

Company Profile

**GREENBLUE**  
주식회사그린블루

[www.green-blue.co.kr](http://www.green-blue.co.kr)





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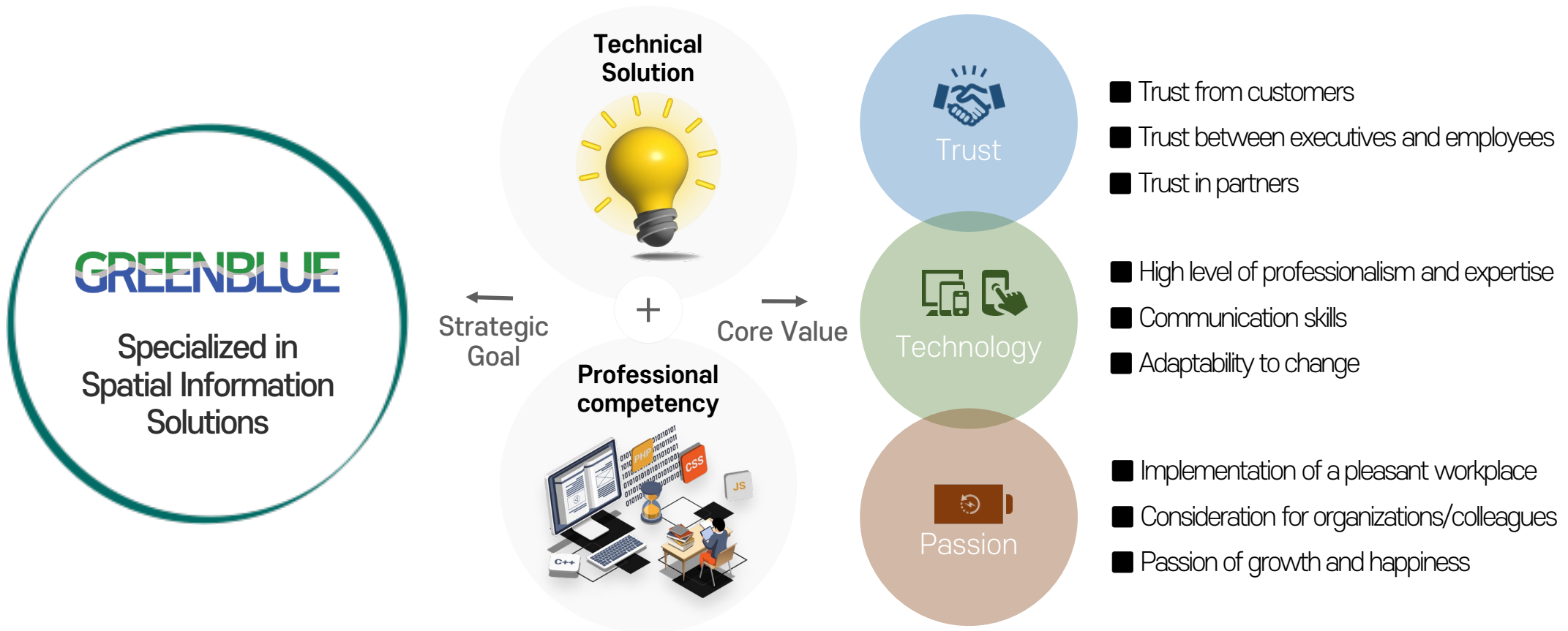
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## | Major Business Performance

1. Major Business Performance
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## GIS and solution made by “Youthful Perspective”

GreenBlue is to become a leading GIS company by fostering a culture of challenge and innovation through the delivery of innovative services and the sharing of core values by all employees.



GreenBlue is a GIS specialized company that creates new value and leads the future by converging various spatial information using the latest technology.



- Established 2017. 12. 1
- CEO Kim Jung Uk
- Employees 66 people (2023.12.31)
- Address Main Office : (Indeokwon IT Valley) 723, Building A, 40 Imi-ro, Uiwang-si, Gyeonggi-do, Republic of Korea  
Busan Office: 6th floor, 72, Chungjang-daero 5beon-gil, Jung-gu, Busan, Republic of Korea
- Business Area System Development Sector : GIS/Solution Development  
Surveying Sector : Hydrographic/Coastline Surveying,  
Land/Unmanned Aerial Vehicle Surveying  
Database Sector : Construction of Charts/Ocean Passage Pilot,  
Miscellaneous Chart  
Research Sector : R&D, ISP

## About Us



We find the value of all spatial information on a land and ocean and prepare for the future.



### System Development

- GIS Utilization Service
- GIS Management System
- S-100 Product Management
- National Defense Information System Development



### Surveying

- National Control Points Survey
- Unmanned Aerial Photography
- Sounding/Current Speed/Tidal Height Survey
- Submarine Topography / Fish Reef Survey
- Coastline/Passage Survey



### Database Construction

- National Spatial Data
- Digital Topographic Map
- Underground Facility DB
- Bathymetric Surface
- Chart/ Basic Maps of the Sea



### R & D

- Big-Data Utilization
- Marine Data Standards
- 3D Ship Navigation

# Company History

## About Us

2017

- **Established GreenBlue Co., Ltd.**
- Registration as Businesses for Software
- Small/Medium Business Verification

2019

- **Engineering Business (Cadastral Surveying)**
- Surveying Business (Other – Underground Facility Surveying)
- Construction Engineering Business (Design, Project Management-Design Services-Surveying)
- Construction Engineering Business (Design, Project Management-Design Services-Hydrographic Surveying)

2021

- **Marine Survey and Information Business (Hydrographic Surveying)**
- Marine Survey and Information Business (Ocean Observation)
- Marine Survey and Information Business (Marine Information Services)
- Startup Growth Package

2023

- **Engineering Business (Marine Engineering)**
- 2 Rotary-Wing USVs (Unmanned Surface Vehicles)
- Relocation of Research Institute to Busan

2018

- **Marine Survey Information Business (Nautical Chart Production Business)**
- Waterway Business (Hydrographic Surveying Business)
- Software Business Operator (Package Software Development and Supply)
- Software Business Operator (Computer-Related Services)
- Software Business Operator (Digital Content Development Services)
- Software Business Operator (Database Production and Search Services)
- Company-Affiliated Research Institute
- Academic and Research Services
- Surveying Business (Geodetic Surveying)
- Surveying Business (Other – Image Processing)
- Surveying Business (Other – Digital Map Production)
- Ultralight Aircraft Operation Business

2020

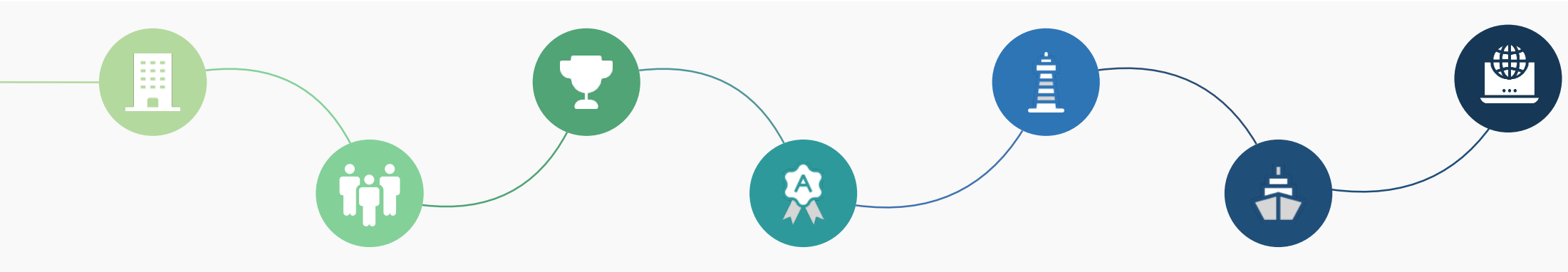
- **Surveying Business (Other – Spatial Imagery Mapping Services)**
- Acquisition of 2 Spatial Imagery Mapping Devices
- 2 Fixed-Wing UAVs
- Early-Stage Startup Package

2022

- **Surveying Business (Other – Coastal Surveying)**
- Overseas Construction Business (Construction Engineering)
- Green Blue (Hydrographic Survey Vessel)
- Excellent Job-Creation Company, Gyeonggi Province

2024

- **Engineering Business (Information Management)**
- Information and Communications Construction Business
- Renewed Certification as an Excellent Job-Creation Company by Gyeonggi Province
- Market Development Project Support (Overseas Contractors Association)
- Smart Village



# Company Structure

## Organization and Equipment Status

- **4** Direct Departments
- **2** Teams
- **11** Sub Teams





## Organization and Equipment Status

### Digital Map System



### Spatial Image Plotting System



### Image Processing System



### High-precision Map System



### Geodetic Survey



### Electronic Navigation Chart

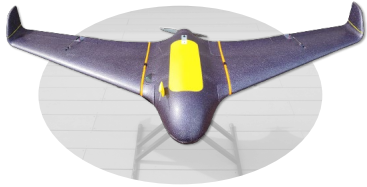


# Equipment

## Organization and Equipment Status

### Drone

Self-manufactured unmanned plane



- Drone system for photogrammetry
- Equipped with Full Frame Mirrorless Camera
- Production of centimeter-level Orthophotos

### Drone | PHANTOM 4

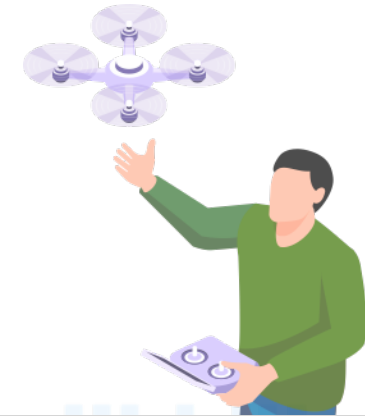


- 1/2.3 CMOS, 12.4MP  
(Max Image Size 4000 x 3000)

### Drone | MAVIC 3E



- 4/3 CMOS, 20MP, mechanical shutter
- Centimeter-level positioning (using RTK)



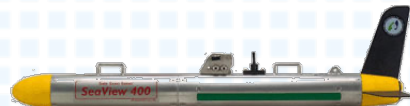
### Marine Research Vessel

GreenBlue



- Hydrographic survey
- Weight : 8.55 tons / Length : 12.30 m
- Passengers : 10 people(Max)

### Side Scan Sonar | Seaview 400



- Seafloor video exploration  
(taking high-resolution seabed images)

### Total Station/Level



- Total Station TS13
- Theodolite DT300
- Digital Level DiNi 03, LS 15 etc.

### Digital Photogrammetry Plotter



- Create a map by reading and describing terrain and other features in two overlapping aerial photographs

### Sub Bottom Profiler | Z-TAM III



- Exploration of shallow strata  
(Identification of marine stratigraphic structure without drilling)

### Multi-beam | R2sonic 2022



- Multi-beam echo sounder  
(Bathymetric surface survey and exploration of seabed topography)

### Underground Facility Detector



- Metal pipe detector (MPL-H10S)
- Manhole detector (MD-3010 II)

### GNSS Recexture | GR-10



- 555-ch GPS, Glonass, Gallileo, SBAS, QZSS
- Integration reference point survey, public survey, status survey

# Field/Hydrographic Survey

We support a variety of convergence services and new industries by establishing high-quality national spatial information through high-precision surveying of the entire country and ocean.

## ✓ Field/Underground Survey

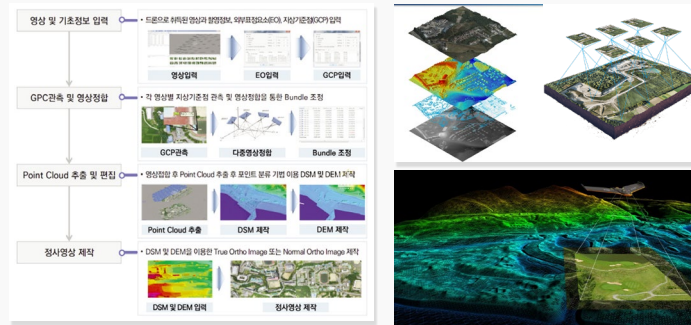
We measure the locations of land, resources, facilities and environment in national space and construct highly usable maps.

- # Geodetic Reference Point Survey
- # Underground Facility Survey



▲ Survey and Exploration of Land / Underground Facilities

▲ Computerization Work and DB Construction



▲ Unmanned Aerial Survey Work Process

## ✓ Unmanned Aerial Vehicle Survey

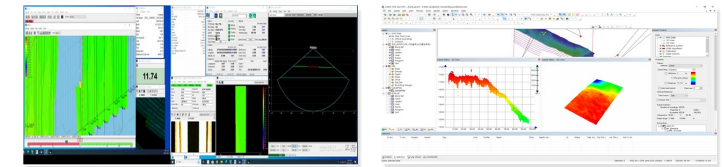
We produce orthoimages, digital surface models, and digital topographic maps using aerial photos taken with unmanned aerial vehicles.

- # Unmanned Aerial Survey
- # Orth Video
- # 3D Modeling
- # Digital Map

## ✓ Hydrographic Survey

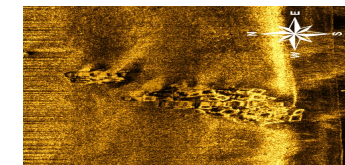
We conduct a detailed marine survey to determine the bathymetry, nature of the seabed, and any hazards to navigation.

- # Bathymetry
- # Coastline
- # Seabed



▲ Acquisition of Multi-beam Data

▲ Multi-beam Data Analysis



▲ Seabed Video Recording



▲ Marine Environment Measurement

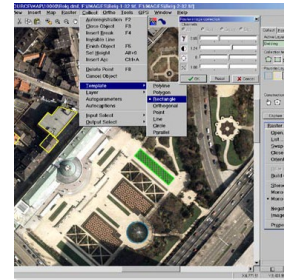
Core Competencies

# Spatial DB Construction

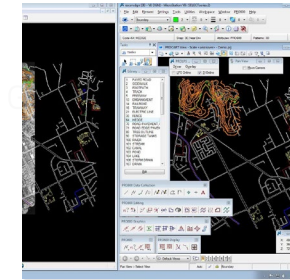
We are building high-quality geospatial information that is used in everyday life and in establishing national policies.

## Digital Topographic Map

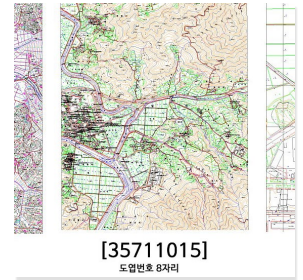
1/1,000 Large Scale Map  
1/5,000 National Base Map



▲ Numerical Plotting



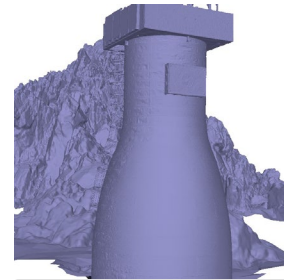
▲ Position Correction And Structured Editing



[35711015]  
도읍번호 표기  
▲ Map Production

## Video Production

DSM(Digital Surface Model)  
3D Modeling  
Orthoimage Production



▲ DSM



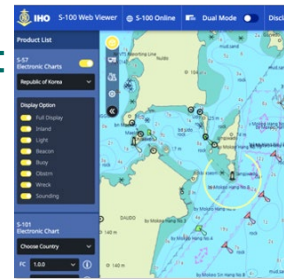
▲ 3D Modeling



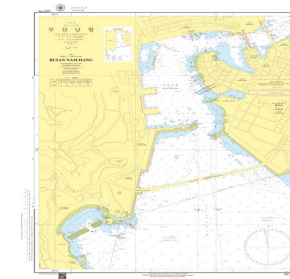
▲ Orthoimage Production

## Chart/Miscellaneous Chart

Electronic Chart  
Paper Charts  
Fishing Information



▲ Electronic Navigation Chart



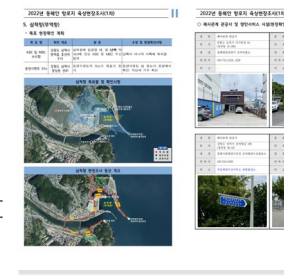
▲ Paper Chart



▲ Information Map for Fishing

## Ocean Passage Pilot

Literature/Field Survey  
Request of Notice to Mariners  
Production of Ocean Passage Pilot



▲ Literature/Field Survey



▲ Report of Notice to Mariners



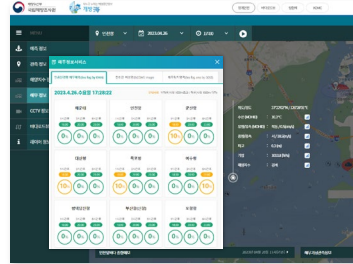
▲ Production of Ocean Passage Pilot

# GIS System Development

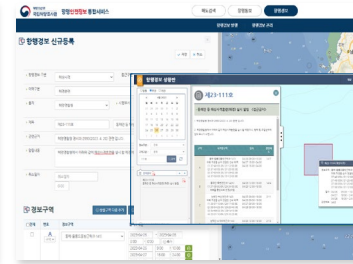
Greenblue develops GIS systems that allow many users to utilize and manage spatial information based on maps.

## ✓ Marine Information Management and Provision

We are building and operating a marine information service that shares and utilizes real-time navigation warnings, notice to mariners information, oceanographic observation, and forecast information for safe navigation.



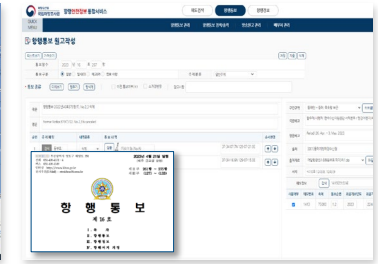
▲ Provision of Port Oceanographic Information



▲ Provision of Real-time Navigation Warnings



▲ Provision of Ocean Data in Grid Framework

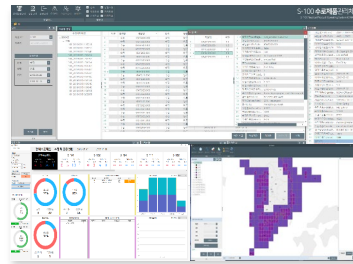


▲ Issuance/Management of Notice to Mariners

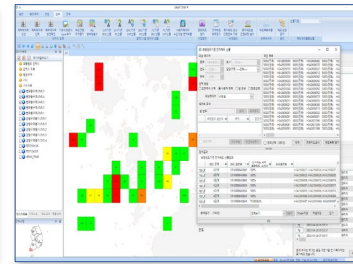
# Navigational Warning Board Service # Notice to Mariners Service # Ocean Data in Grid Framework # Information Service # OceanMap/Port Oceanographic Information System

## ✓ S-100 Standard

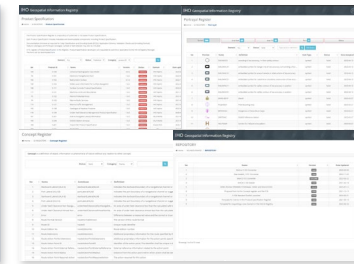
We are developing a system that integrates and manages the data of the Universal Hydrographic Data Model(S-100) and supplies it for quick use in navigation, and is building a simulation and data sharing and utilization system for the development of the latest standards.



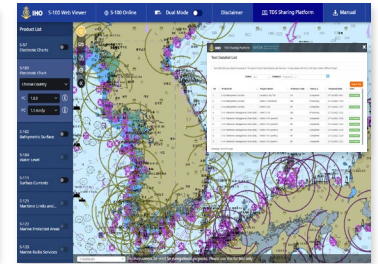
▲ S-100 Product Management System



▲ Chart Production Quantity Calculation Analysis



▲ S-100 Framework



▲ S-100 Web Viewer

# S-100 Product Management System # Nautical Chart Smart Chart # IHO S-100 Standardization Registry # IHO S-100 Web Viewer Service

Core Competencies.

# R&D

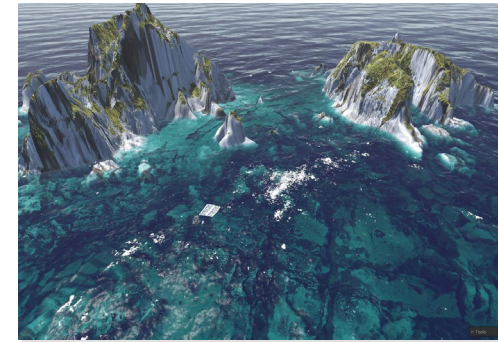
We develop core technologies that can converge in various fields through research and development in the fields of S-100 products, big data, and artificial intelligence.



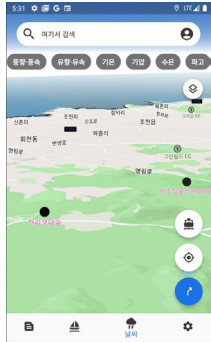
## ✓ Ship Navigation

For safe navigation, we provide a 3D visualization map service using various marine information, and we build and operate a 3D marine information service using various multi-platforms.

# Development of 3D Sea Navigation Service for Small Ships



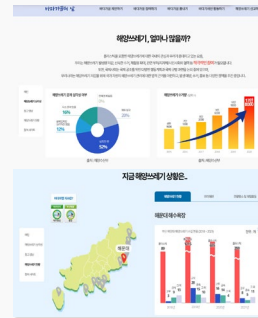
▲ 3D Visualization



▲ Mobile navigation



▲ City in Crisis



▲ Sea Dream Day

## ✓ Marine Big-Data

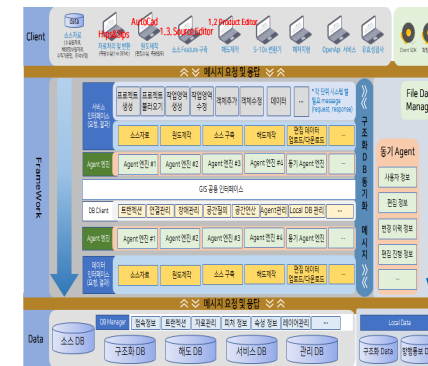
We provide consumer-oriented, high-value data production and innovation services through convergence, analysis, and processing between public data and private data centers in the coastal sector.

# Innovation Service Based on Big-Data

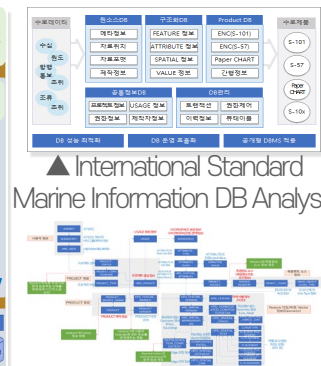
## ✓ S-100 Core Technology

To create a marine information industry ecosystem, we are researching the localization of national GIS core technology based on S-100 and the use of marine GIS services.

# Research on Localization of National GIS Core Technology Based on S-100



▲ Research Content and Structure



▲ International Standard Marine Information DB Analysis  
▲ Marine Integrated DB Design

# Main Business Performance

Sector	Project	Client
System Development	Development of Port Oceanographic Information service	Korea Hydrographic and Oceanographic Agency
	Development of a marine forecast decision support system	Korea Hydrographic and Oceanographic Agency
	Development of the Navy's integrated maritime information system	The Armed Forces Management Corps
	Development of Notice to Mariners Service management system	Korea Hydrographic and Oceanographic Agency
	Development of the International Hydrographic Organization (IHO) work support system	Korea Hydrographic and Oceanographic Agency
	Development of S-100 products management system	Korea Hydrographic and Oceanographic Agency
	Maintenance of the Comprehensive Marine Information System	Korea Hydrographic and Oceanographic Agency
	Improvement of the Marine Information Utilization System	Korea Hydrographic and Oceanographic Agency
	Opening of GIS-Based Marine Information and Marine Safety Information Databases	Korea Hydrographic and Oceanographic Agency
Academic Research	Research on Next-Generation Hydrographic Information Standards	Korea Hydrographic and Oceanographic Agency
	Research on International Cooperation and Promotion Strategies with the IHO	Korea Hydrographic and Oceanographic Agency
	Research on Technical Standards for Nautical Publications in Response to International Guidelines	Korea Hydrography and Research Association
	A Study on the Improvement Quality and Utilization of Nautical Chart	Korea Hydrographic and Oceanographic Agency
	Efficiency of Nautical Chart Inspection Methods and Research on Improving Utilization of Electronic Navigational Charts (ENCs)	Korea Hydrographic and Oceanographic Agency
Hydrographic Survey	Coastline change investigation and monitoring	Korea Hydrographic and Oceanographic Agency
	In-depth investigation of coastal waters	Korea Hydrographic and Oceanographic Agency
	Port sea area precision hydrographic survey	Korea Hydrographic and Oceanographic Agency
	Antarctic marine survey and chart production	Korea Hydrographic and Oceanographic Agency

# Main Business Performance

Sector	Project	Client
DB Construction	Establishment of integrated national basic map	National Geographic Information Service
	Production of east/south/west coast charts	Korea Hydrographic and Oceanographic Agency
	Production of miscellaneous chart	Korea Hydrographic and Oceanographic Agency
	Construction of bathymetric surface (S-102) in major sea areas	Korea Hydrographic and Oceanographic Agency
	Production of Digital Marine Information and Marine Base Maps	Korea Hydrographic and Oceanographic Agency
	Production of Korea Coastal Route Chart	Korea Hydrographic and Oceanographic Agency
	Development of Coastal Flood Forecast Maps	Korea Hydrographic and Oceanographic Agency
	Orthophoto (Orthoimagery) Production	Korea Hydrographic and Oceanographic Agency
	Construction of High-Precision Road Maps for Public Mobility Support	Korea Hydrographic and Oceanographic Agency
Overseas Projects	Market Development Project Support (Bengkulu, Indonesia)	International Contractors Association of Korea
	Market Development Project Support (Sidoarjo, Indonesia)	International Contractors Association of Korea
R&D	Research on establishing a coastal big data platform and center	National Information society Agency(NIA)
	Establishment of Application System for Managing Indonesia's Water Using Korea's Geostationary Satellite	Korea Hydrographic and Oceanographic Agency
	Research on localization of national marine GIS core technology based on S-100	Korea Institute of Marine Science & Technology Promotion(KIMST)
	Research on 3D sea navigation service based on S-100	Ministry of SMEs and Startups
	Research on the development of crowdsourcing-based marine survey technology using sailing vessels	Korea Hydrographic and Oceanographic Agency
	Development of Hydrographic Information Standards for Smart Ships	Korea Institute of Marine Science & Technology Promotion
	Data-Driven Intelligent Marine Environment Management Platform	Busan Metropolitan City

## Central Government



## Public Institutions



## International Organization/ University/ Research Institute





## Contact Us

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