MINIMISING CONSTRUCTION DISPUTES

NORAZIAH BINTI WAHI

A project report submitted in partial fulfilment of the requirements for the award of the degree of Master of Sciences (Construction Management)

> Faculty of Civil Engineering Universiti Teknologi Malaysia

> > NOVEMBER 2008

ABSTRACT

Construction industry plays an important role in developing Malaysia and it is a major contributor towards realizing Vision 2020. It is totally different from manufacturing industry whereby the same construction team will not be able to produce the same products even though the projects have similar nature of construction. Owing to the complex, disputes between different parts within these interacting fragments is highly foreseeable. This study was conducted to identify the causes and effects of disputes in construction industry, as well as ways to mitigate disputes. Results from the survey conducted indicated that the causes of disputes in general between major parties involved in construction projects are various, with certain considered as major, others considered as quite significant and up to certain extent, some are considered of less significant but nonetheless could still give birth to disputes. Categorically the major effects of disputes are those that concerns time as well as money, while those consequences from the legal terms was also considered significant as the other potential effects of disputes. However, all parties involved do not seem to care much of the potential effects of disputes on their reputation as well on third parties. Dispute can effectively be avoided or mitigated by adopting certain or series of dispute avoidance activities. Although effective, these dispute avoidance approaches does not guarantee anybody full exclusion from experiencing disputes. Of all the dispute avoidance approach suggested the partnering approach was seen as the most effective but probably the hardest to be adopted. The content as well as the outcome of this study was hoped to be able to serve as a source of reference for various participants of construction industry with regards to the matters of disputes in construction industry.

ABSTRAK

Industri pembinaan penting dalam pembangunan Malaysia dan turut menyumbang ke arah pencapaian Wawasan 2020. Sektor pembinaan adalah berlainan dibandingkan dengan sektor pembuatan, dimana produk yang sama tidak dapat dihasilkan meskipun melalui proses pembinaan yang sama. Disebabkan sifat industri itu sendiri yang agak kompleks, pertelingkahan antara pihak ataupun pecahan yang pelbagai serta berinteraksi ini sering terjadi. Kajian dijalankan bagi mengenalpasti punca-punca serta kesan-kesan pertelingkahan yang wujud dalam industri pembinaan, selain daripada mengetengahkan kaedah-kaedah bagi mengelak berlakunya pertelingkahan. Hasil kaji selidik yang dijalankan menunjukkan secara amnya, puncapunca pertelingkahan antara pelbagai pihak dalam industri tersebut adalah pelbagai, yang mana ada antaranya dianggap sebagai punca utama, ada pula dianggap agak penting dan sebahagian pula dirasakan tidak begitu penting sebagai punca pertelingkahan. Dari segi kesannya pula, ianya boleh dikategorikan ke dalam kesankesan yang berkaitan dengan masa dan wang, disamping kesan-kesan yang berkaitan dengan aspek perundangan. Walaubagaimanapun, kebanyakan pihak yang terlibat tidak begitu mengambil berat berkenaan kesan pertelingkahan terhadap reputasi mereka. Pertelingkahan mampu dielakkan dengan mengguna pakai kaedah ataupun kombinasi kaedah-kaedah yang pelbagai. Meskipun berkesan, kaedah-kaedah ini bukanlah jaminan pengecualian sepenuhnya terhadap berlakunya pertelingkahan. Kaedah kerjasama antara dua ataupun pelbagai pihak dilihat sebagai kaedah terbaik namun mungkin yang paling sukar untuk dilaksanakan. Adalah diharapkan, kandungan serta hasil daripada kajian ini dapat digunakan sebagai rujukan bagi pihak-pihak yang terbabit dalam industri pembinaan dari segi perkara yang berkaitan dengan pertelingkahan.

TABLE OF CONTENTS

Chapter	Contents Declaration		Page
			ii
	Ded	ication	iii
	Ack	iv	
	Abs	v	
	Con	vii	
	List	xi	
	List of Tables		xii
_		RODUCTION	_
Ι		1	
	1.1	Introduction	1
	1.2	Problem Statement	2
	1.3	Aim of Study	3
	1.4	Objectives of Study	4
	1.5	Scope of Research	4
	1.6	Significance of Research	5
	1.7	Research Methodology	5
II	MINIMISING CONSTRUCTION DISPUTES		7
	2.1	Introduction	7
	2.2	Definition of Disputes	8
	2.3	Nature of Construction Dispute	9
		2.3.1 Enforceable Promises	9
		2.3.2 Technical Matters	10
		2.3.3 Legal Matters	10
		2.3.4 Entitlement and Magnitude	11
	2.4	Sources of Disputes	12

Chapter	Contents		Page
		2.4.1 Inconsistencies of Contract	14
		2.4.2 Payment	15
		2.4.3 Determination of Contract	16
		2.4.4 Variation	17
		2.4.5 Lack of Communication	17
	2.5	Causes of Disputes In General	18
		2.5.1 Causes of Disputes by Stakeholders	21
		2.5.1.1 Clients	22
		2.5.1.2 Consultants	24
		2.5.1.3 Contractors	26
	2.6	Effect of Disputes	28
		2.6.1 Effect on Cost and Profitability	28
		2.6.1.1 Financial Costs	29
		2.6.1.2 Hidden Costs	29
		2.6.1.3 Reducing Profit Margin	30
		2.6.2 Effect on Time	30
		2.6.3Effect on Quality	31
		2.6.4 Effect on Business and Working Relationship	31
		2.6.5 Dispute Escalation (Chain Reaction)	32
		2.6.6 Emotional Costs	33
	2.7	Avoiding Disputes	35
		2.7.1 Partnering Approach	35
		2.7.2 Clarification of Responsibilities	36
		2.7.2.1 Client	36
		2.7.2.2Contractor	37
		2.7.2.3 Consultant	37
		2.7.3 Risk Allocation	38
		2.7.4 Increase Ability to Resolve Problems	39

III	RES	EARCH METHODOLOGY	41	
	3.1.	Introduction	41	
	3.2.	Literature Review	41	
	3.3.	Data & Information Gathering	42	
		3.3.1 Primary Data and Information	42	
		3.3.1.1 Questionnaires	42	
		3.3.1.1.1 Method of Questionnaire Collection	43	
		3.3.2 Secondary Data and Information	44	
	3.4.	Data Analysis and Interpretation	44	
		3.4.1 Frequency Analysis	44	
		3.4.2 Average Index Analysis	45	
	3.5.	Conclusions and Recommendations	45	
IV	DAT	DATA COLLECTION AND ANALYSIS		
	4.1.	Introduction	47	
	4.2.	Questionnaire Feedback	48	
	4.3.	Analysis and Results	51	
		4.3.1 Causes of Construction Disputes in General	51	
		4.3.2 Causes of Construction Disputes by Client	58	
		4.3.3 Causes of Construction Disputes by Consultant	66	
		4.3.4 Causes of Disputes by Contractor	73	
		4.3.5 The Effect of Disputes to Stakeholders in the		
		Construction Industry	80	
		4.3.6 Disputes Avoidance in Construction Industry	89	
		4.3.6.1 Management Role in Avoiding Disputes	96	

V	CO	CONCLUSION AND RECOMMENDATION		
	5.1	Introduction	101	
	5.2	Conclusion	102	
	5.3	Recommendation	104	
	BIB	BLIOGRAPHY	106	
	API	APPENDIX A		

CHAPTER I

INTRODUCTION

1.1 Introduction

Construction industry plays an important role in developing Malaysia and it is a major contributor towards realising Vision 2020. The industry contribute 3.3 percent of the countries gross domestic product (GDP) in year 2003 and employs more than 500,000 workers in some 54,500 local companies. In year 2003 more than 3000 local contracts have been awarded to contractor with the total value of RM4.8 billion. The housing and infrastructure project has been the biggest contributor to the construction industry which contributes more than 70% of the total value, Yusof; M.A et al. (2007).

Construction is totally different from manufacturing industry where the same products with the same quality are possible to be produced even at a thousand times of its production. In construction, the same construction team will not be able to produce the same products even though the projects have similar nature of construction because there would be differences in regulation, site conditions and market conditions for each project.

Global-wise, the construction industry has been identified as a '... loosely coupled system ... characterized by ... particular complexity factors owing to industry specific uncertainties and interdependencies, and inefficiency of operations' stated by Dubois &

Gadde (2002). The separation between the design and construction processes, the fragmentation evident in the management of the construction process by subcontract, and the short term project focus of the contractual relationships between participants results in little incentive or opportunity to improve inter-organizational practices. With respect to this, there are various participants in this industry. These included; clients, regulatory agencies, engineers, quantity surveyors, developers, lawyers, suppliers, contractors, architect and the list goes on. Their obligations and objectives varied, based on their contractual relationship for each projects. Owing to this complex, fragmented nature of this industry, disputes between different parts within these interacting fragments is highly foreseeable.

1.2 Problem Statement

Dispute in construction industry may it be in the form of financial, legal or any other form is an important subject that requires attention of the industry 'players'. Within the scope of the industry itself, disputes most often than not leads to losses may it be in terms of economic, time, market share as well as reputation, and in certain extreme cases may even lead to the downfall of a construction entity.

According to Groton (1997); Mitropoulos and Howell (2001), J.G Richard (2006), evidence showed that the amount of disputes on construction projects can be reduced through dispute identification. There are many who believe that conflicts, and therefore disputes, injured business relationships. Many considered that disputes in the construction industry are inevitable stated by Cheung and Suen (2002); Stipanowich (1996), J.G Richard (2006). Thus, it essential that all participants within this very fragmented industry must consider and establish a proper and effective mechanism to minimise disputes, to ensure products of total quality and value can be achieved and delivered.

The topic on minimisation construction disputes also dawned from newspaper articles entitled 'Precinct 11 Housing Project at a Standstill', published in The STAR Newspaper dated May 8, 2008. It was about the disputes between the Client, Putrajaya Holdings Sdn Bhd (PJH) and the Contractor, Peremba Jaya Sdn Bhd. The disputes has been kept in silence for the last two years. Out of the total of 259 units offered, 211 units or equivalent to 81.5% has been sold. The project was promised to be delivered to the buyers in 2005. The bulk of the project was originally given by Peremba Jaya Sdn Bhd to its subsidiary, Arif Cerah Sdn Bhd who eventually got into financial difficulties in 2005 which causes the project to be stalled. To date Arif Cerah Sdn Bhd has surrendered the land title back to Putrajaya Holdings to resume the work. As a result, customers who have purchased the house by signing the sales and purchase agreement as early as 2003 has been servicing their housing loan repayment to the bank are the victims of the disputes.

Furthermore, in relation to these negative impacts or consequences that disputes can bear towards the industry, therefore it is vital that participants or 'the players' within this industry adopt a serious attitude towards mastering this subject matter, which in turn would assists them in planning, decision-making and implementation of construction projects. This research, will address as much as possible the issues, facts and ideas regarding the matter of disputes in construction industry and its minimization strategies.

1.3 Aim of Study

The aim of this study is to determine the causes of dispute in the local construction industry and to identify strategies to mitigate the disputes. To achieve the above aim, the following objectives have been identified.

1.4 Objective of Study

In order to achieve the above aims, following objectives have been laid out:

- 1) To identify the causes for dispute in the construction industry.
- 2) To study the effect of disputes in the construction industry
- 3) To identify ways to mitigate disputes in construction.

1.5 Scope of Research

With respect to the very vast subject regarding disputes in industry, therefore, this particular work will focus on several types of disputes that are commonly experienced within the industry.

Subsequently, the consequences arising from these disputes will also be addressed, and where possible supported with actual case examples.

Next, the study will also put forward the strategies to minimize these disputes, based on established ideas from various references, journal, articles, working papers and newspapers.

Finally it should also be noted that all the issues, facts, ideas as well as proposal that will be presented in this study will only focused on those related to the scenario of construction industry.

1.6 Significance of Research

The subject matter of disputes is an important subject that participants within construction industry needs to be aware of, and understands as clear as possible, Thus, this study is presumed to bear the significance of compiling the relevant knowledge regarding the minimizations of disputes whereas the final product (the completed work as a literature) may be used as a source of reference for all who are involved in construction industry or the construction processes to enhance their knowledge on the matter of disputes together with strategies to minimize it. This would subsequently assists everyone involved towards a more calculated planning, implementation and decision-making, by taking into account the potential risks of disputes and ways to resolve it if encountered – in short; of how to adopt a proper and effective strategies to minimize and resolve disputes.

1.7 Research Methodology

In order to complete this dissertation, the first and foremost step of the study was identifying research problem which covered the significance, objective and scope of study.

Second step is then followed by exploratory research of the literature. Secondary data sources for literature review are gathered from references books, journals, newspaper articles and relevant magazines. These sources provide lots of data that can help to determine the background of the research.

Primary data gathered for this study are taken from interviews conducted with the expert in this industry. Questionnaires are also distributed among the participants in construction industry. All the data will analysed using statistical method. Figure 1.1 shows methodology flowchart for this research.

BIBLIOGRAPHY

Feniosky Pena-Mora, Carlos E.Sosa, D,Sean McCone (2003), *Introduction to Construction Dispute Resolution*, MIT/Prentice Hall Series on Civil, Environmental, and Systems Engineering, Pearson Education, New Jersey.

Hellard, R. Baden (1988) , *Managing Construction Conflict*, Longman Scientific& Technical, Long Group UK Limited, England

Allan Ashworth (2006), *Contractual Procedures in The Construction Industry*, Fifth Edition, Pearson Education Limited, England.

Keith Colier (1994), *Managing Construction The Contractual Viewpoint*, Delmar Publisher Inc., New York.

K.S Singh Harbans (2003), *Engineering and Construction Contracts Management: Post-Commencement Practice*, LexisNexis Business Solutions, Singapore.

Don McLagan (1991), *An Introduction to Building Contracts*, The Law Book Company Limited, Sydney, Australia.

John Murdoch and Will Hughes (2000), *Construction Contract: Law and Management*, Third Edition, Spon Press, London.

John Murdoch and Will Hughes (1992), *Construction Contract: Law and Management*, E & FN Spon, , London

Bramble, Barry B. and Callahan, Michael T., (1987), *Construction Delay Claims*, Wiley Law Publications, John Wiley & Sons, Inc., Canada

John L.Riches and Christopher Dancaster (2004), *Construction Adjudication*, Second Edition, Blackwell Publishing, Oxford UK

Frederick E.Gould and Nancy E.Joyce (2003), *Construction Project Management*, Second Edition, Prentice Hall, New Jersey.

Micheal P.Reynolds (2002), *The Expert Witness:In Construction Disputes*, Blackwell Science Ltd, UK

Alexandar Bevan (1992), Alternative Disputes Resolution, Sweet& Maxwell, London.

Andrew A.L Tan (1996), Project Management in Malaysia: A Comprehensive Approach for Successful Management of Property Development Projects from Inception until Completion, Synergy Book International, Kuala Lumpur.

K.S Singh Harbans (2002), *Engineering and Construction Contracts Management: Law and Principles*, LexisNexis Business Solutions, Singapore.

C.H Teoh (1992), *Arbitration in Construction Disputes*, Longman Malaysia Sdn. Bhd, Selangor Darul Ehsan.

Simon Roberts and Micheal Palmer(2005), *Disputes Processess: ADR and the Primary Forms of Decision-Making*, Second Edition, Cambridge University Press, New York.

Maxwell J. Fulton (1989), *Commercial Alternative Disputes Resolution*, The Law Book Company Limited, Sydney.

G. Tillet, (1991) **Resolving Conflict: A Practical Approach**. Sydney, Australia: Sydney Univ. Press.

Edwin H. W. Chan and Henry C. H. Suen,(2005), *Disputes and Dispute Resolution Systems in Sino-Foreign Joint Venture Construction Projects in China*, Journal of Professional Issues in Engineering Education and Practice @ ASCE

Sai-On Cheung, Henry C. H. Suen and Tsun-Ip Lam, (2002) *Fundamentals of Alternative Dispute Resolution Processes in Construction*, Journal of Construction Engineering and Management.

J. Richard Cheeks, (2003) *Multistep Dispute Resolution in Design and Construction Industry*, Journal of Professional Issues in Engineering Education and Practice @ ASC.

Hewit, (1991), *Winning Construction Disputes—Strategic Planning for Major Litigation*. London, U.K.: Ernst and Young.

Sai On Cheung and Tak Wing Yiu (2006), *Are Construction Disputes Inevitable?*, IEEE Transactions on Engineering Management, Vol.53, No.3

Sai On Cheung and Kenneth T.W. Yiu,(2007) A study of construction mediator tactics—Part I: Taxonomies of dispute sources, mediator tactics and mediation outcomes, Building and Environment 42, 752–761

D. J. Yates, (1998), *Conflict and Dispute in the Development Process: A Transaction Cost Economic Perspective* [Online].

Available:http://business2.unisa.edu.au/prres/Proceedings/Proceedings1998/Papers/Yates 3Ai.PDF 1998

Ameer Ali (2005) A "Construction Industry Payment and Adjudication Act" – Reducing Payment -Default and Increasing Dispute Resolution Efficiency. Y.B. Dato' Seri S.Samy Vellu, **Speech By YB Dato' Seri S Samy Vellu,** Minister Of Works, Malaysia At The Offical Launch Of The PAM Contract 2006, Minister Of Works, Malaysia, Grand Ballroom, Hotel Maya, Kuala Lumpur, page 3

Kamaruddin, Master Builders Association Malaysia (MBAM)

Project Management Institute Standards Committee (2004). A Guide to the project management body of knowledge.

Stipanowich, T. J. (1998), *The multi-door contract and other possibilities*. *Ohio St. J. On Disp. Resol.*, 13, 303–328.

Building success for the 21st century, (1998), *A guide to partnering in the construction industry*. "http://www.adr.org/guides/ partnering_guide.html.. American Arbitration Association, New York

Association of Soil and Foundation Engineers @ ASFE (1995). *Loss prevention through project management*, Professional Firms Practicing In The Geosciences, ASFE, Silver Spring, Md.

F.B., Osmond, (2003), *Charting a Successful Dispute Resolution*, AACE International Transactions

M.H Jeffery, (2002), *Ineffective Communication : Common Cause of Construction Disputes*, ABA Lehal NotesVol.13, No.2

J.G Richard and Gibson G.E, (2006), *Quantification of Costs for Disputes Resolution Procedures in the Construction Industry*, Journal of Professional issues in Engineering Education and Practice.