

S U M M A R Y

SUMMARY

Keywords: Satellite-based Information, National Land-related Works, Policy Supports, Application Fields, Application Techniques

The purposes of this research were to find available application fields and to suggest the development direction of application techniques for next-generation medium-sized satellite images. By implementing a demand survey for staffs in Ministry of Land, Infrastructure and Transport(MOLIT) and specialists of satellite engineering companies, this research drew highly available application fields for national-land related works and policy supports. Seven application fields were selected from the existing twenty-two satellite-related projects of MOLIT, and twenty satellite-related projects were newly selected based on the survey results of satellite engineering companies.

In this research, following two fields, 『Monitoring the status of North Korea's national land development for preparing unification of Korea』 and 『Monitoring urban green spaces and green belts』, were analyzed for work process and application techniques as case studies. In order to promote the application of satellite images for supporting national land related works, this research finally suggested ① Construction of the cooperative system between ministries and promotion of multi-ministerial efficient application, ② Establishment and promotion of an application technical center for satellite information in the ministry

of land, infrastructure and transport, and ③ Suggestion plans for developing national land monitoring techniques and constructing a platform by supporting R&D program and budget.

Potential future research topics include the construction of demand and application infrastructure, the development of application techniques and services, and the preparation of a professional education and training system for satellite-based information.