



Ministry of Land,
Infrastructure and Transport

Pioneering Service of 3D Satellite Images by AI

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Policy Forum on Dec. 1st to discuss on how to utilize national land satellite images

The Ministry of Land, Infrastructure and Transport (MOLIT, Minister WON Hee-ryong) revealed that the ‘Policy Forum for Utilizing National Land Satellite Images’ will be held at the National Assembly on 1 December to prepare an application model for the images produced by the national land satellite (medium-sized satellite No. 1 as the next generation) and for ways to activate them.

At the forum, experts from the private sector such as CJ Olive Networks and Davio Co. will present plans to utilize satellite images such as predicting various demands and building meta-verse data by using satellite images and big data, and will share opinions with experts from different sectors including industry, academia, research, and government bodies.

The MOLIT successfully launched the National Land Satellite No. 1 on 22 March last year. The satellite images taken by the one are precisely corrected at the National Land Satellite Center and processed into satellite orthogonal imagery to provide them online* and offline** so that they can be used in the fields of land

monitoring, resource management, responding various disasters and accidents, and national spatial information.

* The online service is to allow anyone to use high-resolution satellite images as the first in Korea. Currently, anyone can download satellite orthogonal imagery of National Land Satellite No. 1 through the National Geospatial Information Platform (map.ngii.go.kr) on the National Geographic Information Institute.

** From March 2022, high-resolution satellite images with precisely calibrated coordinates will be provided through security screening under the Article 35-2 of the 'Framework Act on National Spatial Data Infrastructure'.

In addition, MOLIT is preparing National Land Satellite No. 2 not to be missed with the goal of launching in 2024. If the two satellites are operated at the same time, it would be possible to shorten the revisit cycle of the satellites for filming Korean Peninsula (5 days → 2.3 days) as allowing them to provide prompt disaster prevention services and to secure stereo images.

Also, 3D spatial information can be built and updated more quickly, so it is expected that government policies such as improving the speed of spatial information updates, which have been continuously suggested, could be realized.

The application of the satellite information incorporated with Artificial Intelligence and deep learning-based analysis technology is expanding from the fields of meteorology, defense, and communication to 'smart agriculture' through forecasting global crop and 'urban planning' through the analysis of changes in the city center that occur simultaneously in a wide area.

In line with this trend, the Forum will be a chance to harvest various opinions from experts on the construction and utilization of geospatial information convergence using satellite images under the theme of 'Preparation of measures to activate the utilization of the service by the national land satellite images' and to reflect them into the directions of the related policy.

Furthermore, as a part of the efforts to bring the policy for utilizing the national land satellite images closer to the public, 'Special Photo Exhibition of National Land Satellite Images' will be held for one month from 23 December at the Korea Territorial Development Museum where teenagers in winter vacation view

satellite photos.

KANG Joo-yeop, Director General for Spatial Information Policy in MOLIT, stated that “I hope that various satellite image service models for the public can be continuously developed through the ‘Policy Forum for Utilizing National Land Satellite Images’ to enhance public safety and living convenience.” and

“The MOLIT will take the lead in strengthening communication and cooperation with the related people in the space field from the industry, academia, research, and government sectors so that Korea can leap forward as a space powerhouse while providing full support for that.”