

A Space where Virtuality and Reality Become One

National Digital Twin Platform



MOLIT

Ministry of Land, Infrastructure and Transport

NS Center

National Spatial Information Center



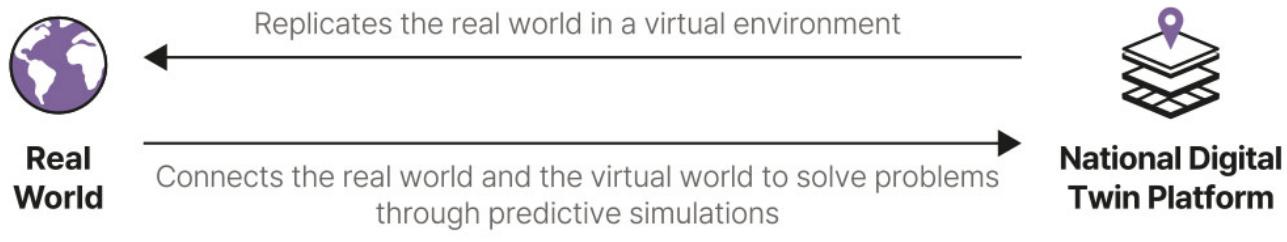
Spatial Information Industry Promotion Agency

National Digital Twin Platform for Korea

MOLIT has integrated scattered digital twin technologies into **K-GeoP** and **V-World**, establishing a platform that is accessible to all

What is the DTP?

A platform that **digitalizes the entire national territory based on high-precision geospatial data, and resolution of social issues** through integrated information and advanced simulations.



Application Areas



Ocean



Agriculture-Forestry



Cultural Heritage



Disaster-Environment



Road Traffic



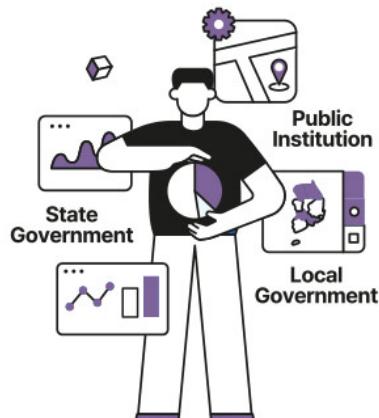
Port

DTP Linkage System

The government collects geospatial information through the **K-GeoP** and offers it on the **V-World** service making it easily accessible to everyone



Production



Collection



Utilization

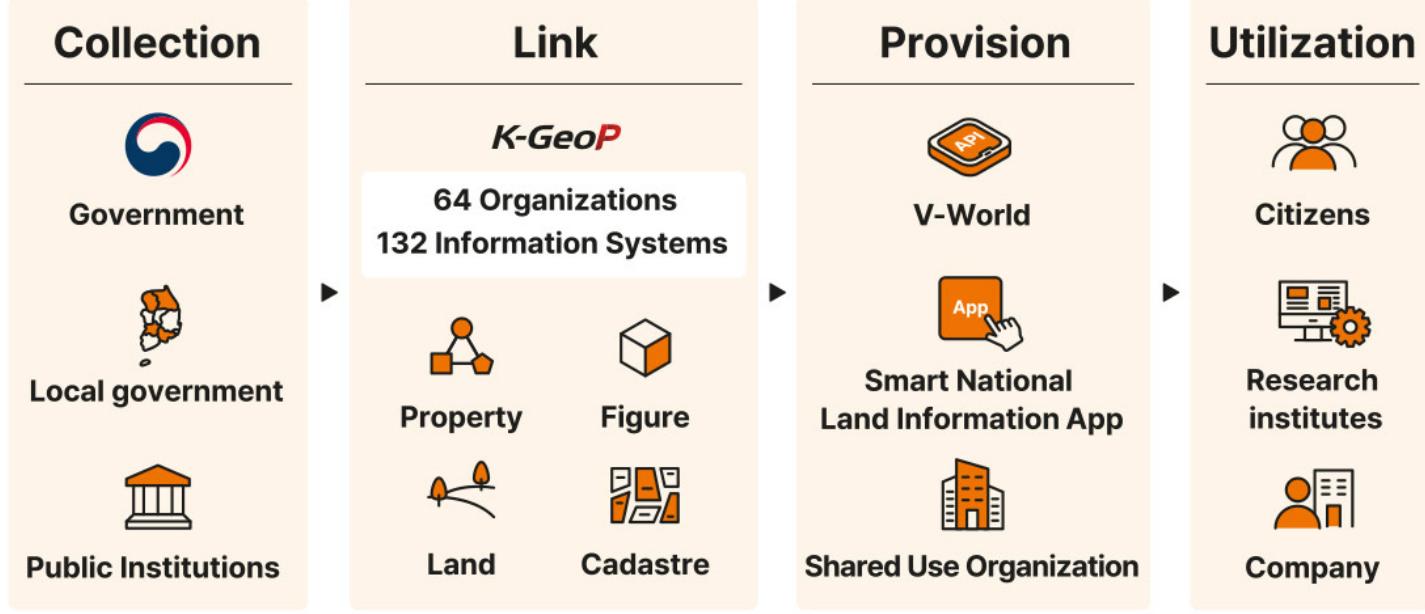


How do You Use the *K-GeoP*?

It is a data platform that **collects and provides national geospatial information** facilitating its use in administrative and public sectors

Collection/Provision of Geospatial Information

Collecting geospatial information **for shared use with other organizations** or **linking/providing it through V-World**



Analytical Map Production Service

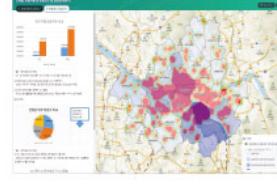
Provides 2D and 3D-based analysis maps and simulation functions using national geospatial information and user-owned data



Flood Analysis



Urban Planning



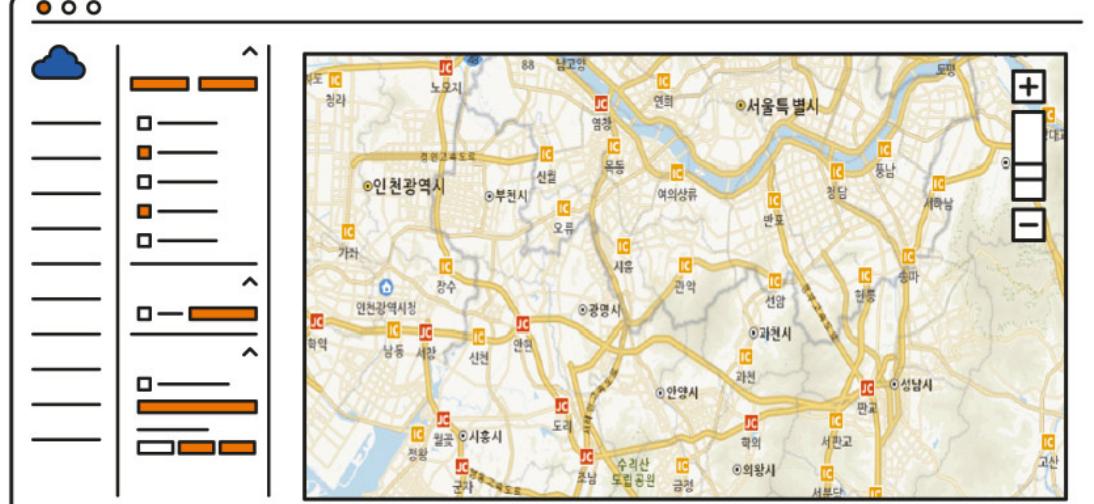
Floating Population



Bus Route

Shared Infrastructure Support

Provides an environment for developing services using ***K-GeoP*** infrastructure without the need to develop separate HW and SW (GeoPaaS, IaaS)



How do You Use V-WORLD?

It is a service platform that **provides national geospatial information to the public** and **supports the use of geospatial information** in various fields

Open API / Geospatial Information Download

Provides APIs that comply with international standards and data download services **to support the development of geospatial information utilization services in the industry**

Open Platform

Infra-geospatial data

Open Maps API

Open Data API

Map Service Provision



Data Provision

Developer

Real estate · Traffic · Weather inf

New Application Program

New Open API



User



new service

Analysis and Simulation Functions

By providing analysis and simulation, it **supports decision-making in public administration** and **assists in the development of industry services in the private sector**

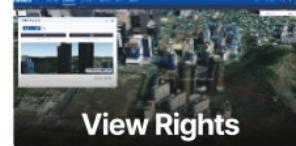
Terrain Analysis



Building Analysis



Landscape Analysis



Weather Analysis



Regional analysis



Geospatial Information Utilization Coordinator Support

Providing consultation for the necessary technology support for planning and commercializing geospatial information services



Service
Development



Utilization
of geospatial Information



Information
Resources

What are some examples of using the *K-GeoP* and *V-WORLD*?

Smart National Land Information App

K-GeoP



- It provides **real estate information such as cadastral and building details** across the country through various IT devices without the need to visit administrative offices

Finding My Land / Ancestral Land

K-GeoP, V-World



- It provides **an online administrative service** that helps people find and inform them about the land owned by their ancestors or themselves, thereby **ensuring the right to know and protecting property rights of the public**

Customized Map of the Public Institutions

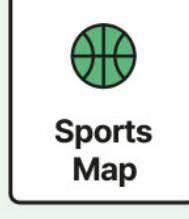
V-World



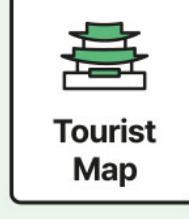
Traffic Map



Safety Map



Sports Map



Tourist Map



Lodging Map



Restaurant Map

- It provides **a customized map-making service** closely related to civil affairs, administration, and daily life by utilizing national geospatial information and user data

Support for Spatial Information Service Development

V-World



Filmmaking



Location Service



Urban Planning



Landscape



Facilities



Game Dev

- It provides **the technology and services to develop diverse and creative applications** through geospatial information data and open APIs

The National Digital Twin Platform



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