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# CLAIMS IN INDUSTRIAL CONSTRUCTION PROJECTS

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ATHESIS

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# ABSTRACT

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The increase in magnitude and complexity of construction projects and the broadening of contractors' activities in new markets as a result of the global economic considerations has increased the potential for claims in the construction industry. Furthermore, the special nature and magnitude of construction projects extending over a period of time with potential of changed conditions due to economic, legislative and regulatory policies are all factors that increase the probability of claims and disputes. This is due to the inability to accurately predict and account for all of these factors during the tendering phase, which may have a negative impact on the management, implementation, and contractual obligations of the parties to the contract during the construction phase. In light of these difficulties, construction projects are prone to many risks, consequently, to the rise of claims which are often controversial, and lead to the disruption of projects. Accordingly, Standard International Contract forms are a means to balance the distribution of risks, in a transparent and just manner between the various parties.

This elevates the importance of properly analyzing, evaluating and managing; the subject of claims in construction projects especially in large enterprises with significant impact on the national economy in all countries of the world. This issue is not limited to emerging and Third World countries, but also includes the countries of the world the first and second due to the presence of giant projects in these countries.

The reality of the problem is that it is extremely difficult to avoid claims in the construction industry. This is because of one very simple factor represented in human err. However, it may be possible to limit claims not only by good practice but also on the basis that being forewarned is often forearmed.

The aim of this research is to gain a better understanding of claims in construction projects in Egypt in an effort to reduce or eliminate them to the extent possible. The following steps will be undertaken to achieve this:

A- Conduct a Theoretical study (in the major forms of contracts JCT, ICE, GC/WKs and FIDIC) to have to the following :

- 1 - Define claims and its sources.
- 2 - Review the life cycle of a claim.
- 3 - Classify types of claims.

B- Conduct a Statistical Study to:

- a. Review of construction claims arising to Cairo Regional Centre for International Commercial Arbitration according to the previous study.
- b. Analyze these claims in Egypt and categorize them.

C- Conclusion and Recommendations

Our goal is to reduce and to the extent possible eliminate claims in Egypt, use the research to analyze the causes and develop recommendations to the construction parties (Employer, Engineer, and Contractor) to enable them to reach this goal.

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## List of abbreviations

|               |  |
|---------------|--|
| A/E/QS        | Architect/Engineer/Quantity Surveyor   |
| BOQ           | Bill(s) of Quantities  |
| EoT           | Extension of Time  |
| FIDIC4        | FIDIC Conditions of Contract for Works of Civil Engineering Construction, Fourth Edition 1987                  |
| GC/Wks 1 Ed 2 | General Conditions of Government Contract for Building and Civil Works (Edition 2) 1977                        |
| GC/Wks 1 Ed 3 | General Conditions of Government Contract for Building and Civil Works (Edition 3) December 1989, Revised 1990 |
| ICE Form      | Conditions of Contract for use with Works of Civil Engineering Construction ('ICE Conditions')                 |
| ICE 4         | ICE Conditions, 4 <sup>th</sup> ed (1955)  |
| ICE 5         | ICE Conditions, 5 <sup>th</sup> ed (1973), Revised June 1979   |
| ICE 6         | ICE Conditions, 6 <sup>th</sup> ed (1991)  |
| JCT Form      | 'Standard Form' of building contract   |
| JCT 63/77     | 'Standard Form' of building contract, 1963 ed, 1977 Revision   |
| JCT 80        | 'Standard Form' of building, 1980 edition  |
| SO            | Superintending Officer   |
| VI            | Variation Instruction  |
| VO            | Variation Order  |

# Chapter 1 – Introduction

## 1-1- Research Topic

Over the past few decades the construction industry has witnessed significant changes in the size and complexity of its projects. Projects have become more complicated due to their expanded magnitude along with the advancements made in the design, technology and delivery techniques. This has had a corresponding effect on the construction contracts used to define the relations between the various parties involved.

Most Construction Contracts represent an Agreement between two parties for the performance of work through the supply of the required resources. Although both parties have the same aim, which is to build the project, they have naturally different objectives: the Employer seeks value for money; while the contractor has to ensure; profitability for his company and shareholders. On the other hand, the Engineer as the Independent Professional has to act as the technical expert and at the same time as administrator and arbitrator, for the implementation of the contract. Hence, the practical and commercial complexities of the construction industry have increased the Engineer's tasks to become more onerous as time passes.

Civil engineering systems have evolved over the centuries to provide structures and facilities for the benefit of mankind. The term "civil engineering" traditionally included but not limited to the following types of projects: housing, commercial and industrial centers, hotels, resorts, navigable canals, irrigation schemes, roads, railways, docks, harbors, dams, bridges, tunnels, libraries, schools, religious centers, etc. With the advance of technology and the resulting sophistication of the world we live in, the scope of civil engineering has expanded. Today this branch of engineering manifests itself in varying degrees

in thermal and nuclear power stations, process industries, oil, gas and coal industries, satellite and communication systems and in almost every conceivable project which is established for the benefit of mankind.

The implementation of civil engineering projects requires proper planning, identifying and setting goals and managing the project resources, before moving to the implementation stage. All these stages require not only vision and thought but also organization. Systems used for organization of such a project will depend on its complexity, but its ultimate realization requires the synthesis of three fundamental parties, namely the promoter, the engineer and the contractor. The formation of a contract requires the establishment of responsibilities, obligations and duties of the parties to be clear, specific and contained in this project to be brought into reality properly and with true economy.

At the outset the point must be made that a construction contract is normally entered into between the promoter and the contractor; the promoter becomes the Employer under the definitions expressed in standard conditions of contract adopted for the construction of civil engineering works. Into this context comes the Engineer, who provides the technical aspects of designs, specifications and, translates the contract. The Engineer's role vis-à-vis the Employer and the contractor is set out in the construction contract and is normally contained in the conditions of contract that are adopted, remembering that the Engineer is not a party to the contract and thus no legal rights or obligations under the construction contract.

The Employer seeks value for money for the proposed facility. Policy decisions for the project obviously rest with the promoter. The Employer alone is responsible for the payment of monies due to the contractor as and when they become due according to the terms of the contract: in this context the Engineer has to certify the payment within the terms of the contract.

The contractor's main goal in executing a contract is profit for his shareholders. Within this parameter reputable contractors will endeavor to provide the works to a high standard of workman-ship and in due time. This enhances their reputation and credibility to further market their services.

There is a common misconception that risk should be avoided. If not managed properly, risk maybe a problem. Therefore, rather than ignore it, we should make risks explicit so that rational commercial decisions can be taken about who should bear them.

Understanding this point helps construction consultants to advise their clients about risk allocation. The aim of contract choice should always be to distribute risk clearly and unambiguously. Unfortunately, there is a general failure within the construction industry to appreciate this and the results of this failure are seen in excessive claims and litigious disputes.

In allocating a risk, we are concerned with the eventual payment and responsibility for the cost of the event, should it materialize. The main point about contractual risks is that the contract apportions these between the parties. Even if the contract is silent on a particular risk, that risk will still lie with one party or the other. The contract may seek to transfer a risk by making one party financially liable should the eventuality take place. In this way, risks are translated into financial equivalents so that they may be transferred or otherwise dealt with.

When a project is first under consideration, decisions will be needed about where liability for the cost of a whole range of risks is to lie. Is it to lie with the contractor, the designers, other consultants or the owner? Mismanagement of construction risks happens when such factors are not considered by employers and tendering contractors.

If the cost of a possible eventuality is to be borne by the contractor, then the price submitted to do the work should include an element for this contingency. This ought to be spread across a series of contracts, because the item at risk will not occur. (If it occurs on all of them, then it is not a risk but has become a certainty.) On the other hand, the cost of the eventuality may be borne by the client. In that case, the offered price should be correspondingly lower but the final price will be increased if the eventuality comes to pass. Any extra risk to be carried by the contractor should therefore be reflected in the price charged for the work.

Claims are unavoidable in the construction industry. Construction claims are usually motivated by one of the parties spending more money than expected for which they believe another party is responsible. Thus, it is important to create strategies to administer construction claims.

So, claims are the symptoms of a problem. It has been said that “One claim can wipe out profit made on many jobs”. If they are unavoidable, then at least we should equip ourselves to deal with them efficiently and expeditiously and minimize the cost in terms of both money and staff resources for both parties of the construction contract.

## 1-2- Problem Statement

Construction claims are probably the most difficult and controversial matter affecting relations in the construction industry. In the past two decades, the Egyptian market has witnessed the introduction of many medium and large scale projects. The Egyptian market suffers from lack of contractual and legal background in connection with claims as well as an inefficient management and administration of the same. There is, however, no proper quantification of the size of the problem.

## 1-3- Research Purpose

The aim of this research is to put the subject of construction claims in perspective in the following manner:

A- Theoretical study ( in the major forms of contracts JCT, ICE, GC/WKs and FIDIC to have to the following :

1 - Definition of claims and its sources.

2 - Review the life cycle of a claim.

3 - Classify types of claims.

B- Statistical Study to :

1 – Review of construction claims arising to Cairo Regional Centre for International Commercial Arbitration according to the theoretical study.

2 – Analysis of these claims in Egypt and categorize them.

From the previous studies and analysis the research strives to minimize claims in the construction industry in Egypt benefiting all parties (Employer, Engineer, and Contractor) involved.

If anything can be done to reduce significantly the burden of claims, then contractors, employers, engineers, must benefit significantly. Not only are there the direct and obvious benefits of saving money and staff resources, there are also the side effect benefits on the work itself as regards quality, efficiency, and, not least, the climate in which it is carried out.

#### **1-4- Organization**

This thesis is divided into five chapters that are organized as follows:

##### **Chapter 1: Introduction**

Serves as an introduction to the thesis and shows the research topic, problem statement, research purpose, and organization.

##### **Chapter 2: Theoretical Study**

Puts the construction claims in perspective in the major standard forms of contracts (JCT, ICE, GC/WKs and FIDIC), definition of claims and its sources, review the life cycle of a claim, classify types of claims.

##### **Chapter 3: Methodology**

Describes the statistical study process which was carried out to the cases arising to Cairo Regional Centre for International Commercial Arbitration.

##### **Chapter 4: Analysis**

Outlines and statistically interpret the outcomes of the chosen methodology and remarks on the results.

##### **Chapter 5: Conclusions and recommendations**

Summarizes the research outcomes and list areas where additional research is or might be needed.