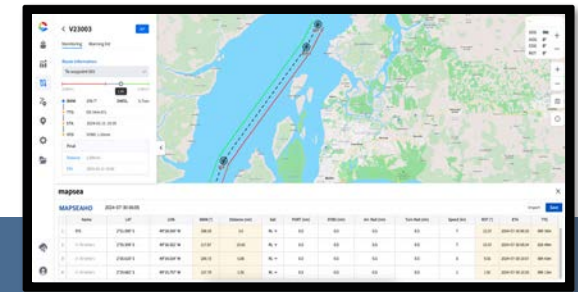
- ✔ Real-time weather data
- ✔ Real-time ETA/Dist-To-Go
- ✔ PSC checklist

mapsea CONNECT MAJOR FEATURES



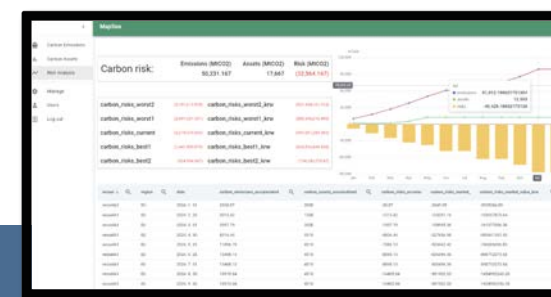
Route Planning

You can directly create the ship's route, import the route file extracted from ECDIS, and display it on the chart.



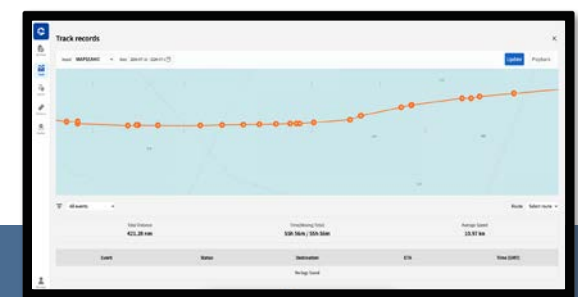
Route Monitoring

When issues such as deviation from the planned route or failure to enter WP within ETA occur in real-time, automatic notifications are sent to the person in charge.



MRV-ETS Consulting

It monitors the ship's carbon emissions and assists with carbon credit financial consulting.



Track record

You can view logs such as the route of the managed ship for the desired period, destination changed, status changed, etc.

Upcoming Major Features for Update

- ✔ Real-time weather data
- ✔ JIT, ETA, Voyage Optimization
- ✔ ECA Zone Tank Cleaning BWTS

Mapsea Solution **KEY ADVANTAGES**

Pilot's Pre-Route Information Check



- Provides direct route drawing and saving management/monitoring functions (screen recording, saving functions)
- Ability to pre-access routes based on real-time and latest official chart data

LIVE DATA ship search and position confirmation



- Real-time global ship search and position confirmation functions
- Accurate position confirmation and warning of approaching outside the range of nearby ships and own ship & designated range

Route Import & Route Deviation Alert



- Automatic import of ECDIS passage plan information & real-time route deviation alert management
- Safety management with automatic import of precise passage plan information and route deviation alerts
- Accurate route import and deviation alerts to prevent accidents in advance through real-time route information and deviation alerts

Official ENC automatic updates & free licenses

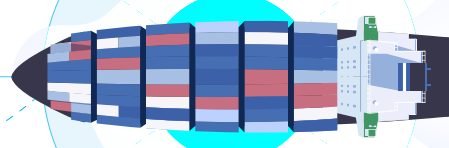


- Supports automatic updates and free licenses for the latest official electronic charts without additional costs
- Minimizes risks and enhances efficient safety prevention by pre-accessing mandatory data relationships between land and sea

Integrated Carbon Emission Solution



- Offers a comprehensive carbon emissions solution, including real-time carbon emissions monitoring and prediction, carbon asset valuation, carbon risk analysis, and carbon credit ordering in collaboration with financial institutions



PRICING AND SERVICE PLAN Information

mapsea NAVIGATION Package

The package includes:

- mapsea Tab (Galaxy Tab S9 + Samsung Knox Solution)
- Samsung Charging Adapter
- mapsea NAVIGATION Professional s/w 3-Month Subscription

Collaboration

Challenge the infinite possibilities of the oceans, which cover 71% of the Earth.

We anticipate collaboration in all areas, including innovative technology, sustainable marine development, and connecting humanity through the seas.

We look forward to meeting partners who will join us in shaping the future of the oceans.

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Website



LinkedIn



Youtube

Sustainability & Connectivity

Sending humanity to and connecting them through the unexplored 71%
of the Earth – the oceans, showing where we live and guiding the way forward.



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