
Abstract

The construction of drone-based 3D spatial information should be carried out mainly in areas with high business utilization.

First, based on the results of the demand survey and case analysis, it is necessary to review the 3D spatial information utilization model for Gyeonggi-do policy support.

Second, in the field of urban planning, 3D-based committee deliberation for major policy decisions is supported.

Third, in the field of road and traffic, it should be used not only for road facility management and civil complaint response, but also for disaster site search and simulation using 3D spatial information in the field of disaster safety.

Lastly, in the environmental field, 3D spatial information is also used in on-site enforcement and facility management tasks.

An organization dedicated to the drone field is needed to operate drone geospatial information and to activate it by field. The specialized department to support drone-based geospatial data work needs to be reorganized into an organizational system that can efficiently perform tasks related to the use of drone operation-related fields and the efficient construction and management of 3D geospatial data.

(Plan #1) It is necessary to consider the recruitment of dedicated manpower and establishment of roles within the current organization.

(Plan #2) Within the Land Information Division, the geospatial data team and the drone operation team should be separated and work should be coordinated.

(Plan #3) Operation of the drone integration center as a separate organization with a task-oriented organizational reorganization.

Drone geospatial data infrastructure and service support are required through drone geospatial data service operation.

In the short term, it is possible to advance the functions of the currently operating drone space to provide integrated management of drones, to activate the use of drone spatial information, and to lay the foundation to prevent duplicate construction.

In the long term, through the drone geospatial data integration platform, Gyeonggi Province, local governments, and Gyeonggi public institutions will respond to demands such as integrated management and information sharing for drone geospatial data filmed and managed by Gyeonggi Province public institutions.

It is a continuous business and task-specific application tasks for activating drone spatial information.

It is to discover and support continuous projects for the operation and activation of drone geospatial information. It is to prepare support and revitalization plans for drone geospatial data projects currently being promoted by local governments, and to expand provincial support projects to discover excellent local government projects through policy markets, etc. and to expand operation of other local governments.

Based on the results of the demand survey, it is necessary to prioritize the promotion of projects with high demand and potential for use in fire-fighting disasters, cities, and the environment as a way to discover prior tasks and implement demonstration projects in consideration of the necessity and effectiveness of business application.

It is necessary to operate an education program on the overall operation of drones and use seminars for each field. Major events such as contests and seminars should be held for publicity of drone spatial information and 3D information service and participation of citizens. It is necessary to provide opportunities for citizens to participate and activate drone spatial information through a sharing activation program for the use of drone spatial information and 3D modeling.

Keyword Drone, 3D Spatial information, 3D Modeling