THE UNDERSTANDING OF CONTRACT DOCUMENTATION IN PROJECT IMPLEMENTATION

ZULKIFLY BIN MADON

A Project report submitted as a partial fulfillment of the requirements for the award of the degree of Master of Science (Construction Management)

Faculty of Civil Engineering Universiti Teknologi Malaysia

NOVEMBER 2005

PEMAHAMAN DOKUMEN KONTRAK DALAM PERLAKSANAAN PROJEK

ZULKIFLY BIN MADON

Laporan projek ini di kemukakan sebagai memenuhi sebahagian daripada syarat penganugerahan Ijazah Sarjana Sains (Pengurusan Pembinaan)

Faculty of Civil Engineering Universiti Teknologi Malaysia

NOVEMBER 2005

Specially dedicated to my beloved family my wife Rohani kassim, my sons Mohd Ikhwan, Mohd. Idzham Shahrin, Mohd Idzhar Zaidi and my daughter Ika Zuharina

For your everlasting love and care....

ACKNOWLEDGEMENT

In preparing this master project report, it was never an individual effort. I was in contact with many people especially senior officers in the Public Work Department Malaysia, academicians and practitioners. They have involved in contributing towards my understanding and thoughts directly or indirectly. In particular I wish to express my greatest sincere appreciation to my supervisor Assoc. Prof. Dr. Mohamad Ibrahim Mohamad. With all the guidance and advices given from the supervisor this master project was able to complete on time. His dedication and continuous assistance have led the author to strive for better achievement in this master project.

I am also wish to express my gratitude to my family and friends for their support and assistance at various occasions. Last but not least, I also wish to all those who have contribute in any way in making this master project a possible one.

ABSTRACT

The contract obligation by any party in any contract will be interpreted by terms and contents of the documents laid down in the contract. Effective interpretation and understanding of the contractual obligations will be much dependent on the clarity of the documents in translating the needs and requirements implied as in the agreement. Without proper understanding of the documents may lead to the different interpretations which may result in unnecessary contractual problems such as disputes, unnecessary claims, reworks, shoddy works, and even litigation. The aim of this study is to identify the importance and the level of understanding of contract documentation in our local construction industry. The study conducted with reference to the indigenous group of contractors who participate in contract implementation in Public Sector Projects experiences. The methodology adopted for the study includes interviews with panel of experts that have vast experience in contract administration and industry wide questionnaire survey among the Bumiputra contractors that involved in JKR projects. The data collected were analysed using content analysis method and using appropriate statistical method such as frequency analysis and relative index method. The study has determined from the viewpoints of expert panel that the expected level of understanding toward contract documentation must be very high. However the levels of current understanding among the contractors are fairly moderate. Therefore there is an urgent need to improve this situation. Apart from that the study also established factors that inhibit the understanding of contract document as well as the factors that can help to improve the understanding of contract documents for the contractors.

ABSTRAK

Tanggung jawab berkontrak adalah diterjemahkan oleh terma-terma dan kandungan di dalam sesuatu dokumen kontrak. Interpretasi yang berkesan terhadap sesebuah kontrak adalah bergantung kepada kejelasan terma yang di tulis serta kebolehan pembacanya untuk menterjemahkan maksud yang telah termaktub didalam perjanjian kontrak. tersebut. Kegagalan mentafsirkan maksud terma dan dokumen kontrak boleh menyebabkan salah faham terhadap kehendak sebenar kontrak dan boleh menjuruskan kepada masaalah kontrak yang lain seperti perbalahan; tuntutan yang tidak wajar; kerja berulang kali; tidak mengikut specifikasi malah ia juga boleh mengakibatkan pertikaian di mahkamah serta menjejaskan reputasi kontraktor pada masa hadapan. Matalamat utama Projek Sarjana ini adalah untuk mengkaji tahap pemahaman terhadap dokumen kontrak oleh kontraktor bumiputra yang terlibat dalam perlaksanaan projek, awam dalam industri pembinaan. Kajian yang di gunakan termasuklah temubual dengan senarai panel pakar yang mempunyai pengalaman yang luas dalam urusan pentadbiran kontrak. Selain dari itu maklumat di kumpul melalui kaedah borang soal selidik yang dijalankan keatas kontraktor bumiputra yang terlibat dengan projek JKR. Data yang dikumpul telah di analisa menggunakan kaedah 'content analysis' serta kaedah statistic lain seperti analisa frekuansi dan index relative. Hasil dari kajian telah mendapati tahap pemahaman terhadap kontrak dokumen pada masa ini adalah serhadana dan keadaan ini memerlukan tindakan yang segera. Disamping itu kajian ini juga telah mengenalpasti faktor yang menghalang kefahaman kontrak dan faktor yang akan membantu untuk meperbaiki tahap kefahaman terhadap dokumen kontrak oleh kontraktor ini.

TABLE OF CONTENTS

CHAPTER		TITLE	PAGE
	DE	CLARATION	ii
	DE	DICATION	iii
	AC	KNOWLEDGEMENT	iv
	AB	\mathbf{v}	
	AB	vi	
	TA	BLE OF CONTENTS	vii
	LIS	T OF TABLES	xii xiv
	LIS	T OF FIGURES	
	LIS	T OF APPENDICES	XV
1	INT	CRODUCTION	
	1.1	Background	1
	1.2	Problem statement	2
	1.3	Objectives	2
	1.4	Scope and Limitation of the Study	3
	1.5	Research Methodology	4
	1.6	Limitation of the Study	5

2 UNDERSTANDING CONTRACT DOCUMENTATION

2.1	Introd	uction	7
2.2	Contract Document		
2.3	Purpose and Function of the Documents		
2.4	The Pr	reparation of the Contract Documents	12
	2.4.1	Time when the Document to be Ready	14
2.5	Conte	nts of a Contract Document	16
	2.5.1	Contents of Document in JKR Contract	16
		Practice	
	2.5.2	Contents of Contract Document based on	19
		other Form of Contracts	
	2.5.3	Contract Administration Process -JKR	21
		Practice	
2.6	Under	standing the Contract Requirement	24
2.7	Factor	s that Influence the Understanding of Contract	25
	docum	nents and Requirements	
	2.7.1	Not Competent and lack of Experience	26
	2.7.2	Adequacy of Documents	27
	2.7.3	Clarity of the Documents	28
	2.7.4	Interpretation of the Legal Term	29
2.8	Attitud	dinal	30
2.9	Summ	ary	31
ME	THOD	OLOGY	
3.1	Introd	uction	32
3.2	Deterr	mination of the Research Objectives	32
3.3	Literat	ture Review	33
3.4	Data C	Collections	33
	3.4.1	Development of the questionnaire in the survey	34

3

3.5	Intervi	ew with the Experts		34
	3.5.1	Objective of the In	terview	35
	3.5.2	Methodology of the	e Interview	35
		3.5.2.1 Face to Fa	ace Interview	36
		3.5.2.2 The struct	cured Interview	36
		Questionr	naire	
3.6	Indust	y Questionnaire Sur	rvey	37
	3.6.1	Methodology of the	e Industry Survey	37
	3.6.2	Questionnaire for t	he Industry Survey	38
3.7	Questi	onnaire for the Indus	stry Survey	38
	3.7.1	Content Analysis		39
	3.7.2	Frequency Analysi	S	39
	3.7.3	Average Index Ana	alysis	40
	3.7.4	Relative Index Ana	alysis	41
DA ′ 4.1	TA AN A Introdu	LYSIS AND RES	ULT	43
4.1			Donal	
4.2		round of the Expert Face to Face Interv		44
				45 46
	4.2.2	Analysis on the stru questionnaires	ictured interview	40
4.3	The In	lustry questionnaire	survey	53
4.4	The Re	spondents' Backgro	ound	54
4.5	Data A	nalysis of the Indus	try Survey	55

4

		4.5.1	The Importance of Understanding the Contract	56
			Documents	
		4.5.2	Factors that Support and Inhibit the	58
			Understanding of Contract Documents	
		4.5.3	Factors that contribute to lack of	61
			understanding of Contract Document	
		4.5.4	Improving the level of Understanding of	
			Contract Documents	
		4.5.5	General comment from the respondents	66
5	DIS	CUSSI	ON	
	5.1	Introd	uction	68
	5.2	The Ex	xpected Level of Understanding of Contract	68
		Docum	nent by the Contractor	
	5.3	The In	nportance of Understanding of Contract	70
		Docum	nents by the Contractors	
	5.4	Factor	s that Influence the Understanding of Contract	73
		Docum	nent	
	5.5	Impro	ving the Understanding of Contract Document	80
	5.6	The Su	ummary of Overall findings of the study	85
6	CO	NCLUS	SION AND RECOMMENDATION	
	6.1	Introd	uction	87
	6.2	Major	findings	87
	6.3	Conclu	usion	90

6.4	Recommendation for Further Study	91
REFERENCES		93
APPENDIX I		96
APPENDIX II		101

LIST OF TABLES

TABLE NO.	TITLE	PAGE
3.1	The level of agreement and evaluation for average	41
	index analysis	
4.1	Distribution of the expert respondents based on disciplines	44
4.2	Distribution of panel Respondent based on experience	45
4.3	Frequency Analysis of the Structured Interview with	
	Expert Panel	48
4.4	Content analysis of open-ended question to Expert Panel	50
4.5	Summary of factors contribute to influence the	
	understanding of Contract Document by the expert	51
4.6	Summary of proposed factors to ensure better understanding	52
	of contact document	
4.7	Number of Respondent Responded to the Questionnaire	53
4.8	Position of the Respondents in the Organization	54
4.9	Experienced of Respondents	55
4.10	The Importance of Understanding the Contract Document	57
4.11	Factors that support and inhibit the understanding of	60
	contract documents	
4.12	Factors that contribute to lack of understanding of	
	Contract Document	62
4.13	Improving the level of understanding of contract documents	64
5.1	The Effect of Understanding of Contract Document	71
5.2	The importance of Understanding of Contract Document	72

5.3	Factors Influence the Understanding of Contract	
	Documents	74
5.4	Additional Factors that Influence the Understanding of	76
	Contract Document	
5.5	Factors Inhibit Understanding of Contract Document	77
5.6	Factors contribute to Lack of Understanding	78
	of Contract Documents	
5.7	Proposal by the Expert to Improve the	81
	Contract Understanding	
5.8	Factors Proposed to Improve the Understanding	83
	of Contract Document	

LIST OF FIGURES

FIGURE NO	TITLE	PAGE
1.1	Research methodology sequence	5
3.2	Five ordinal measures of agreement of Likert's scale	34
4.1	Distribution of expert respondent based on profession	
	by percentage	44
4.2	Distribution of panel Respondent based on experience by percentage	45
4.3	Percentage of the Responded Questionnaire	54
4.4	Percentage of the Respondents in the Organization	55

LIST OF APPENDICES

APPEN	IDIX TITLE	PAGE
I	Structured questionnaires for expert panel	96
II	Questionnaires for industry survey	101

CHAPTER 1

INTRODUCTION

1.1 Background

Contractual obligation by any party in any contract will be of questionable state if the understanding of the terms and interpretation of the contents of the contract documents are not fully appreciated. Clear requirements and needs of each party will be translated in the documents signed by both parties. Factors of contractual language and its judicial interpretation may lead to the problem of understanding of the needs of the contract which may lead to misinterpretation and misunderstanding of the facts in contract obligations. This situation may prevail an opportunistic party to take the unfair advantage of another party when an adjustment to be made in the contract.

The contract documents drafted for any contract should fulfill the intended roles of being the references and guidelines for the relationships between the contracting parties throughout the project. Therefore it is necessary to have proper understanding of the contents of the contract documents which leads to the enhancement of the contractual relation and assurance of the intended deliverance of the product.

1.2 Problem Statement

The complexity of contract documentation in a construction contract most of the times hinders the contract participants especially the contractor and the clients to really understand the contractual needs and obligations of the parties. The various backgrounds of the contractors in our construction industry especially in the Public Sectors contribute to difficulties in delivering the required product to the clients. Therefore, understanding the contents and requirements of the contract documents will have great influence in the smooth and good performance of the deliverance of the products as to satisfy the needs of the clients.

For the smooth implementation of the project, it is therefore necessary for the contractors to be well verse with the contract interpretation and literacy of the contract documents in order not to dispute the product delivery in term of cost, time and quality.

Therefore it is necessary to study the level of understanding of contract document by these contractual participants so as to achieve amicable satisfaction among themselves.

1.3 Objectives

The aim of the study is to evaluate level of understanding of the principles, obligations and commitment required by the contractor and parties in the contract to satisfy the contractual needs among the contractors and the clients.

The objectives of this study are as follows:

- (i) To determine the expected level of understanding towards contract documents.
- (ii) To evaluate the importance of understanding towards contract documents by the contracting parties.
- (iii) To identify factors that inhibits understanding of contract documents.
- (iii) To identify the strategy to improve the level of understanding of contract documents by the contracting parties.

1.4 Scope and Limitation of the Study

The scope of the study will focused on the medium to bigger capacity projects from RM 500,000.00 and above which were carried out by the JKR Malaysia specifically limited in the area of Negeri Sembilan Darul Khusus. The sample of the study will only focus the background of the contractors which are registered with the Construction Industry Development Board (CIDB) and Contractor Service Centre of Malaysia (PKK) having the Indigenous (Status Bumiputra) status that is active in the project implementation with Public Work Department Malaysia. Survey will be conducted on the construction company within Negeri Sembilan Malaysia and the neighboring States.

The level of understanding towards contract documents will be analyzed and evaluated based on factors such as competencies, attitudes, past experiences, commitments and education background. This is to judge the seriousness of the parties when they are involved in the contractual binding. The study will also include the legal interpretation of the documents but focused on the actual

requirements of each party towards each other in order to accomplish mutual satisfaction based on the goodwill spirit of the contractual needs.

1.5 Brief Research Methodology

The methodology used in conducting this research is through literature search, the structured interviews with the professionals who are involved in contract administration in their work and questionnaire survey among the contractors in the respective states of Malaysia. The literature search explores the contract requirements generally practice in Malaysia and abroad. Review has been also carried out on the practices by the government bodies by using the JKR forms of contract and documentation process generally practice by JKR Malaysia in the contract implementations.

The questionnaire survey has been conducted among the contractors within the category of the study to asses the opinions of the practitioners in the construction industry towards the objectives of the study. Besides the questionnaire survey some interviews has also been conducted with the professionals as the expert panel which includes the law practitioner and middle to top managers to assess their opinions towards the expected level of understandings of contract documents in the subject as mentioned in the objectives. The interviews are divided into face to face question and answers session and answering the structured questionnaire.

The qualitative data generated from the questionnaire has been analyzed using statistical method and finally inferences were made to support the study findings. The overall sequence of research process undertaken is shown in figure 1.1.

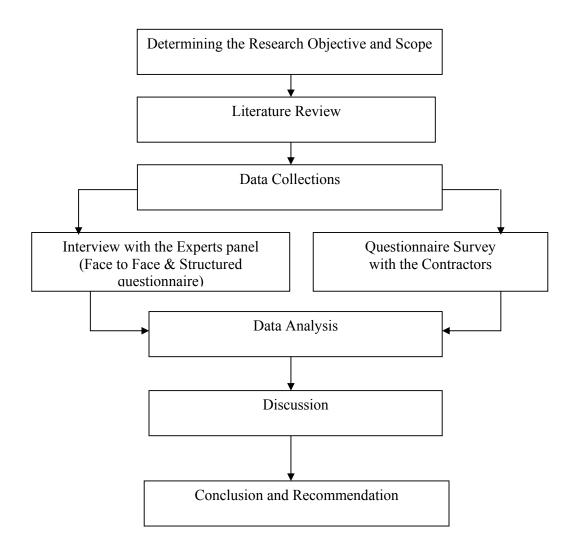


Figure 1.1 Research methodology sequence

1.6 Limitation of the study

The limitations of the sampling are confined to participants from companies registered with Construction Industry Development Board Malaysia (CIDB) and Contractor Service Centre (PKK) having indigenous status (Status Bumiputra) with capacity of RM500000 and above. These contractors have been selected randomly within the States of Negeri Sembilan, Selangor and Federal Teritory of Kuala

Lumpur Malaysia. The level of understanding of contract document by the contractors has been evaluated within the parameters as below:

- a. Attitudes;
- b. Past Experience;
- c. Commitments; and
- d. Education Background.

The study is focusing within Indigenous Group (Bumiputra Status) of contractors only and cannot be generalized for all contractors despite the potential of similar characteristic may exist. The discussion of the results is then presented within the vicinity of responses and constraints may arise due to the localized conditions of the public sector projects participated by the indigenous contractors handles by the states JKR or JKR Malaysia.

REFERENCES

Harban, K S (2002). Engineering and Construction Contracts Management, Pre-Contract Practice. Lexis Nexis, Singapore.

Harban, K S (2002). Engineering and Construction Contracts Management, Commencement and Administration. Lexis Nexis, Singapore.

Harban, K S (2002). Engineering and Construction Contracts Management, Post Commencement Practice. Lexis and Nexis, Singapore.

Keating, D. and UFF, J. (1978). Building Contracts. Sweet & Maxwell, London.

Dennis, F. T. (1982). *Building Contracts, A Practical Guide*. 4th ed. George Godwin, London.

Harmon, K. M (2003). Conflicts between Owner and Contractors: Proposed Intervention Process. *Journal of Management in Engineering, ASCE/July2003 pp,121*.

JKR Malaysia (1990). The Administration of Public Works Contracts. K. L

Mc. Callum, M.H.(2002). A Quick Primer on Construction Risks And Contracting Practice. *American Corporate Counsel Association Annual General Meeting*. October 2-4, 2002.

Majid A.M. (2004). Legal Interpretations in Construction Contracts. *Mesyuarat Jurukur Bahan Sektor Awam*. JKR Malaysia, November 29-30, 2004.unpuplished

Neil A. W. (2005). Introductory Statistics. 7th ed. Arizona State University, USA.

Chan, E. H. and Suen, C. H. (2005). Dispute and Dispute Resolution System in Sino-Foreign joint Venture Construction Project in China. *Journal of Professional issues of Engineering Education and Practice* © ASCE / April 2005/141

Panagiotis, M. and Gregory, H. (2001). Model For Understanding, Preventing, and Resolving Project Disputes. *Journal of Construction Engineering and Management*. May/June 200/231

Dozzi et. al. (1966). More Stable Owner- Contractor Relationships. *Journal of construction Engineering and management*. March 1996/31.

Al-Sobiei, O.S. et al. (2005). Managing Owner's Risk of Contractor Default. *Journal of Construction Engineering and Management*. © ASCE/ September 2005/973.

Thompson, R. M. et al. (2000), Innovation To manage Disputes: DRB and NEC, *Journal of Management in Engineering*. September/ October 2000/51.

Diekmann, J.E. and Girard M.J. (1995). Are Contract Disputes Predictable. *Journal of Construction Engineering and management*. December 1995/355.

Cheng, W.L. et al. (2001). Network Communication in the Construction Industry, corporate Communication. *An International Journal*. Vol 6-Number 2, 2001, 61-70.

Paul, G. C. et al. (2002). Relationship Between Personality Traits and Performance for Engineering and Architectural Professional Providing Design Services. *Journal of management in Engineering*. October 2002.158-166.

Battersby, J. (2002). Developing Trend in Construction Disputes Resolution. *The Chartered Institute of Arbritrators, Malaysia Branch and Bar Council States of Malaya*. Monday 13 May 2002,

Low, S. P. and Goh, K.H. (1992). Construction Quality Assurance: Problem of Implementation at Infancy Stage in Singapore. *International Journal of quality and Reliability Managemen*. Vol. 11 No. 1,1994, pp 22-37.

Vincent P.S. and John, S. (1985). *Contract Documentation for Contractors*. Collins: 8 Grafton, London W1.

Vincent P.S. (1990) . The Malaysian Standard Form of Building Contract, Kuala Lumpur. *Malayan Law Journal Sdn. Bhd.* 1990.

Caplicki, E.V. (2005). Construction Not Entitled to Recover for Extra Work in Absence of Written Authorization. *Journal of Professional Issues in Engineering Education and Practice*. ©ASCE/ April 2005.

Bran, M.S.(2005). International Construction Disputes Adjudication under International Federation of Consulting Engineers Condition of Contract and the Dispute Adjudication Board. *Journal of Professional Issues in Engineering Education and Practice*. © ASCE / April 2005/149.