# CONTRACT IN TELECOMMUNICATION INFRASTRUCTURE PROJECT

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To my beloved husband...

Thank you for your support, guidance and everything. May Allah Bless Us.

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In the name of Allah, the most gracious and the most merciful,

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## ABSTRACT

It is unavoidable that during the construction process, a dispute on the insufficiency of contract document often arose. However, the insufficiency of the clauses in the contract is uncommon. The drafted contract must fulfill all the intended roles and guidelines for the relationships between the contracting parties throughout the project. Apart from that, all the project needs and requirements should be also included in the contract to optimize the usage of the contract for the project and to ensure the contract is more comprehensive. Therefore, this research aims to identify insufficient clauses in the contract for telecommunication infrastructure project. A structured interview is performed with the stakeholder in telecommunication infrastructure project to established issues and problems that occur due to insufficient clauses in the contract documents. The data is collected mainly through documentary analyses, which consist of contract documents for telecommunication infrastructure project. From the findings, seven clauses have been identified as insufficient based on the issues and problems, which arose during the execution of work and the needs and requirement of telecommunication infrastructure project. From the analysis, it was also found that the contract is not only insufficient in the contract clauses, but it also in the interpretations of the clauses of contract documents. Some recommendation has been suggested to Network Facilities Provider as the client to enhance the contract documents for telecommunication infrastructure project. From the recommendations being made, the interest and rights of both parties in the contract can be protected. It also helps to minimize disputes between Network Facilities Provider and a Full Turnkey Contractors and to optimize the productivity of the project.

## ABSTRAK

Perselisihan mengenai kekurangan dokumen kontrak semasa kerja-kerja pembinaan adalah sesuatu yang sering berlaku dan ianya tidak asing lagi di dalam industri pembinaan. Walau bagaimanapun, kekurangan didalam klausa kontrak adalah sesuatu yang luar biasa dan sangat jarang berlaku. Kontrak yang digubal perlu memenuhi fungsi dan garis panduan yang dicadangkan kepada pihak di dalam kontrak tersebut sepanjang projek dijalankan. Bukan itu sahaja, semua keperluan dan garis panduan projek perlu disertakan di dalam dokumen kontrak bagi mengoptimumkan penggunaan kontrak tersebut dan memastikan ianya adalah lebih menyeluruh. Oleh itu, kajian ini dibuat bertujuan mengenalpasti klausa yang tidak mencukupi di dalam kontrak bagi projek pembinaan infrastruktur telekomunikasi. Temubual berstruktur bersama pihak berkepentingan di dalam projek infrastruktur telekomunikasi dilakukan bagi mengenal pasti isu dan masalah yang berlaku disebabkan oleh klausa yang tidak mencukupi di dalam dokumen kontrak. Data di kumpul adalah melalui analisis dokumentari iaitu dokumen kontrak bagi projek pembinaan infrastruktur telekomunikasi. Hasil dari kajian, mendapati tujuh klausa dikenalpasti sebagai tidak mencukupi berdasarkan isu dan masalah yang timbul semasa pelaksanaan kerja-kerja projek infrastruktur telekomunikasi dijalankan. Melalui analisis juga didapati bahawa bukan sahaja tidak mencukupi dari segi klausa kontrak, malah dokumen kontrak ini juga tidak mencukupi dari segi tafsiran klausa dan kekurangan sebahagian dari dokumen kontrak yang perlu ada. Beberapa cadangan telah dibuat untuk 'Network Facilities Provider' sebagai pelanggan bagi projek ini iaitu membaik pulih dokumen kontrak bagi projek pembinaan infrastruktur telekomunikasi. Melalui cadangan yang dibuat, kepentingan dan hak kedua-dua pihak di dalam kontrak dapat dilindungi. Ia juga dapat membantu mengurangkan perselisihan di antara 'Network Facilities Provider' dan juga pihak 'Full Turnkey Contractors' serta dapat mengoptimumkan lagi produktiviti projek.

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# LIST OF ABBREVIATIONS

CAPEX Cost Expenditure

CIDB	Construction Industry Development Board
CPC	Certificate of Practical Completion
FTC	Full Turnkey Contractor
LAD	Liquidated Ascertained Damages
LC	Local Council
MSA	Master Service Agreement
NFP	Network Facilities Provider
NSP	Network Service Provider
PAM	Pertubuhan Arkitek Malaysia
PM	Project Manager
PWD	Public Word Department
RTT	Rooftop
SLA	Service Level Agreement
SOR	Schedule of Rates
SOW	Scope of Work
TP	Technical Proposal
TSS	Technical Site Survey
TSSR	Technical Site Survey Report

#### **CHAPTER 1**

## **INTRODUCTION**

## 1.1 Research Background

Malaysian construction industry is most significant sectors in the Malaysian economy. This industry is very critical for the creation of national wealth as it acts as a catalyst for the country. Construction sector registered 25.9% of annual growth rate in 2012. 63.9% of the total construction industry was collected from infrastructure and residential construction<sup>1</sup>.

Telecommunications is one of the sub-sections of infrastructure construction. Telecommunication project is rapidly growing and Malaysia is also experiencing the changes. The development of information technology, multimedia, Internet and communication led to the creation of a new environment and establish a better-quality lifestyle concept and sophistication.

<sup>&</sup>lt;sup>1</sup> Construction Industry Development Board (2012), Construction Industry Master Plan 2006-2015.

The launch of The National Broadband Initiative by the Prime Minister, Dato' Seri Najib Tun Abdul Razak on March 24<sup>th,</sup> 2010, has inspired economic growth in the telecommunication industry. The research report on Asean countries stated that every ten percent increase in broadband penetration has contributed to one percent of gross domestic product (GDP). In order to improve the broadband coverage to rural communities, existing cellular services in urban areas was enhanced by the construction of 1,000 new towers across the country. This is to achieve ninety-seven percent coverage of the service network. The development and evolution of the telecommunications also contributed to the construction of telecommunication infrastructure extensively.<sup>2</sup>

In every construction projects, there must be a binding document known as a contract. It is a compulsory document and acts as a reference throughout the project. The contract can be defined as a legally binding agreement or valid between two or more competent parties. Normally, the contract is in written form however it might be in oral or implied. This is usually related to an employment contract, sale or lease or tenancy.<sup>3</sup>

Contracts can be very simple or they may be very long and complicated legal documents. The contract will be legally binding when it is properly set-up. The contractual parties will perform various obligations as agreed and specified in the contract documents. Therefore, a contract is essential to protect the right and interest of both client and contractor.

In the construction industry, the contract is divided into two (2) types; building contract and engineering contract. Building contract refers to works involving design, fabrication, erection, alteration, repair or demolition of structure and installation on site. Other works related to infrastructure, systems and equipment installation are

<sup>&</sup>lt;sup>2</sup> Malaysia's New Economic Model and High-Speed Broadband. ITU News 4/2010. May 2010

<sup>&</sup>lt;sup>3</sup> Ewan McKendrik, "Contract Law." Fifth Edition. (Palgrave Law Masters, 2003)

called 'engineering contracts'. The diction between building contract and engineering contract has no legal significance hence, it is a class of Malaysian law which is part of the general law of contract.<sup>4</sup>

Letter of award, contract drawings, contract bills, articles of agreement, specifications, conditions of contract and appendix are normally part of the contract documents and shall be inserted according to its priority. Drawings, bill of quantities and specifications are important and highly used<sup>5</sup>. This is due to the entire documents are construed to each other, giving meaning and effect to each part. It is also presumed that documents in the contract were inserted deliberately and with its purposes.<sup>6</sup>

Great attention on contract interpretation would be needed to understand the content of the whole contract documents. Contractual parties are usually contract literate and are aware of the terms and conditions sufficient to ensure the successful project delivery and to minimize disputes.

#### **1.2 Problem Statement**

Disputes concerning the inconsistencies of interpretation, insufficient of documents and clauses in the contract, plans, conditions or even in specifications during construction are something are unavoidable. If the understanding of the contract terms and the interpretation of the contents are not fully utilized, the

<sup>&</sup>lt;sup>4</sup> Ir. Harban Singh K.S, "Contracts: An Overview." (The Ingenieur, March-May 2005), pp.7-20

<sup>&</sup>lt;sup>5</sup> Aminudin Ali, "Exploitation of Contract Document for Construction Project Planning and Controlling." Msc. in Construction Management. (Faculty of Civil Engineering, University Technology Malaysia, 2006).

<sup>&</sup>lt;sup>6</sup> Richard H.C, "Construction Contracting." 5th Edition. (A Wiley International Publication; John Wiley & Sons, 1986), pp.148-149

contractual obligation will always be questionable.<sup>7</sup> Syahira Nabilla, Ahmad Hisham and Dr. Khairulzan Yahya (2016) stated that one of the factors contributing to delay in the construction industry is caused by mistakes and discrepancies in contract documents. Not only delay, it also causes time and cost overrun in the construction project.<sup>8</sup>.

The findings by Fenn  $(2002)^9$  shows that the contents of contract document itself such as error in design (46%), discretionary and mandatory changes (26%), technical report especially in site condition, contract conditions and contract terms are the main contributor to discrepancies of construction contract.

Collier (1982)<sup>10</sup> also gives an opinion on the issues encountered after the contract agreement signed:

i. Interpretation and minor changes of a contract

Effect a minor change on the document such as wording and drawings. The interpretation between the employer and the contractor is different which the consequences had caused the contractor to incur unexpected costs.

#### ii. Inconsistencies in a contract

Certain documents shall govern others in the event of discrepancies among them. Like declining order of agreement, general conditions, specification and drawings. Collier (1982)<sup>11</sup> explained; some inconsistencies may be

<sup>&</sup>lt;sup>7</sup> Daniel M.B, Erik Kamstier, Micheal M. Krieger and Willenken Loh Stris Lee & Tran, "From Contract Drafting to Software Specification: Linguistic Sources of Ambiguity". A Handbook. Version 1.0 (2003).

<sup>&</sup>lt;sup>8</sup> Syahira Nabila, Ahmad Hisham and Dr Khairulzan Yahya, "Cause and Effects on Delays in Construction Industry." (Faculty of Civil Engineering, Universiti Teknologi Malaysia, 2003)

<sup>&</sup>lt;sup>9</sup> Peter F, "Why Construction Contracts Go Wrong (or an Aetiological Approach to Construction Disputes)." (A presentation paper at The Society of Construction Law, 2002)

<sup>&</sup>lt;sup>10</sup> Keith C, "Managing Construction Contracts." (Reston Publishing Company, Inc Reston Virginia, 1982), pp. 346, 352-355, 359.

<sup>&</sup>lt;sup>11</sup> Ibid no. 10

detached nevertheless, others occurring in the same document such as specification may remain to confound and cause trouble.

Lack of mutual agreement
Due to mistake, misrepresentation, non-disclosure, fraud and undue influence

#### iv. Areas of contention

Arose due to the amendment of contracts, instruction beyond the part of the contract document, disproval of items, samples, test results and the information released by an owner or designer to subcontractors.

As a sub-division of engineering construction, telecommunication infrastructure project is very unique. The duration or period of construction work is short but the numbers of sites are increasing nowadays, aligned with telecommunications' technologies as it provides a platform for the network coverage.

Although it considered as fast track project, parallel to all construction projects, the existence of contract documents is very important to ensure deliverable in the project. Similar to building contractors, telecommunication contractors also facing the same difficulties in the construction contract. The discrepancies in the contract documents usually arose due to insufficient information provided in the signed contract documents.

Insufficient in the context of having sufficient and impartially contract clauses, understanding the contents and the requirements of the project most of the times, delays the contractual parties to perform their roles in the project. For that reason, this research attempts to identify the insufficiency of the clauses in the bespoke contract between Network Facilities Provider (NFP) and Full Turnkey Contractors (FTC) for telecommunication infrastructure project.

In this research, the contract agreement to be used in the research is a bespoke type (non-standard form of contract) where the agreement has been modified based on the project requirements. The procurement type is a '*Turnkey Contract*'. Turnkey Contract is where the contractor undertakes both design and construction work to meet the employer requirements throughout the project period. Hence, in telecommunication infrastructure project, the Full Turnkey Contractors (FTC) is the party responsible for the design and construction of telecommunication infrastructure sites.

#### **1.3** Objective of the Research

The objective of this research is to identify the insufficiency of the clauses in the contract between Network Facilities Provider (NFP) and Full Turnkey Contractors (FTC) for telecommunication infrastructure project.

#### **1.4** Scope and Limitation of the Research

This research will be focus on:

- Construction bespoke contract between Network Facilities Provider (NFP) and their Full Turnkey Contractors (FTC) for telecommunication infrastructure project.
- ii. The selected documents and clauses in the telecommunication bespoke contract based on the issues arise during the project implementation.
- PAM Contract 2006 as a reference since this form is established for private project in Malaysia

#### **1.5** Significance of the Research

Insufficient contract documents in a construction contract is a common issue. However, insufficient clauses in the construction contract are uncommon. It is not a wrongdoing if any of the clauses in the contract are not included, nevertheless if the clauses are critical to the execution of work, it will give an enormous impact on the deliverables of the project.

This research project would be able to determine insufficient clauses in the telecommunication bespoke contract. The improvement and enhancement of the contract are important to resolve a dispute arose during the execution and implementation of the project.

## 1.6 Research Methodology

To meet the objective of the research, a systematic process will be conducted. A collected data and information is divided into several stages. Data and information will be reviewed and analyzed based on reference books, journals, Internet sources, seminar papers, the standard form of contracts and others. The process of data and information collected is shown in Figure 1.0.

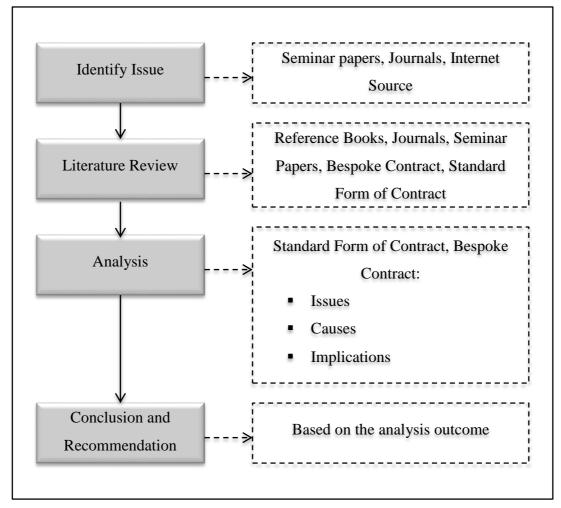


Figure 1.1: Research Methodology Process Flow

#### 1.7 Organization of the Research

This research project comprises of six chapters. The first chapter is the introduction, which explains the overall contents of the research such as issues, the objective of research, scope and limitation of research, a significance of research and the organization of chapters.

In the second chapter, it will give an overview regarding the construction contract and documents. In this chapter, the definition of construction contact will be explained in details. The nature of the construction contract is also discussed to give a better understanding from construction industry's perspective. PAM 2006 Standard Form of Contract to be used for detail explanations on the construction contract documents in Malaysia. This chapter also explains the type of construction contract forms available in Malaysia, what makes the contract document sufficient, the type of insufficient construction contract documents and the difficulties arose during the formation of the contract. The overview of Bespoke Contract also will be explained in this chapter.

The third chapter will give an overview of telecommunication infrastructure project in Malaysia and the types of telecommunication infrastructure sites being developed throughout the project.

In a fourth chapter, it explained the methods of data collections and information needed to achieve the research objective.

Chapter five discussed the findings of the research. There are three types of findings:

- a. Insufficient clauses, which is necessary to the project but not included in the contract.
- b. Insufficient clause in terms of inconsistencies in interpretation of clauses
- c. Insufficient or incomplete contract documents.

This chapter also discussed the implications of insufficient clauses in the contract to the project delivery.

Chapter six will conclude the findings for the whole research and recommendation for enhancement of the bespoke contract for telecommunication infrastructure project.

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