

Potential for Expanding Satellite Data-Driven Businesses into Europe

24 September, 2026
Center for satellite intelligence service
Nippon Koei Co., Ltd.





熊 須 五朗

Goro KUMASU

Assistant General Manager

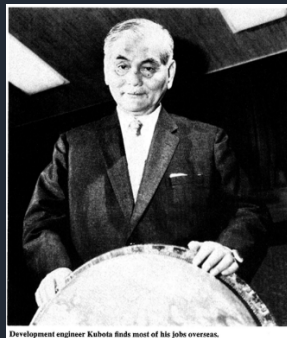
Center for Satellite Intelligence Service
Nippon Koei Co., Ltd.



ID&E Group Management Policy

Act with integrity and contribute to society through technology and engineering.

Amidst a society that is changing faster than we can imagine and ever more complex social challenges that are arising as a result, the ID&E Group has made it the core of its business to resolve issues with sincerity. At the root of this lies the pioneering spirit to tackle new businesses possessed by Yutaka Kubota, the founder of Nippon Koei, and our history of growth up to the present by continuing to provide solutions based on the accumulation of knowledge represented by technology and engineering.



Founder of Nippon Koei Co., Ltd.
Yutaka Kubota

Development engineer Kubota finds most of his jobs overseas.

Our Aims

Mission

Make the World a Better Place

Always maintaining high aspirations, we will work hard to improve our skills, and provide services based on our accumulated technological capabilities

Vision

Providing Unique Value as a Company

Evolving into a cohesive, global corporate group
Top class worldwide by 2030

Values

Tackle your problems with sincerity and the road ahead shall be clear.

“Willingness to Try” “Valuing Speed”
“Entrepreneurial Mindset” and “Stakeholder Satisfaction”

Organization focused on Satellite Data Utilization Business

As of June 1, 2025



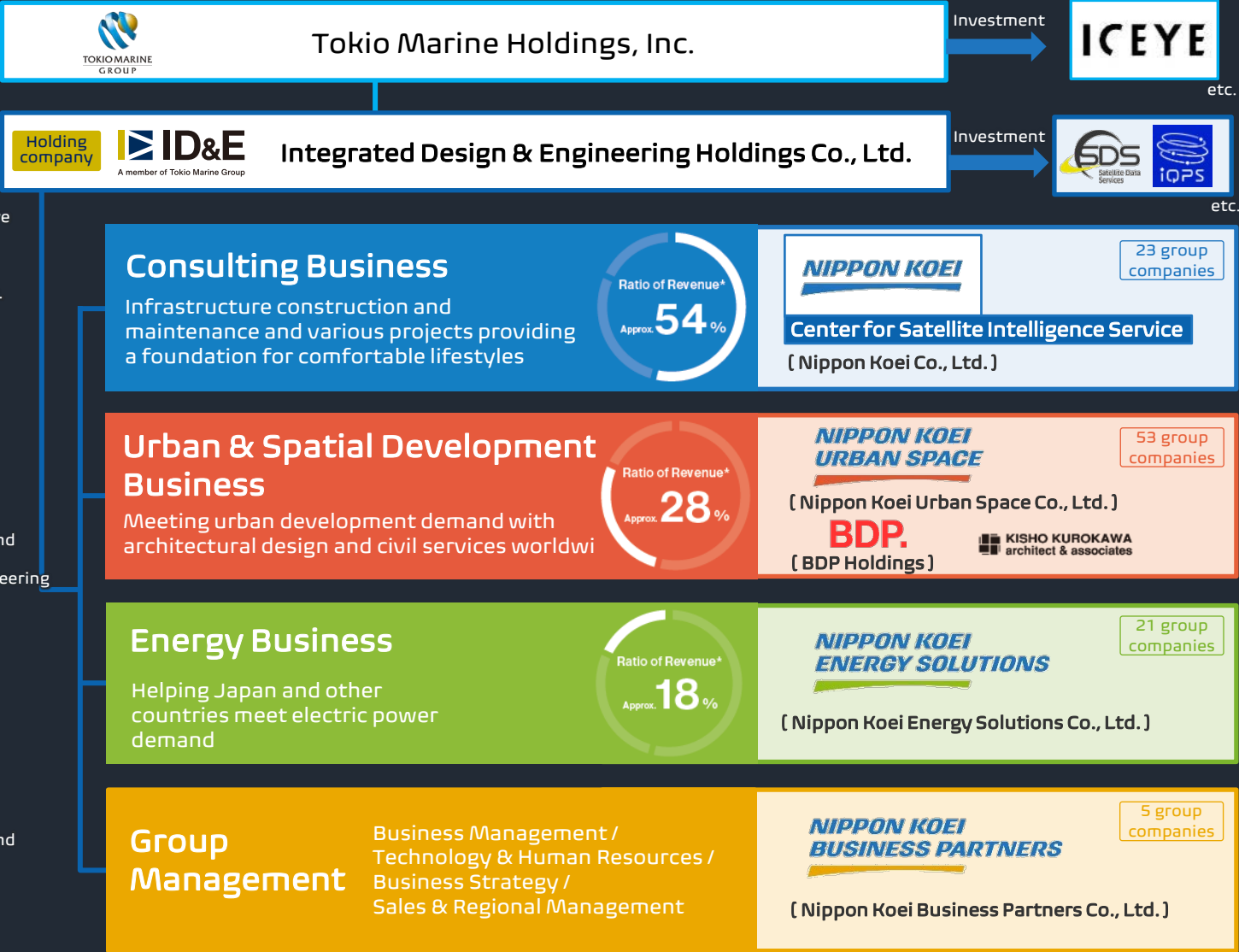
Masahiro Koike
President & Chief Executive Officer
(Representative Director),
Group CEO, Group CCO
Tokio Marine Holdings, Inc.



Hiroaki Shinya
Representative Director and
President
Integrated Design & Engineering
Holdings Co., Ltd.



Tomohisa Fukuoka
Representative Director and
President
Nippon Koei Co., Ltd.



at a glance of ID&E

Established 1946* **Number of Staff** Approx. 6,700

Sales in Japan
Ranked No.1 in Sales in Japan's Civil Engineering Consulting Industry
* Source: "Sales ranking of engineering consulting firms in Japan," Nikkei Construction, April 20, 2025

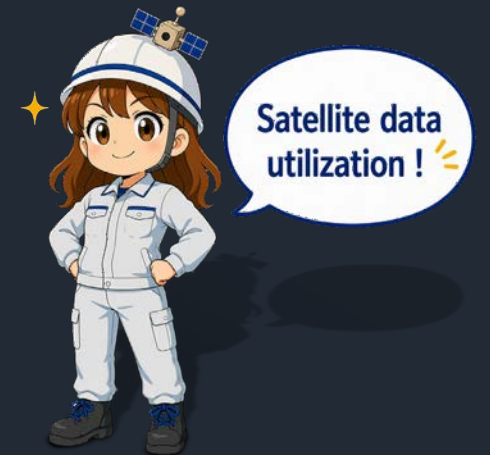
Overseas sales ratio Approx. 45% **Revenue** Approx. 198 billion yen

Operations Over 160 countries and regions **Number of projects per year** Approx. 9,000

Chaos MAP of CONSEO

As of September, 2026

CONSEO created a chaos map, in which we are positioned under the category of “Satellite Data Utilization.”



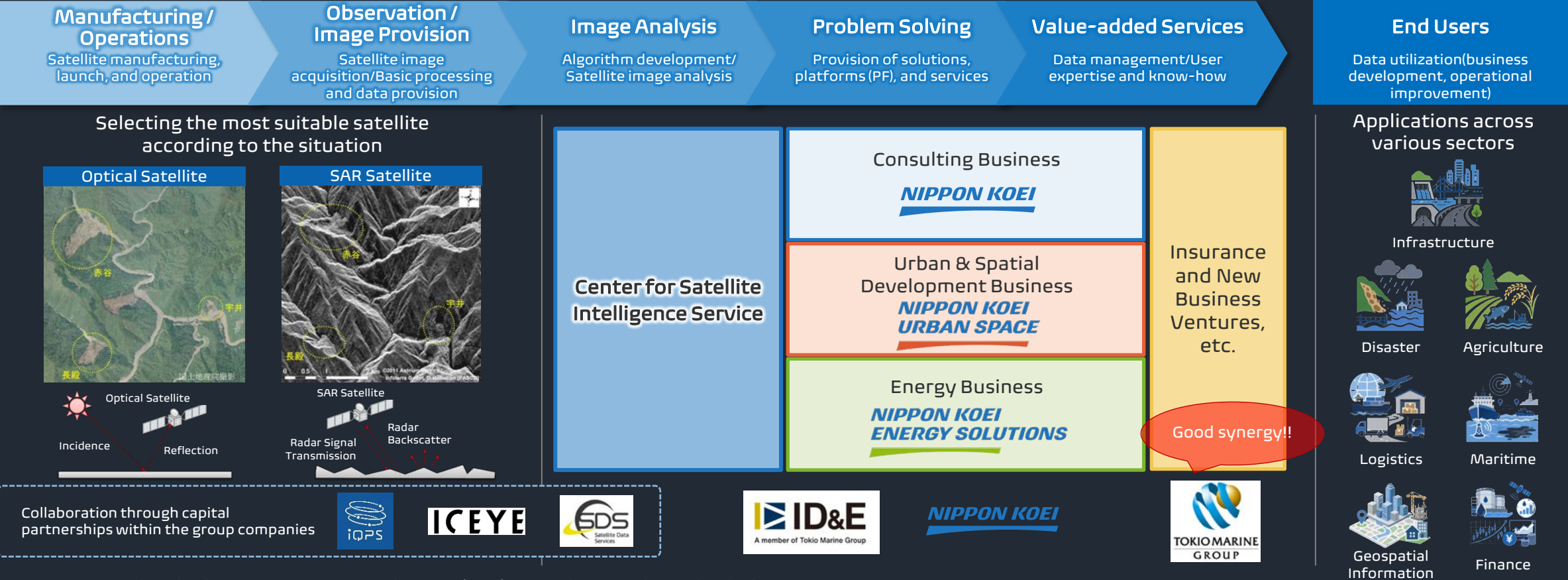
Source: jaxa (https://earth.jaxa.jp/conseo/news/20260824-1/EN_khaosMAP.pdf)

Satellite Data Initiatives of Center for Satellite Intelligence Service

Creating Safe and Resilient Communities

Leveraging our expertise in infrastructure, we are uniquely positioned within the satellite data business value chain to provide not only data analysis, but also post-analysis interpretation, problem-solving, and value-added services.

Satellite data business value chain

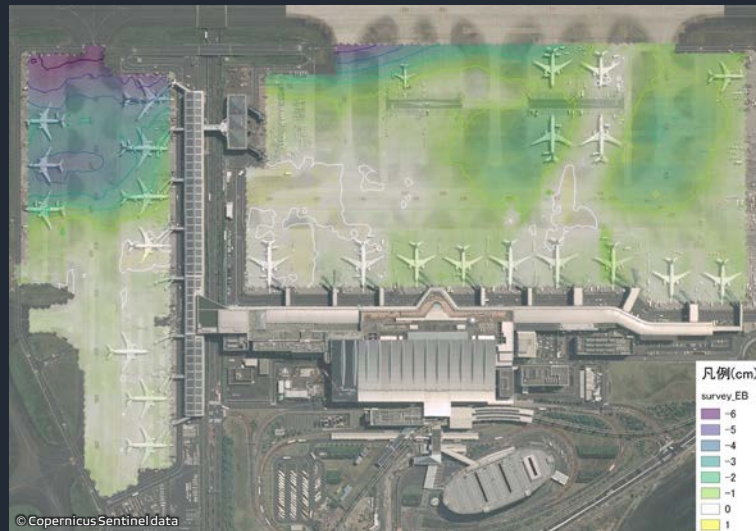


Source: Ministry of Land, Infrastructure, Transport and Tourism (MLIT), National Institute for Land and Infrastructure Management (NILIM) (<http://www.nilim.go.jp/lab/bcg/siryou/tnn/tnn0760pdf/ks076005.pdf>)

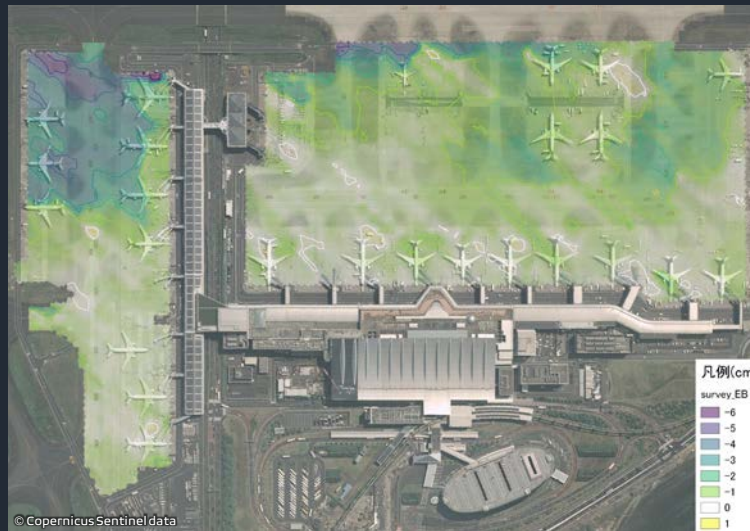
Use case: Airport Management (C-band Case)

Advanced Airport Maintenance and Management

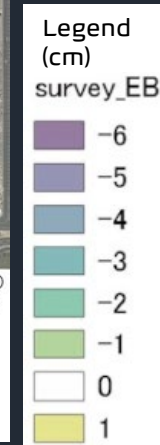
- Airport facilities must regularly monitor and maintain structural integrity to ensure safe and reliable operations for users. Surveying and inspecting airport facilities, which cover vast areas, requires significant labor and cost.
- High-density, high-accuracy observations have become possible even for facilities where conventional methods could not provide measurement values.
- This approach is useful for identifying potential deformation areas and for routine monitoring as a primary screening tool.



Survey Results



SAR Analysis Results



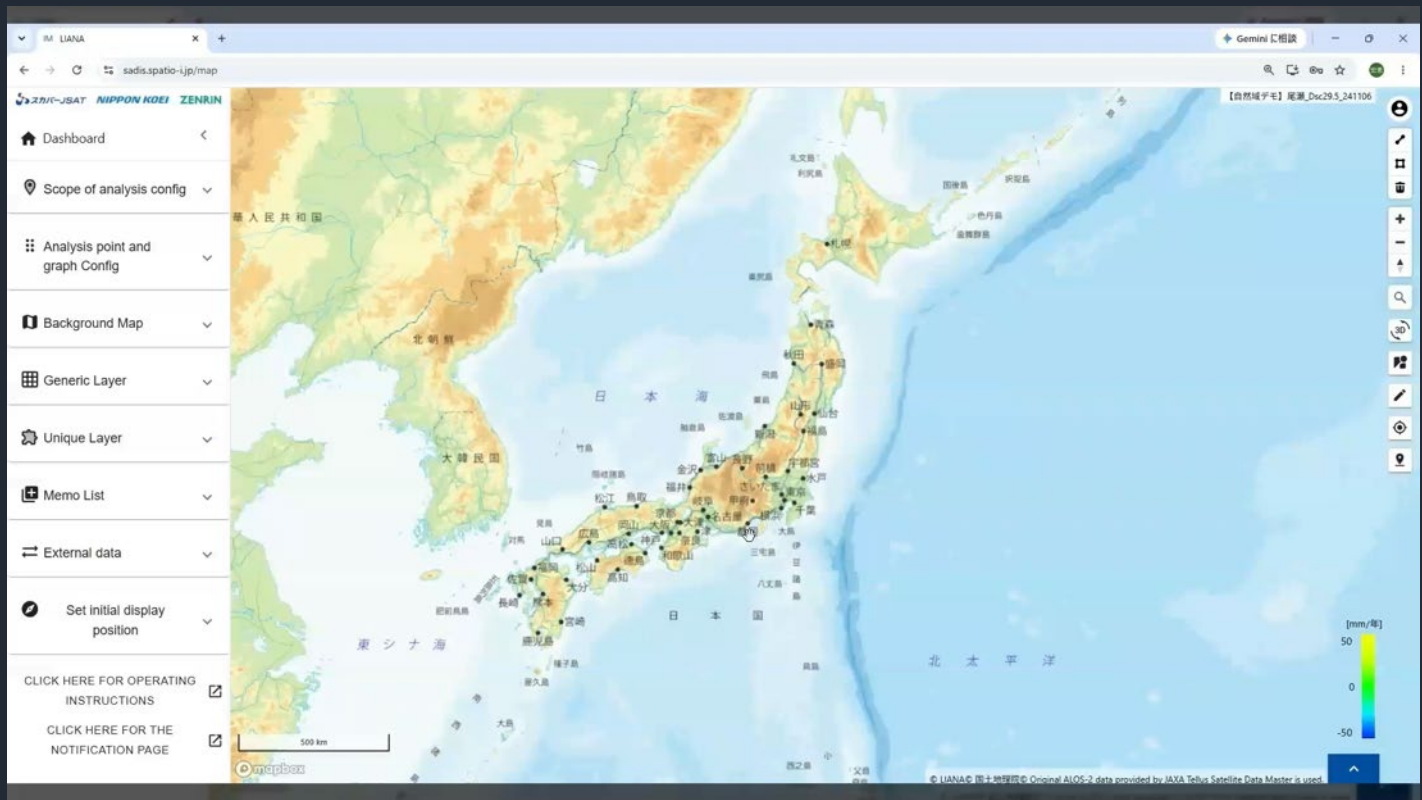
Purple → Blue → Green indicates increasing settlement tendency in that order

Source: Advanced Satellite Remote Sensing Data Utilization Demonstration Project for Solving Societal Challenges, Fiscal Year 2020.

Satellite Data Initiatives of Center for Satellite Intelligence Service

Routine Maintenance and Asset Management

Monitoring Service 「LIANA®」



LIANA is a collaborative service developed by Nippon Koei Co., Ltd., SKY Perfect JSAT Corporation, and ZENRIN Co., Ltd.



Visualize deformation of infrastructure assets and slopes using satellite data
Support early risk detection and mitigation planning

ALOS-2 & 4

POINT 01

Minimum area at low cost

Reduce survey and inspection costs compared with conventional methods

POINT 02

Historical archive data available

Visualize long-term ground deformation trends since around 2014

POINT 03

Detect subtle ground movements

Measure deformation at Millimeter-to-Centimeter scale

POINT 04

User-friendly interface

Easy-to-understand visualization of deformation trends through 3D Displays



“LIANA” is a trademark registered in Japan only and may not be available for use in other countries or regions.

Integrated Insurance and Satellite Solutions for Disaster Resilience

Implementing agency name

※Bold: Representative organization, Regular: Collaborative organization

Tokio Marine Resilience Co., Ltd., Nippon Koei Co., Ltd., ABeam Consulting Ltd.

Overview

Business Model for Integrated Insurance and Satellite Solutions

This project aims to establish a business model that integrates satellite data-based GEOINT solutions into insurance products, providing seamless support from normal times to disaster events, including risk assessment, damage assessment, and recovery assistance.

By using satellite data for risk monitoring, rapid post-disaster damage detection, and recovery planning, the project will contribute to early response and “Build Back Better.”

To realize this phase-free solution, the project will develop and demonstrate:

1. Resilience assessment in normal times;
2. Damage assessment and monitoring after disasters; and
3. Recovery planning and triage, supported by a GEOINT service platform.

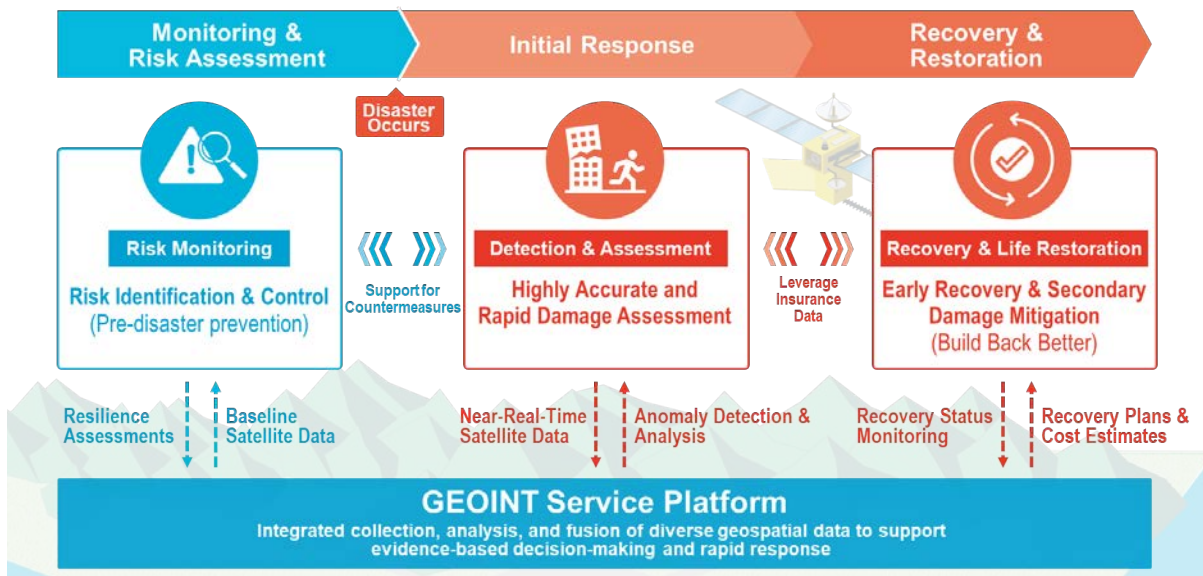
Implementation period (planned)

※Varies depending on stage gate evaluation, etc.

From the date of grant decision for two years

Point of Contact for international communication

Please contact us using the QR code on the right.

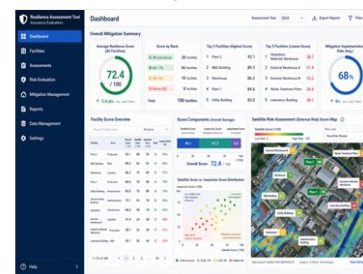


Target Outcome Overview

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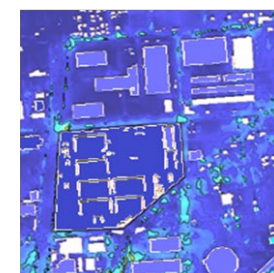
Resilience Assessment

Monitoring, Assessment, Anomaly Detection



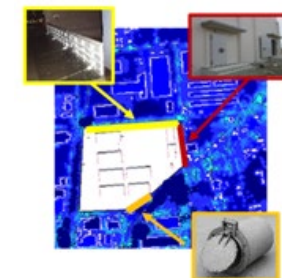
Damage Assessment

Damage Status Assessment



Recovery Plan

Triage of Recovery Areas



©Tokio Marine Resilience Co., Ltd.

Technology Development Output Overview

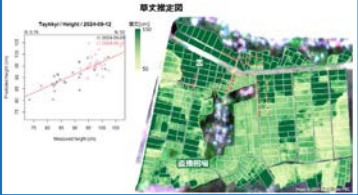
Recent Major Project Achievements using satellite data

Ukraine: Information Gathering and Verification Survey to Support Ukraine's Recovery in the Agricultural Sector(JICA, 2022)

Sentinel-2
(2021/06~08 - 2022/06~08)



Myanmar: Crop Growth Monitoring (R&D) (Private Sector, 2024-)



Global: Rapid Survey Services for Disaster Recovery Support (JICA,2026-2029) (Standby Contract)

Africa, Thailand and Laos: Data Collection Survey on Hydrological Data Collection and Analysis by Utilizing Digital and Space Technology in Africa (JICA, 2025)

Pakistan: Das Hydropower Project Detailed Design (World Bank,2023)

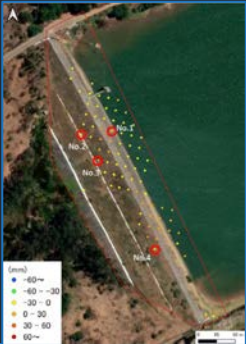
Malaysia: Time-Series Analysis of Satellite Data for Flood & Mudslide Monitoring (NIED, 2022)

Indonesia: Aceh Tunnel & Road Route Selection (Private Sector, 2026)

Philippines: Typhoon Damage Detection in Mangrove Forests (Private Sector,2023)



Honduras: Preparatory Survey for Bridge Construction on National Highway No. 6 (JICA,2022)



Brazil: Time-Series Interferometric SARAnalysis (Private Sector,2022)

As of FY2025

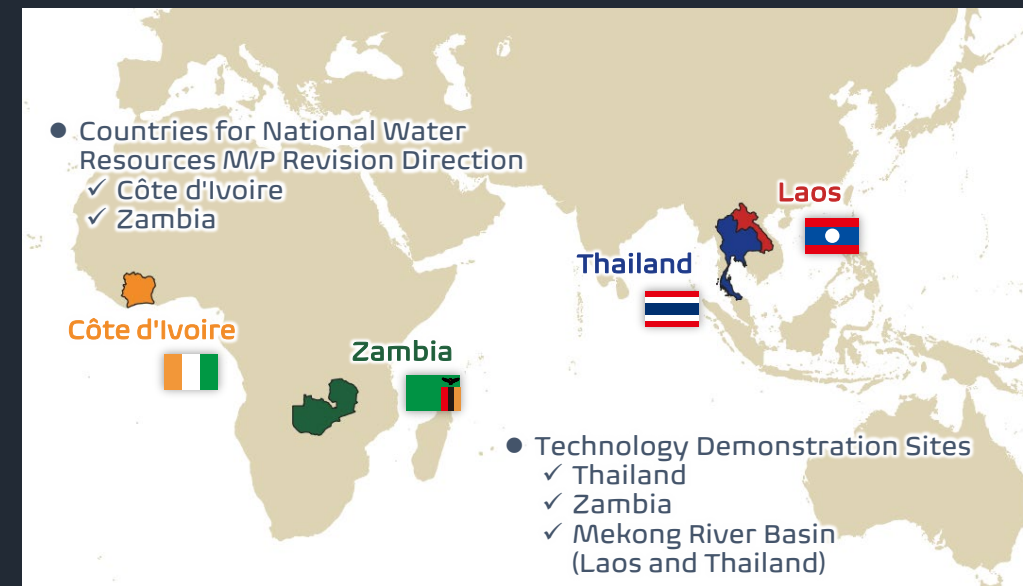
JICA Survey on the Potential Use of Digital and Space Technologies

◆ JICA Survey: Data Collection Survey on Hydrological Data Collection and Analysis by Utilizing Digital and Space Technology in Africa

JV of Nippon Koei Co., Ltd. and Deloitte Tohmatsu LLC, Period: May 2025 – February 2026

◆ **Background:** In Sub-Saharan Africa, **limited hydrological and meteorological data constrain water resources planning**. Recent advances in **digital and space technology** enable the estimation of rainfall and the visualization of water use, allowing more **efficient water resources planning even in data-scarce countries**.

◆ **Purpose:** Using previously formulated national water resources master plans (M/Ps) as reference cases, this survey explores future opportunities in the water sector through the application of Japan's digital and space technologies.



Technologies from five Japanese companies were selected through an open call.

ArkEdgeSpace

- ✓ Demonstration of remote hydrological observation using IoT water level sensors with satellite communication, and ground-based validation of GSMap rainfall accuracy within the river basin.
- ✓ Thailand
- ✓ Rainfall, river water level

ME-Lab Japan

- ✓ Estimation of rainfall and river discharge using physical simulation and satellite observation, with bias correction using ground observation data. Analysis results were deployed as an application, and needs were collected from relevant organizations.
- ✓ Zambia
- ✓ Rainfall, river discharge

Gaia Vision

- ✓ Quantitative validation of river water level and river discharge estimates derived from the next-generation satellite SWOT and the flood inundation model CaMa-Flood.
- ✓ Mekong River Basin (Laos, Thailand)
- ✓ River water level, river discharge

SPACE SHIFT

- ✓ Verification of the correlation between building area data and water demand data using satellite data and an AI-based building detection algorithm.
- ✓ Zambia
- ✓ Water demand estimation

HONDA

The Power of Dreams

- ✓ Verification of a rainfall estimation algorithm using connected vehicle data collected through in-vehicle sensors and communication modules.
- ✓ Thailand
- ✓ Rainfall

About BDP

BDP is a global architecture, engineering and design practice.

- 60+ years' experience
- Joined Nippon Koei in 2016
- 1000+ design awards
- Expertise across 12 sectors

Our purpose:
To design a world that' build for good

19 Studios.
14 Professions.
12 Sectors.
6 Regions.
One BDP.

- UK

Birmingham

Bristol

Cardiff

Edinburgh

Glasgow

Leeds

Liverpool

London

Manchester

Sheffield
- Europe

Dublin

Rotterdam

North America

New York

Toronto

South America

Lima

Europe

Dublin

Rotterdam
- MENA

Abu Dhabi

Asia Pacific

New Delhi

Mumbai

Shanghai

Singapore

Australia

Brisbane



Sport: Everton FC Stadium, UK



Retail & Mixed Use: The Well, Canada

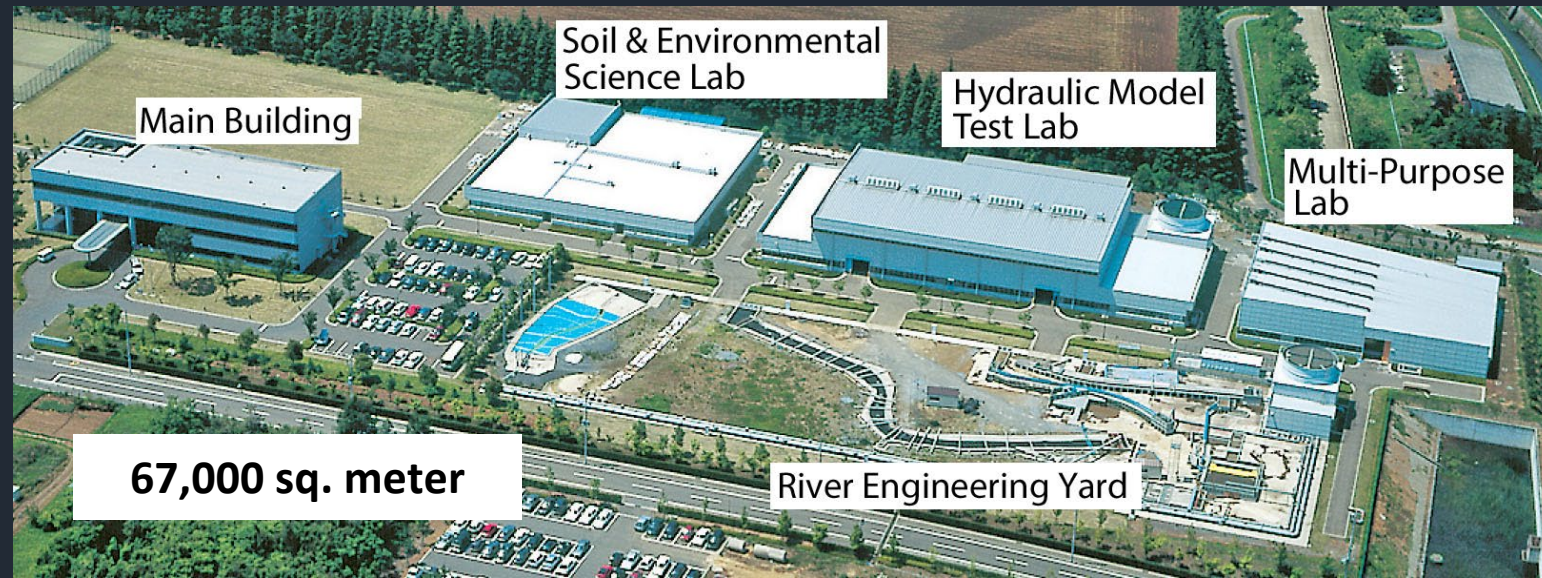


Science & Technology: CTTQ R&D, China



	Resilient Design
Prevention	Resilient building, structures and landscape design to help counteract the impact of an extreme weather events.
Response	Urban strategy to build back better
Recovery	Transport planning Rebuilding places and communities

State-of-the-Art R&D Center in Tsukuba



SATELITE

- Infrastructure Facility Monitoring
- Extraction and Monitoring of High-risk Landslides
- Monitoring of Slope Fluctuation



MR & VR

- Seamlessly Integrates Real and Virtual in the Field of Disaster Prevention
- Realistic Simulated Experiences from the Results of Disaster and Traffic Forecasting Simulations



AI

- Predicting Unexperienced Floods
- Deep Learning and Automation of Landslide Topography Reading Technique
- Traffic Safety Countermeasures



RPA - Robotic Process Automation

- Making Efficiency of Our Daily Operation as well as Project Operation



Thank you.

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Center for Satellite Intelligence Service
Nippon Koei Co., Ltd.



Goro KUMASU
NIPPON KOEI CO.,LTD.-Assistant
general manager, Center for satellite...



ID&E Group Launched
LinkedIn Account

