

Creation of Lifecycle Comprehensive Construction Information Portal for Facilities & Architecture

Kim Sungil, Senior Research Fellow, Cho Jung Hee, Assistant Research Fellow

Summary

1. Construction projects produce materials for specific project content and participants at each stage of the lifecycle of facilities and architecture, from planning to management and maintenance. If such materials are used effectively, their economic and social utility are enhanced.

2. Information on construction is distributed via the individual systems of around 30 organizations, making it difficult to identify the organizations that have information, the list of data and content, and ways to review the information. Under such circumstances, the provision of customized information to consumers remains insufficient.

3. The major procurement organizations have created and operated their own information systems for construction projects internally to manage their projects, but project planning, design, construction, and management are often not divided into separate systems. Also, their information systems only gather administrative materials produced in the process of implementing projects, preventing utilization of materials for other uses.

4. Information on facilities and architecture must be managed in a comprehensive manner to raise the economic value of the materials used by investing in public facilities and enhancing the efficiency of facility management, raising quality by minimizing subpar implementation and inefficiency, and raising the quality of safety and life by enhancing the efficiency of facilities and architecture.



Policy proposals

① Creation of a "lifecycle comprehensive construction information portal (proposed name)" would combine information managed by information database systems for each lifecycle of facilities and architecture.

② To build such a portal, an R&D taskforce must be formed first with the participation of the Ministry of Land, Infrastructure and Transport, industry, academia, and the research sector. Then a committee should be formed by related government departments as well as industry, academia, and research institutes to appoint implementing agencies and devising detailed plans and content.

③ Legislation is needed for creating big data for the construction lifecycle and enhancing efficiency of use to lay the basis for creating data for each lifecycle of construction, releasing the data to the public, and utilizing the information.