

Direction of CM Services Defect Liability in the CM Contract

Cho, Young-Jun

Department of Architectural Engineering, Joongbu University, Kumsan, Chungnam, 312-702, Korea

Abstract

The execution of a construction project involves the engagement of many participants. Generally, the Authority uses CM to certify that the Work is built according to the contract documents. The CM work scope is expressed in the Construction Technology Management Act and its Regulation. The mandated and delegated CM services are limited to the construction period. If Contractor is required to repair a construction defect, the Contractor should bear the burden of the inspection service for the defect repair, because it is associated with him. Nevertheless, CM should submit a bond to provide the inspection and supervision service for the defect repair. These may result in conflict with each liability. Therefore, CM service in the law and regulation was investigated and analyzed in this study to classify the characteristics of CM contracts, and it was suggested that the CM liability for the inspection and supervision service for the defect repair should be reconsidered.

Keywords : construction manager, contract, liability, defect

1. Introduction

1.1 Research background and objective

To execute a construction project, a design document is needed, in which the types and engineering methods of the facilities are defined. Unlike the manufacturing industry, many people are involved and many materials are input over a long-term period to accomplish a construction project according to the design document[1]. In this process, completion can be a problem, whether it is completed in a state with no defects or in a state with latent defects. Some consider it a faulty assumption that designers make out a design document without any defects[2]. In principle, the building is completed if there is no defect on the

completion date. However, it is realistically difficult to find all the defects on the completion date. In particular, for a construction project which is done in the form of contracted construction, the ordering party has the image of the finished building but does not have a concrete idea of the project's progress or construction method, which means that it cannot actively participate in a construction project in relation with the construction process or method by the point of completion, the completion date. Therefore, labor supply agreement types are set out in the civil law, and legal responsibilities and obligations are also stipulated by agreement. In other countries, diverse types of standard agreements have been developed and used[3], while in Korea it is realistically difficult to regulate all of the contracts with diverse and specified concepts introduced as the industry has developed with civil law alone. For this reason, new laws are being enacted to set out new business areas and related issues.

Received : May 8, 2012

Revision received : November 1, 2012

Accepted : November 27, 2012

* Corresponding author : Cho, Young-Jun

[Tel: 82-041-750-6223, E-mail: claimz@joongbu.ac.kr]

©2013 The Korea Institute of Building Construction, All rights reserved.

While a business may be newly created, it still exists within the basic concept stipulated in the civil law, but in many cases basic concepts must be compositely considered to do the business. In this process, diverse ordinances have been made in relation with the construction industry, and with the construction management service as well.

The Korean government made the Service Guide of Construction Management to stipulate detailed work types and other detailed businesses for the construction manager (CM) to perform when the governmental ordering party assigns a CM to a contractor based on the Enforcement Decree of the Construction Technology Management Act[4] (hereinafter “Enforcement Decree”) in August, 2009. The responsibilities of the business may be different depending on the characteristics of the business stipulated in the Service Guide. In the current ordinance, the responsibilities arising from the implementation of the project management are set out, and the appropriateness needs to be reviewed.

Thus, this paper aims to present the direction of the responsibilities for defects of the CM service after reviewing the characteristics of the construction project management agreements, part of the construction technology service stipulated in the current Construction Technology Management Act[5] (hereinafter ‘CTMA’).

1.2 Research Method and Scope

This research is conducted within the scope of the legal responsibilities and related regulations of the CM stipulated in the CTMA.

This research aims to present the direction of responsibility for defects of the CM service after conducting fundamental research related with the labor supply agreements, exploring the targets and tasks of the CM service, and analyzing the characteristics of the CM agreements.

2. Labor supply agreement related fundamental research

This section discusses the relationships among the stakeholders and the characteristics of employment contract, delegation contract, and contract for work.

2.1 Relationships of stakeholders in the labor supply agreement

There are diverse types of labor supply agreements in civil law. Of the labor supply agreements, employment contract, delegation contract, and contract for work are representative examples, to name a few. When an employment contract is signed, the employer–employee relationship is established. The employee has the obligation to provide labor according to the labor supply agreement, while the employer has the obligation to pay for the labor in turn. The employee must exercise due diligence as a responsible manager and engage in the tasks faithfully. Other than the payment obligation, the employer must take all the necessary steps to protect the health and life of the employee.

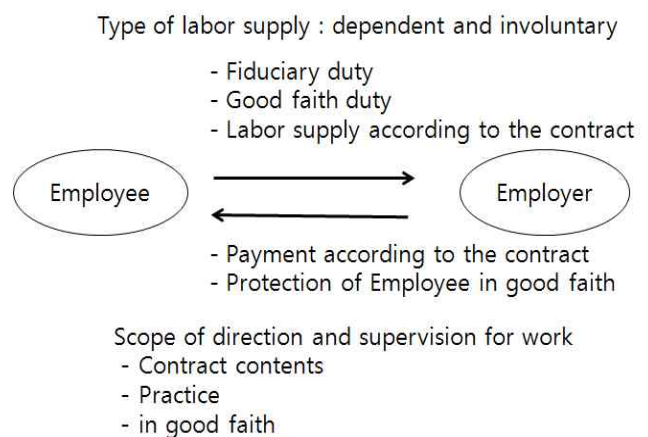


Figure 1. Relationship of employment contract

The employer has the directional and supervisory

right for the employee, which is limited in scope according to the agreement, practices and good faith principles. The employee is subordinate and not voluntary in labor supply. The relationship in an employment contact is as shown below (see Figure 1).

A contract for work is for a contractor to accomplish the contracted project, and the ordering party pays in turn according to the completion of the contracted project. The contractor has an obligation to deliver the agreed object. There is a controversy regarding in which participant the ownership of the object agreed is vested, but the ownership is generally held by the ordering party, and the contractor can execute on the lien in the event that the contractor does not get paid. In addition to its payment for the completed object, the ordering party must protect the contractor. The contractor enters into a contract on the assumption that it executes and accomplishes the project using its special technology or technique, and the direction or supervision of the ordering party is not considered. The contractor takes the responsibilities for security including defect repair, indemnification for damage, and termination of the contract. Of the responsibilities for security, when the termination of a contract is admitted, many social and economic problems can arise as a consequence, and it is not admitted. Therefore, the contractor takes such obligations as defect repairs and indemnification for damage.

Figure 2 is a diagram showing the relationship between the contracting parties.

The delegation contract is a contract entered into when a mandator entrusts management of business to a mandatee, and the mandatee accepts it. The mandator entrusts the management of business based on the trust that the mandatee has special capabilities, including good personality, intelligence, knowledge and technologies.

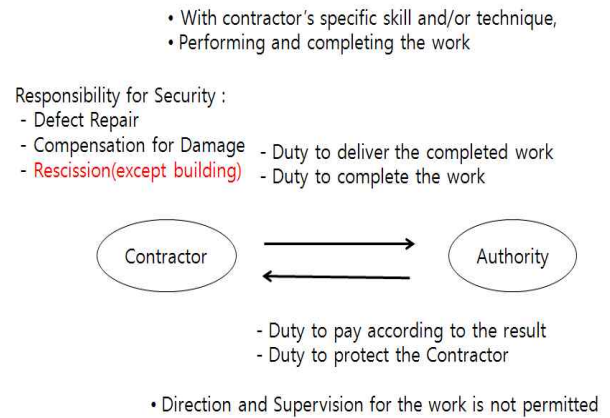


Figure 2. Relationship in a contract for work

In other words, the fact that the relationship between mandator and mandatee is based on trust makes it fundamentally different from a contract for employment. The mandatee deals with the management of business based on the trusted relationship with the mandator, and he/she should take more special care in handling the business. In the delegation contract, the mandatee handles the entrusted business at his/her discretion based on the assumption that the mandator trusts the mandatee. In an employment contract, the employee ends up providing his or her labor according to the employer's direction or order. In a contract for work, the aim is to finish the work, the end result of the labor provided by the contractor. However, in a delegation contract, the aim is the management of business, and even if the mandatee does not accomplish the management of business, the mandatee is acknowledged to reimburse the mandator for the part the mandatee implemented. In the case of paid delegation, the mandatee can claim for his/her service fee at the rate of implementation. The mandatee keeps the mandator at arm's length in dealing with the business because the mandatee handles the management of business at his/her discretion, utilizing his/her own capabilities. When the management of business is terminated, the

mandatee must report the fact, deliver the acquired items and transfer the rights acquired while doing the business, if any. As in the contract for work, no direction or supervision of the mandatee is required. The parties to the delegation contract are shown in Figure 3.



Figure 3. Relationship in a delegation contract

The mandator sometimes has a relationship with a third party while entrusting the management of business to a mandatee. It is a kind of agency relationship, but delegation is distinguished from agency in legal terms. If delegation takes place in the relationship with a third party, it is considered that the power of representation is given to the third party as a result[6].

2.2 Analysis of labor supply contracts

As has been discussed, the types of labor supply contracts include employment contract, contract for work, and delegation contract, and the characteristics of each contract type are indicated in Table 1. The characteristics to be discussed below are not specified in the Table. The characteristics are divided into A(Labor supply), B(Affairs processing), C(Completion of work), D(Direction/Supervision), E(Trust relationship), F(Responsibility for security), G(Discretion), H(Dependence), and I (Employee protection).

Table 1. Characteristics of contract type

Type	Characteristics	Employment	Contract for Work	Mandate
A	Labor Supply	●	●	●
B	Affair Processing		●	●
C	Completion of work		●	
D	Direction / Supervision	●		
E	Trust Relationship			●
F	Responsibility for Security		●	
G	Discretion			●
H	Dependent	●		
I	Employee Protection	●	●	

As indicated in Table 1, the purpose of an employment contract is to supply labor, while the purpose of the contract for work is the completion of the work, and the purpose of the delegation contract is affairs processing. The employment contract defines a dependent relationship because the employee is ordered or directed by the employer. However, the delegation contract is not a dependent relationship because it is based on trust, and the mandator's direction or supervision is not required for the mandatee's implementation of the work. The contract for work is for completion of the work, and the contractor takes responsibility for security, including completion of the work. In the employment contract, the employer has the obligation to protect employees' health and life, and the ordering party must also provide protection for the workers engaged in the contract for work, which has been implemented realistically through various methods.

The CTMA deals with the CM Service. In the following section, we will explore this more closely to understand the characteristics of the CM Service.

3. Targets and tasks of the CM Service

In Article 22 of the CTMA and Article 75 of the

Enforcement Decree, targets of a project and construction project management tasks by project progress phase are set out, and the construction project management tasks are analyzed based on this.

3.1 Targets of the construction management project

In Article 22 Clause 2 of the CTMA, the targets to perform the construction project management are enumerated.

To perform a construction project effectively, the ordering party can entrust the construction project management to a contractor. The following are the targets that can be entrusted by the governmental ordering party.

First: large-scale composite construction projects including airports, railways, power plants, dams or plants

Second: construction projects specially managed due to complicated design and construction management

Third: construction projects that cannot be managed smoothly by the ordering party due to a lack of technical staff

Fourth: other construction projects the ordering party needs to execute for the smooth implementation of the projects

Figure 4 indicates the analysis results of CM service targets.

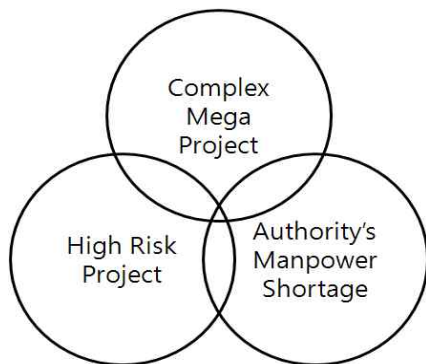


Figure 4. Target of CM service

3.2 CM tasks by project process phase

The tasks of the CM service are stipulated as 10 items in Article 75 of the Enforcement Decree of CTMA. The contractor who performs the CM service can lay out the basic scheme of the construction project, perform feasibility study and management, and design the management of the construction in advance, and can carry out contract management, cost management, schedule management, quality control, safety management, and project information management of the construction management during the construction. After the construction project is completed, contractor can implement post management of the facilities. In addition, the CMer can carry out the activities stipulated in the CM service contract other than the activities mentioned above. Figure 5 explains this in detail.

Pre-Construction	Under-Construction	After-Construction
<ul style="list-style-type: none"> • Basic Scheme • Feasibility Study Management • Design Management 	<ul style="list-style-type: none"> • Contract Management • Cost Management • Schedule Management • Quality Management • Safety Management • Project Information Management 	<ul style="list-style-type: none"> • After Construction Management

Figure 5. CM Service of project process phase

4. Analysis of CM service contracts

When the ordering party delegates the CM service, the specific tasks and other particulars to be performed by the CMer are set out in the Service Guide of Construction Management according to Article 39 Clause 4 of the Enforcement Decree of CTMA. The contracts are

analyzed based on the specific tasks of the construction project management stipulated in the Service Guide.

4.1 Business scope of CM and analysis of participants' roles

The governmental ordering party delegates or implements part or all of the CM service throughout the entire construction phase. When the business scope of the CM is determined, the characteristics of the construction project, site conditions and the manpower composition of the ordering party should be considered. In addition, when the ordering party delegates or implements the CM of a construction project and the project is subject to design supervision and construction supervision, the design supervision and construction supervision should be included in the CM. That is, the CMer should implement the tasks, including design supervision and construction supervision.

The ordering party should direct or supervise to ensure the CMer performs the CM in good faith, but it should not be considered that the ordering party endows discretionary power to the CMer to deal with the handling of general affairs based on a trusted relationship through the medium of special capabilities the CMer has. Rather, it is more like an employee has entered an agreement to do the tasks and is directed or supervised while doing them.

On the other hand, the CMer should execute the CM service in good faith to achieve the objectives of the construction project. In the contract for work, the ordering party orders the contractor to do the tasks in order to complete them, and the contractor does the tasks agreed upon in the contract. However, the purpose of the CM is to attain the goals of the construction project only. Unlike a contract for work, which requires the

contractor to take responsibility for security, it does not impose the responsibility for security on the CMer. If the project cannot be completed within a scheduled time frame due to the CMer's tasks which are not stipulated in the contract, the CMer cannot avoid its responsibility. There is a high likelihood that such a circumstance will occur, and the ripple effects could be large. For this reason, if any responsibility or obligation of the contractor needs to be changed due to the CMer's tasks (including supervision), it is stipulated in the general terms and conditions of a construction project that the contractor must notify the ordering party of the change immediately to prepare for the situation.

The ordering party stipulates that a designer or the contractor must actively cooperate with the third party, the CMer, for an agent of the ordering party to perform the delegated tasks effectively (See Table 2).

Table 2. CM Service and project participants

Participants	Services	A	B	C	D	E	F	G	H	I
Authority	Direction and Supervision for the CM Service				•					
CM	Completion of Target of Construction Project	•	•	•		•		•	•	
A/E and Contractor	Cooperation with CM for delegated Service		•			•		•	•	

As indicated in Table 2, the CMer contract is a combination of the contract for work and the delegation contract. The ordering party should provide direction and supervision for the tasks contracted for work.

4.2 Analysis of detailed tasks of the CM

The CMer's tasks can be divided into three phases: pre-construction phase, construction

phase, and post construction phase. As shown in Figure 5, the detailed tasks by phase can be analyzed as follows based on the characteristics classified in Table 1.

Table 3. CM Service and characteristics of contract type

Phase	Services	A	B	C	D	E	F	G	H	I
General Preparation and Management Service	Preparation and Management of CM Service Program	•	•			•		•	•	
	Preparation and Management of CM Service Procedure	•	•			•		•	•	
	Management of WBS/PNS	•	•			•		•	•	
	Accumulation, Management and Operation of Project Information	•	•			•		•	•	
	LCC and Total Cost Management	•	•		•	•		•	•	
	Management and Cooperation of Construction Project Participants	•	•			•		•	•	
	Reports related to CM Services	•	•		•	•		•	•	
	Support for Approval/Permission and Service for the public	•								
	Support for Claim Analysis and Dispute Response Service	•								
	Other CM related Services	•	•			•		•	•	
Pre Design	Selection of Construction Technique & Engineering Service Corporation	•								
	Support for Project Plan Preparation	•	•			•		•	•	
	Review of Reasonableness of Feasibility Study Report	•	•			•		•	•	
	Support for Delivery System Decision	•	•			•		•	•	
Basic Design	Support for Selection of A/E	•								
	VE for Basic Design	•	•			•		•	•	
	Cost Analysis and Review of Approximated Cost	•	•			•		•	•	
	Management of Design Service and Payment	•	•			•		•	•	
	Coordination of Basic Design and Review of Design Relationship	•	•		•	•		•	•	
	Quality Control of Basic Design	•	•			•		•	•	
	Other Basic Design Supervision Service	•	•			•		•	•	
Advanced Design	Support for Selection of A/E	•								

Phase	Services	A	B	C	D	E	F	G	H	I
	Establishment of Schedule for Project Delivery Scheme	•	•			•		•	•	
	VE for Advanced Design	•	•			•		•	•	
	Cost Analysis and Review of Approximated Cost	•	•			•		•	•	
	Management of Design Service and Payment	•	•			•		•	•	
	Coordination of Advanced Design and Review of Design Relationship	•	•		•	•		•	•	
	Quality Control of Advanced Design	•	•			•		•	•	
	Other Advanced Design Supervision Service	•	•			•		•	•	
	Establishment of Schedule for Procurement and Management of Supplied Materials	•	•			•		•	•	
	Support for Selection of Contractor	•								
	Construction	Integrated Schedule-Cost Management	•	•			•		•	•
Review of Design Documents, Shop Drawing and Contraction Plan		•	•			•		•	•	
Inspection and Measurement		•	•			•		•	•	
Quality Management and Technique Guidance(Review and Confirmation)		•	•			•		•	•	
Disaster Prevention, Safety and Environment Management		•	•			•		•	•	
Schedule Management and Establishment of Recovery of delayed Schedule		•	•			•		•	•	
Coordination of Interface between Participants		•	•		•	•		•	•	
Interim and Final Inspection		•	•			•		•	•	
Other Construction Supervision Services		•	•			•		•	•	
Review of Total Commissioning Plan and Confirmation of Commissioning		•	•			•		•	•	
After Construction	Support for Selection of Facility Maintenance, repair and Maintenance Corporation	•								
	Review of Facility Hand-over Plan and Other Supports	•	•			•		•	•	
	Final CM Report	•	•			•		•	•	

Based on Table 3 above, the CMer contract is close to the employment contract because CMers provide labor in the form of cooperation in the various licensing and civil services, claim analysis, selection of the construction technology service providers, selection of the designers for the basic and final designs, selection of the builder, operation and maintenance of the facilities, and selection of the maintenance service provider. However, it is also similar to the delegation contract, in that the CMer should take care of the management of total construction cost and life cycle cost, various CM-related reporting, adjustment of basic design, and connectivity review, which should be supervised by the ordering party. The tasks other than those above can be classified in the representative delegation contract. Therefore, the CMer's contract is a combination of the contract for work and the delegation contract.

4.3 Responsibility analysis of the CMer

If the CMer causes harm to the service object or a third party due to negligence or fault, it must indemnify the damage according to the CTMA. When the CMer provides supervision in accordance with the Enforcement Decree of CTMA, it is stipulated that the CMer should purchase an insurance policy or a bond of cooperation within the contracted amount of the construction project management. In addition, the CMer must submit the defect liability guarantee to cover the supervision and inspection of defect repair during the defect liability period stipulated in the related decrees.

As discussed in Sections 4.1 and 4.2, the CMer contract has the characteristics of an employment contract in relation with the selection of various participants, and it is difficult to impose additional responsibility on the CMer when the CMer

conducts due diligence in good faith. However, the CMer takes responsibility for security in relation with the completion of work. The completion of work is based on the premise that there is no defect at the point of project completion. The unique properties of construction projects make it difficult to define what a defect is, and project completion is rather abstract as long as the defect is not defined clearly. Therefore, it is reasonable to take the approach that project completion is an identical concept to the completion of the construction work. That is, the CMer implements the contracted tasks by the completion of the construction work, and the responsibility for security of the CMer is considered complete at the same time as the completion of the construction work.

The contractor or the builder must repair any defect arising during the defect liability period regardless of whether or not it is caused by the builder's fault. At this time, it is the additional obligation of the contractor in charge of the defect repair to check whether or not the defect is repaired properly. If so, the defect liability guarantee the contractor must submit should be reconsidered.

In addition, the CMer should take the responsibility for damage arising out of the inability of the CMer, which means the CMer could not deal with the tasks agreed at its discretion. In other words, the CMer should indemnify the damage caused by its failure to handle the professional tasks.

5. Conclusion

The CMer can implement diverse tasks given by the ordering party by project progress phase throughout an entire construction project. In

reality, the CMer can perform the tasks given by dividing the tasks into common tasks, pre-design phase, basic design phase, final design phase, construction phase, and post-construction phase. The characteristics of the tasks given to the CMer by related decree and regulation can be largely categorized into employment contract, employment and delegation contract, and contract for work and delegation contract.

The responsibilities the CM takes on can be examined after the characteristics of the CM contract are properly understood. In this paper, the characteristics of the CM contract are reviewed, and the findings are as follows.

First, the CM contract is a combination of a contract for work and a delegation contract in relation with the goal attainment of the construction project completion, and the ordering party can provide direction and supervision for the tasks categorized into the contract for work.

Second, of the detailed CM tasks, the CMer provides labor in the form of cooperation in the selection of service providers, which is similar with the employment contract.

Third, the review by the ordering party bears some similarity to supervision. It is like a combination of a delegation contract and an employment contract. The tasks other than those aforementioned can be categorized under the delegation contract.

Fourth, the contractor takes responsibility for defect repair, and the task of checking whether or not the defect repair was carried out successfully is an additional obligation under defect repair, and the submission of the defect liability guarantee by the CMer should be reconsidered.

Fifth, the CMer's responsibility should be limited to the damage caused by failure to perform the professional tasks given.

The characteristics of the CM service are

analyzed, and the responsibilities related with the characteristics are examined in this paper. There are various methods by which the CMer can take the risk, including guarantee, insurance, etc. Therefore, the frequency and the ripple effects of the risk should be studied further. In addition, with the fundamental research, studies should be conducted from the legal perspective to prepare the legal basis.

References

1. Hinze J. *Construction Contracts*, NY: McGraw-Hill; 1993, Chapter 1, Description of the Construction Industry; p. 2.
2. Thomsen C. *Program Management-Concept and Strategies for Managing Capital Building Programs*, 1st ed, Seoul (Korea): Spacetime; 2011. Part 2 Chapter 5, Design-Bid-Build; p. 117.
3. Cornes DL. *Design Liability in the Construction Industry*, 4th ed, London (UK): Blackwell Scientific Publications; 1994, Chapter 1, The problems of design; p. 11.
4. *Implementing Regulations to Construction Technology Management Act of 2009*, Pub. L. No. 21565, 52 Stat, 1989 (Jun. 18, 2009).
5. *Construction Technology Management Act of 2012*, Pub. L. No. 11180, 27 Stat, 1988 (Jul. 18, 2012).
6. Kwak YJ. *Contract Law(Civil Law Lecture IV)*, 4th rev. ed, Seoul (Korea): Bakyoungsa; 1999, Chapter 3, Contract for mandated and delegated Contract; p. 477-95.