

February 8, 2022
Tokio Marine Holdings, Inc.

Strategic Investment in and Commercial Collaboration with ICEYE Finland

Expanding Business Offerings Utilizing Satellite Data

Tokio Marine Holdings, Inc. (President and Group CEO: Satoru Komiya, hereinafter referred to as “TMHD”) and Finland-based ICEYE (CEO : Rafal Modrzewski, hereinafter referred to as “ICEYE”) are pleased to announce that both companies have entered into a capital and business alliance, aiming to further advance our insurance claim services as well as develop new products utilizing earth observation data collected from satellites (hereinafter “satellite data”).

1. Background and Purpose

The impact of increasingly frequent and severe natural disasters and climate change have become global social issues. Hopes and expectations are growing for the role to be played by various data and technologies such as AI and IoT in helping to resolve such issues.

The Tokio Marine Group has been utilizing technology to make prompt insurance payments in order to provide customers with a sense of safety and security as quickly as possible. In the event of large-scale flooding, satellite data and AI can be used to determine the inundation range and height within just a few hours after the disaster.

ICEYE is a company with integrated technology for the production, maintenance, and operation of the SAR satellites (*1) and has advanced satellite imagery analysis capabilities. As of January 2022, ICEYE has launched a total of 16 in-house SAR satellites, the world's largest number of satellites in the private sector. These satellites provide high-precision data to governments and companies around the world, regardless of the weather conditions or time of the day.

Since December 2020, Tokio Marine & Nichido Fire Insurance Co., Ltd., a member of the Tokio Marine Group, and ICEYE have been collaborating to improve insurance claim payments in the event of floods (*2) and to establish a support system for local governments and volunteer groups in the case of such events (*3). To further advance this collaboration and to work together to solve various social issues, TMHD has decided to conclude a capital and business alliance agreement with ICEYE.

*1 The SAR (Synthetic Aperture Rader) satellite is a satellite equipped with a special radar which can observe at night and in places covered with clouds.

*2 Collaboration with three satellite companies. Efforts to improve insurance payments using satellite data.(December 29, 2020)

https://www.tokiomarine-nichido.co.jp/company/release/pdf/201229_01.pdf (In Japanese)

*3 Collaboration with the NPO National Disaster Volunteer Support Group Network (December 23, 2021)

https://www.tokiomarine-nichido.co.jp/company/release/pdf/211223_01.pdf (In Japanese)

2. Future Major Initiatives

With ICEYE's capability for high precision imagery and its unique 「Daily Coherent Ground Track Repeat (*4)」 capabilities, combined with its specialized team dedicated to the insurance field, Tokio Marine Group and ICEYE will collaborate to solve various social issues by jointly promoting digital transformation in insurance claims services and developing new insurance products and services related to early warning and rapid response to natural disasters.

[Key Initiatives]

① Advanced Insurance Claims Services in the Event of a Wind Damages

When a windstorm occurs, it is particularly difficult for customers to take photographs of the damage to the roof, and it takes time to grasp the extent of the damage and arrange for a repair company. In collaboration with ICEYE, we will establish a system to estimate the presence and extent of roof damage by analyzing various data such as satellite data and wind velocity. By proactively identifying the occurrence of roof damage caused by windstorms based on satellite data, we can help our customers quickly restore their lives by arranging for repair contractors and expediting repair work.

② Enhancement of Various Services at International Group companies

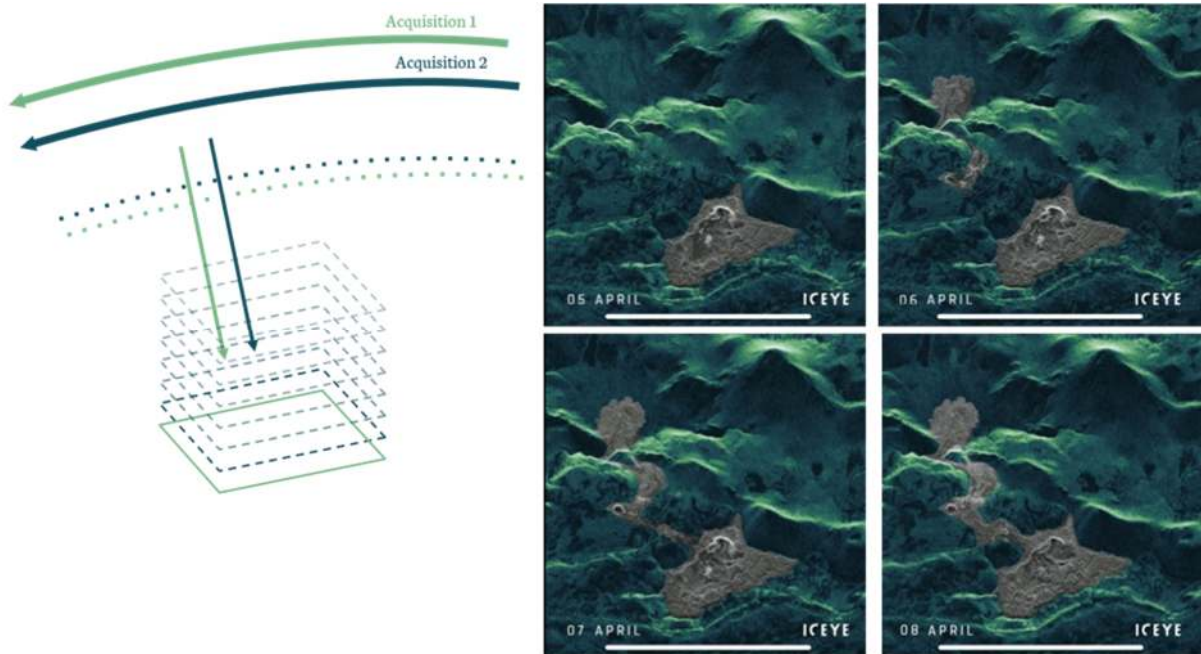
TMHD supported by ICEYE will develop initiatives at Tokio Marine Group companies outside of Japan to accelerate the insurance claims payment process. Such initiatives include expediting the insurance claims payment for agriculture/crop insurance by quickly estimating the extent of damage to farms through satellite data and developing parametric insurance products utilizing data observed and collected by satellites. TMHD has accumulated the know-how on effectively utilizing satellite data and will take full advantage of this capital alliance with ICEYE to further develop natural disaster related products and services across the Tokio Marine Group.

③ Development of Disaster Prediction and Prevention Service Using Satellite Data

Taking advantage of the strengths of satellite data to track vast areas, combined with the fact it isn't impacted by the external environment during times of disaster and extreme weather, we will develop services that detect potential disasters and send alerts by monitoring ground changes or changes in facility conditions.

*4 ICEYE is a world's first in implementing satellites to shoot and observe the same point every 24 hours under the same conditions. By accurately controlling the satellite orbit and periodically passing over the observation point to take pictures, it is possible to constantly monitor, and detect minute changes in the surface of the earth and changes in facility conditions due to natural disasters can be performed with high frequency and accuracy.

[L: Image of "Daily Coherent Ground Track Repeat", R: Example of volcano observation]



【About ICEYE】 URL : <https://www.iceye.com/>

- Location : Espoo, Finland
- CEO : Rafal Modrzewski
- Established : 2014