

# Construction Procurement and contract forms

Mikael Rånes 2011-03-30

## Introduction

### The concept of construction

There is no direct legislation on contracts similar to legislation that is on the sale of personal property - Sale of Goods Act - and of real property - Land Code, Chapter 2.

Therefore, there is no direct definition of construction, but it is defined as "commitment to the designated place and under contract with the client to carry out certain work".

In daily speech it means "construction is generally taken to performing building, structure or installation in which the final result usually becomes real property."

Construction commitment may relate only to the execution of work performance, such as tearing down an existing building, to carry out excavation work.

The only law which can be referred to, to cover contracts - which describe services, labor, on real property - are consumer services law which only applies where the client is a private person.

### Standard contract for construction field

To not have to enter all common ground rules for the relationship client - contractor, it is normal to use a standard contract.

Since 1954 commissioner construction sites have developed a standard that stipulates the rules and the latest is:

- *AB 92, Allmänna Bestämmelser, General provisions*
- *AB 04, Allmänna Bestämmelser, General provisions*
- *ABT 94, Allmänna Bestämmelser Totalentreprenader, General Provisions Total contracts*
- *ABT 06, Allmänna Bestämmelse Totalentreprenader General Provisions Total contracts*
- *AMA, Allmän Material- och Arbetsbeskrivning*
- *BBR, Boverkets Bygg Regler, National Board of Housing*

AMA does General materials and job descriptions and reference work for the establishment of administrative regulations and technical specifications for construction, building and installation projects.

BBR, Building Regulations are regulations that are required by law and therefore binding. Their activities are controlled and influenced by regulations such as the Planning and Building Act and the Environmental Code.

BBR regulates both building permits, building notification and community minimum requirements for what is built.

The requirements of the BRR:

- *when a building is constructed,*
- *when a building is built into, for the built elements,*
- *when a building is changed to the next building components,*
- *Ground and demolition work*
- *for the land occupied for construction*

### **Type of procurement, five classifications**

Basically there are five classifications of procurement form that the commission can choose between:

- Split construction
- General construction
- Coordinated General construction
- Partnering/Negotiating construction
- Turnkey construction

#### *Split construction*

Split construction, commission procures the lots and has responsibility for coordination of procurement and implementation. The commissioner of the building project hires development planners, consultants, who may be instructed to prepare documents for the project after a more or less detailed program. The consultants form a working group, which jointly works out a proposal and it's expressed mainly in descriptions and drawings.

In split construction contracts the commissioner takes on a heavy responsibility to coordinate and manage the business on site. In return, they have through the various agreements, a direct impact on the various contractors and maybe also money to be earned. Some need to pay the consultants and if the commissioner does that instead of the general contractors, then they know what it costs and then have the possibility of negotiating the price and avoid the general contractor's fee of 10%.

## Split Construction



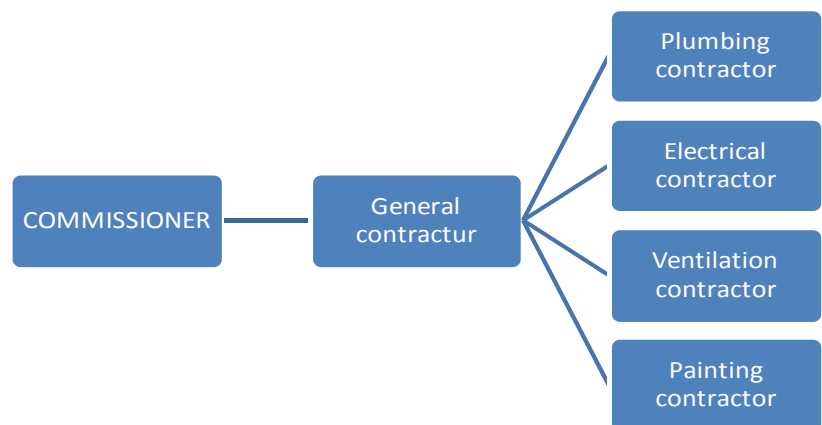
### *General Construction*

General contract is the developer only agreement, concerning the work on site, all other contracts will be subcontractors to the general contractor. The General contractor is responsible for coordination between contractors. They are also responsible for all public facilities such as scaffolding, sheds and other workplace facilities.

Procurement in the form of general contractor, bidders tend to base their bids on a limited number of quotations from the prospective subcontractors. The contractor commissioned to be general contractor, has the opportunity to go out with more quotes, and press of the previously published rates. Any profits will not benefit the client, but instead stays in the general contractor's pocket. The project supervisor administrative expenses will be less than the general contractor in the divided contract, because they will not have responsibility for coordination.

Under conditions of a fixed-price contract, a general contractor is not such a big difference from the shared construction in the case of the project. Possibly the start could be slightly faster. In relation to a shared construction, General works assumes far easier responsibilities, since the developer only has a contract with a party at the construction site. However, the commissioner is responsible for design toward the contractors.

### General Contractors



### *Coordinated General Construction*

To take advantage of general construction benefits combined with the shared total works of scale, it is quite often the client issuing tenders, such as a shared construction, since in the procurement of construction works this allows the developer to take over the contract to other contractors. This is known as integrated general contractor. Ancillary equipment contracts will therefore be on contract for the construction contractor.

A General contractor is assumed to take over all the client's rights and obligations. Agreements and contracts are then transferred to the general contractor through a contract that identifies the contract and the contractors concerned.

Preferably, the prospective general contractor firstly procures the other contractors in consultation with him.

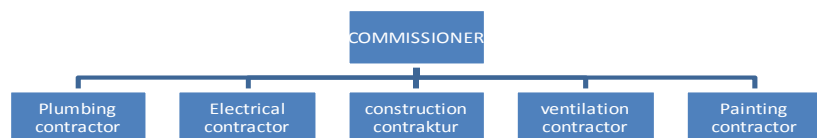
Construction shape provides the client opportunity to influence and control the cost of each lot, while the developer does not have coordination responsibilities at the construction site. The contractor who is given the task of coordination, has less opportunity to force the previously published rates, and usually compensated by a specified percentage of the takeover of specified contracts.

Two methods of payment may occur, either to pay the general contractor out to the subcontracting, or so the building owner may pay compensation directly to each contractor.

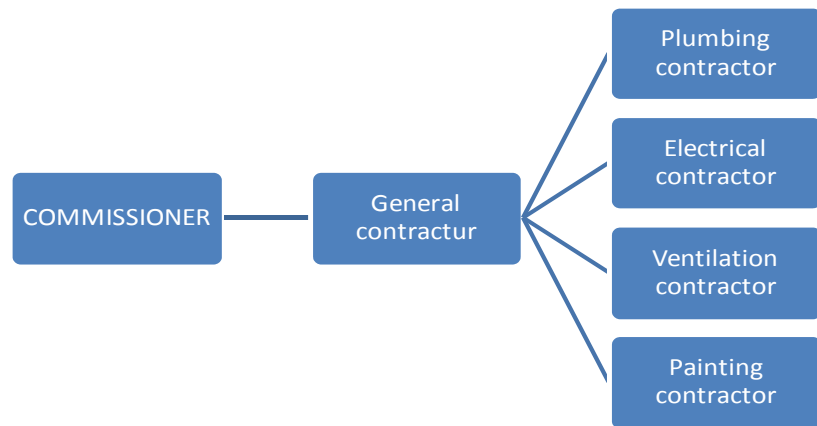
Under conditions of a fixed-price contract, a general contractor does not differ from shared construction in the case of the project.

The contract documents in an integrated general contractor agreement are exposed to higher standards than a purely general contractor; therefore, the emphasis should be given to the contracts described in full in the specification. If the general contractor is awarded first, and other contracts in a coordinated manner, this avoids the regulatory problems because of the contract documents. Particular emphasis should be placed on the General Regulations (AF-part) of the contract documents are designed properly. After the transfer of the client contracts procured on the general contractor, the legal position is the same as for a pure general contractor

#### Coordinated General Construction Procurement phase



#### Coordinated General Construction Implementation stage



### *Partnering / collaboration Construction*

It is increasingly common for a commissioner looking for other forms of cooperation to even be able to implement important projects. Such interaction terms are partnership. Partnership may have slightly different contents and scope, but the lowest common denominator is that the parties will work jointly in any respect and that the parties must have confidence in each other. The term collaborative contract, a definition of a collaborative contract can be controlled and in no way regulate interaction between client and contractor also including subcontractors and consultants. Other names that have existed even longer "early procurement" and "bargaining contract." The basic idea and a running theme seems to be that the contractor shall enter at such an early stage as possible into the project so that the contractor can be involved and influence the design of the project with their knowledge of production methods, technologies, and costs.

The Large Construction Company, NCC has made studies of their partnering projects and reached the following conclusions. That cooperation increases significantly between contractor and builder, a reduction in costly modifications and additions, higher quality of finished product and increased knowledge of the client after project completion.

As a commissioner, one must be aware that there are great demands on their current technical knowledge and presence. This form of construction is time consuming with repetitive construction meetings, planning meetings and position before the contractors' proposed solutions, technical, material and design suggestions are accepted. All courses strive to find the best solution to the cheapest cost, ultimately in order to make money on their incentives. If they manage less than the bid / budget price they get 50% of the shortfall and the other half

accruing to the commissioner. Thus, it is quite possible to have both better quality and lower costs in the project.

Partnership is not a new form of contract, but indeed a new form of collaboration. Almost all large contractors and a number of government clients are working with the title of partnership. It is not easy to procure a partnership agreement and you must then place large demands on the contractor's financial ability to implement a partnership project, also the contractor's technical ability. In addition to economic strength and technological know-how it is also equally important to require people involved to have social and interpersonal skills.

From a liability perspective, it is not always simple in partnerships. It is not clear that AB 04, ABT, or ABK is the appropriate standard or appropriate to use with no additions. The mentioned standard contracts are negotiated in the light of traditional contracting and consultancy arrangements. What may be a legal problem in a partnership agreement is to determine the responsibilities and it may be worth considering the liability issues before signing the agreement.

#### *Turnkey construction*

In a turnkey contract has the commissioner only one contract covering both design and execution of contracts. The total contractor is responsible that the building is constructed according to current standards and in accordance with the functional requirements that are consolidated in the specifications. A project manager is usually appointed to keep a permanent client's actions and monitor the project during the construction period. The arguments against the total contract are usually claimed that this form of contract must be more expensive than any other because all bidders must conduct a planning effort. For complex objects this may be true, but for basic buildings it may be sufficient to supplement the previously used standard solutions with what is special for the item.

The design that each bidder performs does not mean it is more expensive overall. In comparison with other construction forms, it appears that contractors pre-planning (before bidding) and completion of the design of turnkey projects are so much cheaper than the client the cost of finished design so that 6-7 tender counters can participate in a contest for a total contract but that it became totally financially expensive, than if the developer had allowed the project until final documents.

The reason that it is cheaper for the contractor for preconstruction planning than for the developer to complete planning is that the documents need not be legally binding and complete in detail, a "watertight" but that one can do with

documents that meet regulatory requirements and workplace needs.

The risk is that the client receives a building with high operating and maintenance costs, because bidders seek the cheapest solution to any functional requirements. The tender requirements must therefore be set so as to take into account the operating and maintenance costs. It can sometimes be difficult to balance the scale of the tender dossier functional requirements, the turnkey constructions benefits of competition for technical solutions.

From a time perspective, the turnkey contract has about the same benefits as that of the shared work. Construction can start quickly because pre-planning can be done in parallel with construction. The design work is also easier than for other construction types. The time required for the production of contract documents is of course dependent on the object's complexity, but the overall design time should be relatively short.

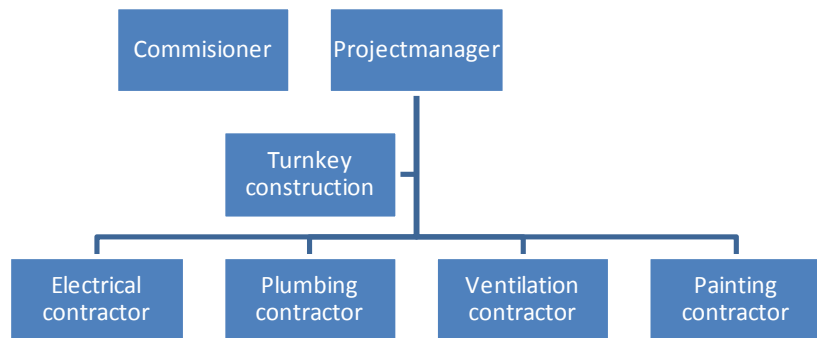
The processing of building permits may be a delaying factor, as it is in principle not to be applied until the contractor is appointed. In some cases, the client establishes building permit documents simultaneously with the specifications, but this is unnecessarily locking conditions for the turnkey contract.

A turnkey contract is the simplest type of contract from the point of view. The developer only has a contract with a party. The tender requirements must be clear in terms of functions and expected operating and maintenance costs for fear of shortcomings in the quality of individual parts, or that the building is expensive to own.

Total contracts can lead to a restriction of competition because only companies that have sufficient economic resources to manage the design, can participate and compete for the turnkey contract.

The turnkey construction should not be indiscriminately chosen for all projects.

## Turnkey construction



### **Compensation arrangements**

There are many ways to get paid in the industry and determining is usually type of contract and the most common variants have been given specific names.

#### *Fixed price - With or Without index*

A fixed price means that the parties have agreed on a lump-sum compensation for all contract works. It is generally inappropriate to use the term "fixed price" without adding the words "with index" or "without index", because otherwise misunderstandings could easily arise. Fixed price usually does not include VAT, so it is standard that all price are exclusive of VAT, except when the customer is a consumer who orders something for private use.

#### *Quantity Contracts/price per unit contracts*

This is a contract form usually used in ground works and is sometimes called a quantity contract. This means that the commissioner specifies a certain amount for a number of different work operations, such as soil excavation and rock excavation. The volumes are presented in a specification which is provided to the tendered, who puts prices on the different operations and summarizes the amounts.

#### *Price per unit, A-price*

Agreement on the application of "price per unit", means that the parties have agreed to apply a fixed price per unit for future performance. A price per unit can be changed, for example: The specification for a building states that the walls are supposed to be built with plaster and wood. In the contract there is a price per unit for drilling a 75 mm hole through the wall for the wastepipe. Now the commissioner has changed the conditions, so that the walls instead are built in concrete.

The specified price per unit is then not applicable and the parties will be referred to seek to negotiate a new price per unit. The most common with price per unit are that it covers the compensation of all costs associated with the work, including material, labor costs, interest rates, central administration and profit.

*Time and material contract, current account*

The opposite of a fixed price is when the contractor gets payment for their own actual costs, for labor, material, subcontractors are specified and upon that the contractor adds a fee, as a specified percentage that covers central administration, interest, profit and risk.

This fee is called contractor fee.

This type of contract tends to be regarded with skepticism by the developers, since it contains inappropriate incentive for the contractors. However, this compensation form has its justifications, because the commissioner has several advantages, a very early start of the construction, which can lead to interest gains for them, especially in times of rapid inflation.

Another advantage is that the contractor is not exposed to the temptation of cheating in quality to make money in the context of a fixed price or the contractor can be very flexible, because they get paid for all of their costs. It is possible to build without specifications and drawings, for cases where the developer can not provide this.

You can also combine the time and material contract with a ceiling price or with a fixed fee. A contract with a ceiling price is an unusual compensation form, possibly due to the fact that it can be considered a bit unfair - the contractor has little to win and much to lose.

A time and material contract with a fixed fee you use because of the fact that the contractor's fee also includes the contractor's profit. Furthermore, since the contractor's fee is calculated as a percentage markup on other costs, the contractor's profit becomes higher when the costs become higher.

To avoid this you can have the contractor's fee as a fixed amount instead of a percentage mark -up.

# Group Work

## Construction Procurement and contracts form

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1. Which procurement and contract form should we use on a fluctuation apartment to do a total make over?
2. Which procurement and contract form should we use on a building when we change window, insulate the facade and make new balconies?
3. When we discovery a water leak on the ceiling in a bathroom and the apartment above is a mess, which procurements and contract form should we then use?

Discuss these three questions and describe how you would act and procure this construction!

Good Luck!