## 공공건축사업 평가체계 개선 연구 - 공용재산취득사업을 중심으로 -

Improvement of the Evaluation System for Public Building Development Projects

- Focused on Central Government Office Building Projects -

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#### Introduction

Today, public buildings reached approximately 150,000 buildings in Korea and about 6,000 public buildings are newly built every year. Public buildings is not only composed of major portion of state & common properties, but also a daily visiting place of residents such as community center, borough office, nursery facility, school, library and so on. It is directly connected with the quality of people's life.

However, many problems regarding public buildings have been remained unsolved. For example, central departments propose a project as a bigger scale in accordance with the custom, and they usually construct buildings with similar building uses without local demand survey. It causes its lower coefficient of utilization. Furthermore they belittle the value of design, and are proceeding whole working process oriented administratively. "Review In Advance' is expected as a betterment of public building planning phase by the ARCHITECTURE SERVICE INDUSTRY PROMOTION ACT. Still evaluation and management system is one-sided to early stage of new building projects only and being insusfficient for the whole result evaluation.

The central government builds and rebuilds 'Government Office Building & Official Residence Building' operating 'National Property Management Fund' and this type of project is called 'Public Property Acquisition Project(PPAP)'. The total budget of PPAP is roughly 900 billion won. This research is aiming to propose evaluation system of national public architecture projects for the purpose of budget execution efficiency and progress of design quality through good circulation system.

### Chapter 2. Review of National Public Architecture Projects Evaluation System

The present condition of evaluation system is reviewed. Its limits and problems are as follows. First, evaluating procedure is disconnected and working at the individual phase without linkage programme in the system. Second, current system is mainly operating for large scale public engineering works and difficult to evaluate small scale public building projects. This becomes major reason almost 95% of public building construction projects are excluded from the existing evaluation system so far. Third, the system hardly evaluates planning, design quality or building use, rather evaluates construction expenses. Forth, the system evaluate public building as a mere formality, simply comparing project purpose and the result.

These issues drive the necessity of evaluation system improvement. The system needs to be developed to establish project purpose and result index, and set a 'Value Chain' at every stage of compilation of a budget, design, construction, post-evaluation, and management. In addition, feedback system should be adapted to transform results of each stage's inspection and evaluation to data base. The new data base would accumulates problems and improvements of each projects and provides worthy references for the future projects.

#### Chapter 3. Analysis on Public Property Acquisition Projects

The main drawback to public property acquisition projects is related with issues of technicalities and special knowledge value. Most of project managers who were interviewed with a structured questionaire point out three issues; first, lack of specialty for project management, second, difficulty of securing relevant information and data, and last, absence of professional support. The guidelines given from Ministry of Strategy and Finance and Ministry of The Interior do no have enough information for a project manager to well prepare project proposal.

The adjustment of project expenses is depending only on the issue of effectiveness of total fund's execution without review of architectural and technical

design. Overall, the existing system has its limit for a appropriate project management condition throughout whole process. Budget change, design change and project schedule change are allowed only few cases. It implies the rigidity of present project procedure and shows the possibility how erroneous strategic plan governs the whole project to the end phase.

Public building leadership in general aims for energy efficiency. But the relevant energy design fee is not considered importantly in the order of budget priority. Every public building projects should concern issue of community friendly design with no association of building use and their unique security system. These issues are supposed to be main obstacle to develop systematic management of achievement.

### Chapter 4. Proposal on Evaluation Model of Public Property Acquisition Projects

The evaluation systems of US, Japan and UK generally display more systematic and detailed evaluation and management procedure compared to Korea one. Policy implications are three; first, it is critical to set up specific performance goal in the early planning process, second, coherent evaluation and management of achievement based on project goal is necessary, third, it is very needed to construct feedback system allowing information offering and remedial action based on evaluation results.

The research proposes index of evaluation and evaluation model, which has been simulated as performance management programme to operate in the field. The index of evaluation is composed of a mandatory index and an elective index. This evaluation system is innovative to authorize each ministry(project manager) select index based on project's goal and allow to put weight on more important index. The index list that project manager submitted is required to review by public institute or committee at the level of validity and appropriacy. The project should be deliberated at several critical phase to verify its coherent progress. Post evaluation plan is carried in terms of project goal and performance evaluation index. All the result of evaluation should be registered and accessible for project managers to

consult.

The research is significant to design specific action plan proposing evaluation system and feedback system which several advanced researches have discussed on reinforcing early strategic planning process, evaluation and feedback system, information system, and so on. Future research tasks related with this subject will be three; first, pilot project of evaluation and feedback system should be delivered and monitored whether it is applicable to current public property acquisition projects. Second, overall research on project achievement management including advanced review which National Public Architecture Center is currently undertaking needs to be Third, this proposed evaluation system operating on a legal basis of revised 'Guideline of National Property Management Fund', needs to be fully considered effective orchestrating with relevant law and guidelines.

Keyword: Public Building, Evaluation System, Public Property Acquisition Project(PPAP), Advanced Review of Project Proposal, Management of Achievement