

# Comparative Study on Supervision System in South Korea and Japan

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## Abstract:

Recently, the construction industry is increasingly internationalized. Especially in the Northeast Asian region, there are opportunities in which companies from various countries collaborate in projects more and more. And a lot of problems are caused by the differences between Western project management and local project management.

The aim of this study is, as a part of international comparative study on project management, to clarify the characteristics of the supervision system in South Korea and Japan. In this study, construction management system including related regulations is analyzed. And the differences between construction supervision in Japan and that in South Korea are made clear.

**Keyword:** supervision, supervisor, construction law, Korea, Japan

## 1 Introduction

The internationalization of the construction market advances increasingly. Recently, European and American project management (PM) has got into Asian market and friction has been caused. On the other hand, each country in Asia is preparing for the next stage corresponding to the change in the market environment. Therefore, it is necessary to clarify the system of PM in each country which has been performed unconsciously from an objective aspect.

The comparative investigation of the supervision system in South Korea and Japan is discussed in this paper.

## 2 Contractor's work

### 2.1 Quality control

The arrangement of engineers (based on the construction industry law) and the preparation of the construction ledger are made as contractor's work concerning the quality control in Japan (based on law concerning the promotion of fair tenders for public construction and proper contracts) And the arrangement of engineers (based on the construction industry fundamental law) and the planning of quality assurance are established in South Korea (based on law concerning management of construction technology). The arrangement of engineers is a commonly-observed feature in both countries, but the preparation of the construction ledger in Japan and the

establishment of quality assurance in South Korea are two different things.

The purpose of imposing on contractors the duty for the preparation of the construction ledger is to increase transparency for the parties concerned of layered structure of the organization at the site, especially for clients. Since documents for subcontract are attached to the construction ledger, clients can prevent possible misconduct which might violate the value of the quality of the construction by auditing the ledger.

On the other hand, it is believed that the aim of obligating the establishment of quality assurance plan is to clarify the system of construction quality control for clients as well. Moreover, it should be considered that there is a shade of meaning of showing the framework of contractors' quality assurance plan by prescribing the contents of quality control plan in detail.

The difference between contractors' services reflects the peculiar background of each country. It is said that the construction industry of Japan has developed based on long-term mutual trusts between the clients and contractors. To maintain this mutual trust, contractors have improved their management ability independently, and clients have left work trusting contractors' ability of management. A long-term relation exists between the main contractors and subcontractors similarly. Contractors in Japan has established the self-management system to control quality centering on major general contractors through such development process.

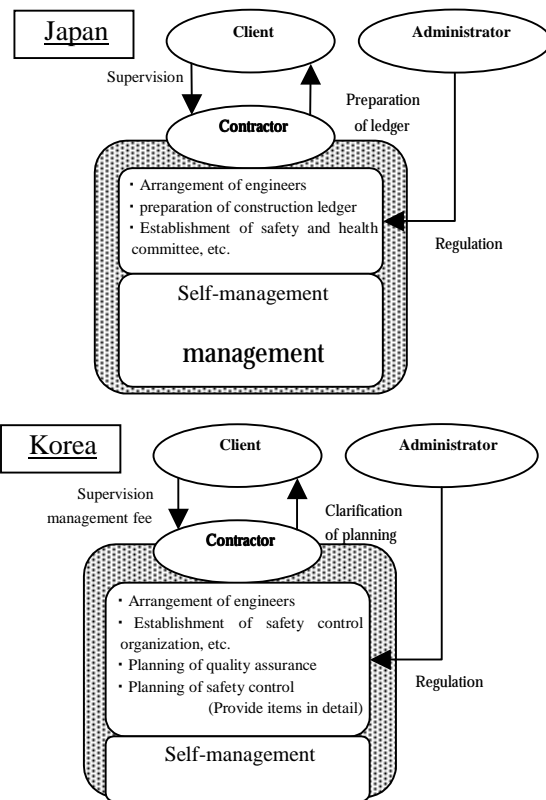


Fig.1 Management in Japan and South Korea by contractor

On the other hand, it is thought that distrust of contractors' self-management ability lead to the foundation of the construction administration in South Korea. It is necessary to compensate for the lack of contractors' ability of management or to correct it for public ends as well as the client. The matter which affects the quality control is established in detail for that.

## 2.2 Safety management

The work concerning the safety control is to set up the safety and health committee in Japan (based on Industrial Safety and Health Law), and the establishment of the safety control organization (based on law concerning health and safety of industry) and the safety control plan (based on law concerning management of construction technology) in South Korea. A commonly-observed feature in both countries is the establishment of the organization concerning safety control based basically on law covering all industries; occasionally special provision for the construction industry is made because of its layered structure and the complexity on the construction site. Detailed regulations for the safety control are established in Japan as well as South Korea. This is

because accidents in the construction industry are more than those of other industries and one of the most important missions of the administration is to protect workers' life. In South Korea, the safety control has been enhanced by providing the establishment of the safety control plan and the content in further detail based on law concerning management of construction technology. It is thought that the lack of the self-management ability of contractors is the cause for the development of safety control as well as the quality control.

## 3 Comparison of supervision system

### 3.1 Execution of supervision

The official personnel does the supervision as a supervisor in public construction projects, and the architect who belongs to the architectural firm does in private construction projects in Japan.

The supervision in South Korea is provided by the architect who belongs to the architect office or the supervisor who belongs to the company specialized in the supervision. But, there are buildings which only the registered supervisor can supervise. The supervisor who belongs to the company of the supervision specialty does "Responsibility Supervision". (System of South Korea which obligates clients to consign the supervision to the private supervision specialty company in addition to the supervisor of public organization in public constructions above 10,000,000,000won)

### 3.2 Legal position of supervisors in construction

- (1) Delegation of inspection function from the administration

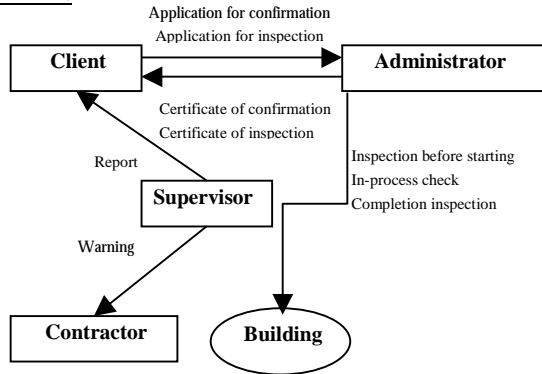
When the construction is completed and the supervision work is ended, supervisors in Japan must report the result to the client in written documents. After receiving the notice of the completion of supervision, the client applies for inspection of the building by the administrative authorities. If the inspection is successful, the client can get the approval for occupation.

In addition to this completion inspection, the authority is conducting in-process check in Japan when specific process which the site manager indicates is completed. It is obligated to submit the management report to the client for the supervisor in South Korea as well as in Japan. However, if the supervision report which the supervisor made is presented, the approval for occupation can be got. In a construction where the supervisor is not

appointed, the supervising authority is supposed to inspect it.

(2) Giving of strong authority

JAPAN



KOREA

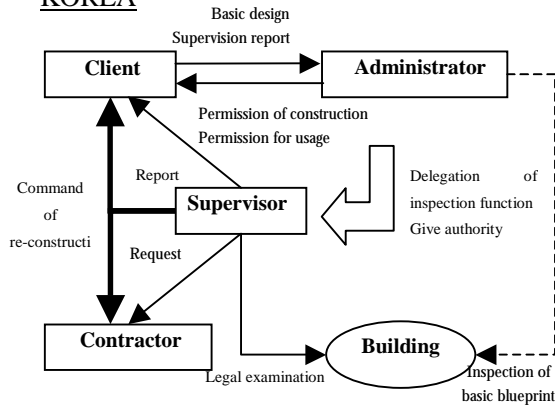


Fig.2 Legal frame of supervisor in construction

The difference between two countries is seen in the actions that should be done by the supervisor in a construction. When a construction turns out to be not executed as described in the drawing and specification in Japan, the supervisor gives advice to the contractor at once. And, if the contractor ignores, if the supervisor is supposed to report the matter to the client. Therefore, it is assumed that the report to the client is supervisor's work. In South Korea, after notifying the client, the supervisor is supposed to request the correction or re-construction to contractor when construction is not being done as the drawing and specification shows.

It is assumed that the work of the supervisor in Japan is nothing more than that. However, in South Korea, when the contractor refuses such requests, cancellation of the construction can be ordered. Not only the contractor but also the client should obey the order. In addition, it is prohibited to take all

retaliatory actions against the supervisor who executed the request or order by canceling the appointment or refusing to pay. Thus, a strong power with legal grounds is given to the supervisor in South Korea; supervisor's authority exceeds that of client's.

**3.3 Content of the supervision**

It is assumed that the legal examination of the drawing and specification is the basic work of the construction supervision. A prior consultation to the drawing and specification and the legal examination of them at the building site are included in the construction supervision.

There is no description about the work of the supervision in the law, but there exists in the consignment book on the construction supervision in Japan. Since construction permission can be obtained only by the examination of the basic drawing and specification in South Korea, the party who can carry out legal examination to a detailed drawing is needed. It seems that in order to have the construction supervision bear a part in this service, the legal examination of the drawing and specification is provided for basic work of the construction supervision.

It is believed that the confirmation of the application form for the approval of use and the examination of the completed drawing of construction are basic work of the "construction supervision".

The administration or a designated representative of the administration does the completion inspection, and gives the approval of use afterward in Japan. In South Korea, if the completed report of the supervision is sent in as an application document, the approval of use can be gotten. Thus, there is legally a close relation between the approval of use by the administration and the work of the construction supervision.

The examination and guidance of contractor's safety control and quality control are described clearly as work of the "construction supervision". As for the Japanese construction supervision, the work includes the examination of the construction plan and the management as a supervisor, though the meaning of the "construction plan" is ambiguous. In case of South Korea, the service of the construction supervision is described clearly as the examination and guidance of the contractor's safety control and quality control, and these are the basic work which the construction supervision must do especially in a large-scale construction.

The system of the responsibility management in South Korea is done by stationing the supervisor on the building site. A private supervision company

which is commissioned to do the responsibility management by public organizations should station its supervisor on the building site as the responsibility supervisor.

## **4 Strength and weakness of management system of Japan and South Korea**

### **4.1 For Japan**

The strength of the management system of Japan lies in a close network centered on competent general contractors based on a long-term mutual trusts and cooperative relationship. The soft warily ability like the quality controls and the safety control is accumulated in the close relationship between main contractors and subcontractors, and this has enabled companies to implement the project smoothly. Moreover, the client can take advantage of the high ability of the general contractors and can fix the responsibility on it by using procurement like the design and build etc. Meanwhile, this strong point becomes the weakness of Japanese system, and it brings about the opacity of the organization and the fixation of the method of procurement. Moreover, cooperative relation established domestically prevents companies in construction industry from becoming independent from the domestic demand.

### **4.2 For Korea**

The strong point of the management system of South Korea is as follows. The first is the supervisor which seeks profits on behalf of the client. It promotes projects maximizing the demand of the client on the strength of legal authority. The second is the leadership of the administration. By a variety of measures implemented by the administration, private companies are made to act unitedly.

But, such leadership of the administration becomes the weakness of management system of the South Korea production system. Various restrictions make it difficult for the private company to provide flexible service for the demand of the client because the production system of construction is improved at the initiative of the administration. The second weakness of management system of the South Korea production system is detailed regulations concerning the work of each subject. There is a possibility that the regulations make the contractor lose the consideration of important improvements. The third is the clear division of the scope of work of

each party. Because the scope of work of each party is classified, the organization of the project becomes large and the locus of the responsibility might become obscure. Moreover, the effect of reflecting the technology of construction in design phase decreases.

## **5 Conclusions**

The supervision system of the construction industry in Japan and South Korea and the feature of both countries are compared.

There are two types; government-initiated system based on law in South Korea and the Japanese system based on mutual-trust among each party. It cannot be judged so far which system is more efficient. However, it cannot be overlooked that an original system is developed according to the environment of the industry of the home country.

It seems that comparing the supervisor systems in each country promotes the change into the more effective production system.

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