ENHANCING THE CONTRACTUAL PROCEDURES AND PROVISIONS FOR SUSPENSION OF WORKS IN GOVERNMENT PROJECTS

ANISHA SHAZWANI BINTI AHMAD ANUAR

FACULTY OF BUILT ENVIRONMENT
UNIVERSITY OF MALAYA
KUALA LUMPUR

2022

ENHANCING THE CONTRACTUAL PROCEDURES AND PROVISIONS FOR SUSPENSION OF WORKS IN GOVERNMENT PROJECTS

ANISHA SHAZWANI BINTI AHMAD ANUAR

RESEARCH PROJECT SUBMITTED TO THE FACULTY OF BUILT ENVIRONMENT UNIVERSITY OF MALAYA, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PROJECT MANAGEMENT

FACULTY OF BUILT ENVIRONMENT UNIVERSITY OF MALAYA KUALA LUMPUR

2022

UNIVERSITY OF MALAYA ORIGINAL LITERARY WORK DECLARATION

Name of Candidate:	Anisha Shazwani	i Binti Ahmad Anuar
runic of Canadate.	I IIIISIIa Silazwaii	Dilli / Hilliad / Hiladi

Matric No: 17109194/2

Name of Degree: Master of Project Management

Title of Project Paper/Research Report/Dissertation/Thesis ("this Work"): Enhancing the Contractual Procedures and Provisions for Suspension of Works

in Government Projects

Field of Study: Project Management

I do solemnly and sincerely declare that:

- (1) I am the sole author/writer of this Work;
- (2) This Work is original;
- (3) Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or reproduction of any copyright work has been disclosed expressly and sufficiently and the title of the Work and its authorship have been acknowledged in this Work;
- (4) I do not have any actual knowledge nor do I ought reasonably to know that the making of this work constitutes an infringement of any copyright work;
- (5) I hereby assign all and every rights in the copyright to this Work to the University of Malaya ("UM"), who henceforth shall be owner of the copyright in this Work and that any reproduction or use in any form or by any means whatsoever is prohibited without the written consent of UM having been first had and obtained;
- (6) I am fully aware that if in the course of making this Work I have infringed any copyright whether intentionally or otherwise, I may be subject to legal action or any other action as may be determined by UM.

Candidate's Signature	Date:
Subscribed and solemnly declared before,	
Witness's Signature	Date:
Name: Designation:	

ENHANCING THE CONTRACTUAL PROCEDURES AND PROVISIONS FOR SUSPENSION OF WORKS IN GOVERNMENT PROJECTS

ABSTRACT

Suspension of works is widely discussed in the previous study as a remedy for late payment by the contractor. However, some situations may occur during the construction period where the suspension of works has to be taken such as the issuance of Movement Control Order (MCO) due to the Covid-19 pandemic. The procedure of implementing the suspension of works is given less attention due to the absence of detailed guidelines availability. The lack of understanding of what happens when a project is suspended also causes this matter to be ignored. Suspension of works is the privilege of the government to direct work on-site either in whole or in part to be stopped or delayed based on Clause 50 of PWD 203A form. Therefore, careful consideration should be given in deciding on the suspension of contractor works at the construction site. This research aimed to formulate enhancement to the contractual procedures and provisions for suspension of works in government projects. The objectives of the research are to determine the issues on suspension of works in construction projects, to analyze the current contract provision for suspension of works in the local standard form of contracts, and to assess the necessary improvement to the contractual procedures and provisions for suspension of works in government projects. The data for this research was collected and analyzed using a sociolegal research approach that included the standard form of contracts, current procedures, and legal cases concerning the suspension of work. Following that, a preliminary contractual provisions enhancement proposal was developed. The expert's validation process was carried out through a focus group discussion to ensure that the research's findings were reliable. This research has identified the list of events and a fair time restriction mechanism for the suspension of work as the two essential enhancements that

should be included in the contractual provisions for the suspension of work. The outcome of this research could also aid in the development of practical solutions for more effective work suspension in government projects.

Keywords: government projects, suspension, enhancement, provision

PENAMBAHBAIKAN PROSEDUR DAN PERUNTUKAN KONTRAK UNTUK PENGGANTUNGAN KERJA DALAM PROJEK KERAJAAN

ABSTRAK

Penggantungan kerja dibincangkan secara meluas dalam kajian terdahulu sebagai satu penyelesaian untuk pembayaran lewat oleh pihak kontraktor. Walau bagaimanapun, beberapa situasi mungkin berlaku semasa tempoh pembinaan di mana penggantungan kerja perlu diambil seperti pengeluaran Perintah Kawalan Pergerakan (PKP) disebabkan oleh pandemik Covid-19. Prosedur melaksanakan penggantungan kerja kurang diberi perhatian kerana ketiadaan garis panduan yang terperinci. Kekurangan pemahaman tentang apa yang berlaku apabila projek digantung juga menyebabkan perkara ini diabaikan. Penggantungan kerja adalah hak istimewa kerajaan bagi mengarahkan kerjakerja di tapak sama ada secara keseluruhan atau sebahagian dihentikan atau ditangguhkan berdasarkan Klausa 50 borang JKR 203A. Oleh itu, pertimbangan yang teliti harus diberikan dalam memutuskan penggantungan kerja kontraktor di tapak pembinaan. Penyelidikan ini bertujuan bagi memformulasikan penambahbaikan kepada peruntukan kontrak untuk penggantungan kerja dalam projek kerajaan. Objektif penyelidikan adalah untuk menentukan isu-isu mengenai penggantungan kerja dalam projek pembinaan, untuk menganalisis peruntukan kontrak semasa bagi penggantungan kerja dalam kontrak bentuk standard tempatan, dan untuk mengakses penambahbaikan yang diperlukan kepada peruntukan kontrak bagi penggantungan kerja dalam projek kerajaan. penyelidikan ini dikumpulkan dan dianalisis menggunakan pendekatan penyelidikan sosio-undang-undang yang merangkumi kontrak bentuk standard, prosedur semasa, dan Berikutan itu, cadangan kes undang-undang mengenai penggantungan kerja. penambahbaikan peruntukan kontrak telah dirangka. Proses pengesahan pakar telah dijalankan melalui perbincangan kumpulan fokus untuk mengesahkan kebolehpercayaan

hasil penyelidikan. Penyelidikan ini telah mengenal pasti senarai peristiwa dan

mekanisme sekatan masa yang adil untuk penggantungan kerja sebagai dua

penambahbaikan penting yang harus dimasukkan dalam peruntukan kontrak untuk

penggantungan kerja. Hasil penyelidikan ini juga boleh membantu dalam pembangunan

penyelesaian praktikal untuk penggantungan kerja yang lebih berkesan dalam projek

kerajaan.

Kata kunci: projek kerajaan, penggantungan, penambahbaikan, peruntukan

vi

ACKNOWLEDGEMENT

First and foremost, I would like to praise Allah the Almighty for His grace and blessings, which have enabled me to complete my thesis. I would like to express my heartfelt gratitude to the following individuals for their assistance and support during the writing of my thesis:

My supervisor, Associate Prof. Dr. Sr Mohd Suhaimi Bin Mohd Danuri, who has been extremely helpful in providing me with valuable knowledge, opinions, and constructive criticisms during the entire process of writing this research report. I am forever grateful for your support and directive in enabling me to focus on and deliver this research.

My dear parents, Ahmad Anuar Bin Ahmad and Shahrimi Binti Baharom for your neverending prayers, sacrifices and love, which have always been my pillars of strength in pushing me to complete my Master's degree. This is a one-of-a-kind present in exchange for your faith in me.

My family and friends, for always being a good listener, supportive, and sharing words of wisdom throughout the preparation of this research.

My children, who have always inspired me to lead by example and demonstrate that learning is a lifelong process. Thank you for your patience with me when I could not give you my full attention when you need it.

Finally, I also would like to thank everyone who has helped me with this research, whether directly or indirectly.

May we always strive to be the greatest of the best.

TABLE OF CONTENTS

Abstr	act		iii
Abstr	ak		v
Ackno	owledgn	nent	vii
Table	of Cont	ents	viii
List o	f Figure	s	xiii
List o	f Tables		. xiv
List o	f Cases .		XV
List o	f Appen	dices	xvii
СНА	PTER 1	: INTRODUCTION	1
1.1	Introd	uction	1
1.2	Resear	rch Background	1
1.3	Proble	em Statement	3
1.4	Resear	rch Questions	5
1.5	Resear	rch Aim and Objectives	6
1.6	Scope	of Research	6
1.7	Resear	rch Methodology	6
1.8	Signif	icant of Research	8
1.9	Structi	ure of Research	9
	1.9.1	Chapter One: Introduction	9
	1.9.2	Chapter Two: Literature Review	10
	1.9.3	Chapter Three: Research Methodology	10

	1.9.4	Chapter Four: Data Collection and Analysis	10
	1.9.5	Chapter Five: Discussion of Findings	11
	1.9.6	Chapter Six: Conclusion & Recommendation	11
СНА	PTER 2	: LITERATURE REVIEW	12
2.1	Introd	uction	12
2.2	Malay	sian Construction Industry Outlook	12
2.3	Suspe	nsion of Work in Malaysian Construction Industry	14
	2.3.11	Procedures for Suspension of Work	16
2.4		iew of the Construction Contract	
	2.4.1	Elements of a Good Construction Contract	19
	2.4.2	Standard Contract Forms in Malaysia	25
2.5	Releva	ant Events to Suspension of Work	26
	2.5.1	National Interest	27
	2.5.2	Antiquities	27
	2.5.3	Force Majeure	28
2.6	Overv	iew of the Government's Movement Control	
	Order	(MCO) in Malaysia	28
	2.6.1	Categories of MCO	29
	2.6.2	The Impact of Pandemic Covid-19 on Malaysia	
		Construction Industry	. 32
	2.6.3	Measures Taken for Government Projects	. 33
	2.6.4	Contractual Implication on the Government Projects	37
2.7	The U	Inderstanding of Pandemic and Force Majeure	37
	2.7.1	Pandemic	. 38
	2.7.2	Epidemic	39

	2.7.3	Endemic	40
	2.7.4	Force Majeure	41
2.8	Chapt	er Summary	45
CHA	PTER 3	3: RESEARCH METHODOLOGY	46
3.1	Introd	uction	. 46
3.2	Resea	rch Method	
	3.2.1	Qualitative Research Approach	. 48
	3.2.2	Socio-legal Research	. 59
3.3		rch Design	
3.4	Resea	rch Techniques	. 53
	3.4.1	Data Collection	53
	3.4.2	Data Analysis	54
	3.4.3	Data Validation	55
		3.4.3.1 Experts Validation	56
		3.4.3.2 Sampling Method	57
3.5	Chapt	er Summary	58
СНА	PTER 4	l: DATA ANALYSIS & FINDINGS	59
4.1	Introd	uction	59
4.2	Comp	arison between Standard Forms of Contract	59
	4.2.1	Provisions of Contract Related to Suspension of Work	61
		4.2.1.1 PWD 203A Form	63
		4.2.1.2 PAM 2018 Form	65
		4.2.1.3 CIDB 2000 Form	68

		4.2.1.4 FIDIC RB2017 Form	70
	4.2.2	Issues of concerns	73
	4.2.3	Solutions available to overcome the issue	78
		4.2.3.1 Potential Suspension of Works Events	79
		4.2.3.2 Fair Time Restriction Procedure	80
	4.2.4	Suggestions for improvement	81
4.3	Prelin	ninary Contractual Provisions Enhancement Proposal	82
4.4	Chapt	er Summary	87
CHA	PTER 5	5: EXPERT VALIDATION & DISCUSSION OF FINDINGS	88
5.1	Introd	luction	88
5.2	Criter	ia Development for Expert Validation	88
	5.2.1	The purpose of Expert Validation	89
	5.2.2	Development of Validation Focus Group Questions	89
	5.2.3	Criteria Selection of the Experts	91
	5.2.4	Focus Group Validation	92
5.3	Critic	al Discussion on Validation Findings	93
	5.3.1	Suspension of Work Events	93
	5.3.2	Prolonged Suspension	103
5.4	Final	Contractual Provisions Enhancement Proposal	107
5.5	Chapt	er Summary	110
СНА	PTER (6: CONCLUSION AND RECOMMENDATION	111
6.1	Introd	luction	111
6.2	Overa	.ll Summary of the Research	111

6.3	Concl	usion of the Research Objectives
	6.3.1	Objective 1: To Identify the Issues on Suspension of Work in
		Construction Projects
	6.3.2	Objective 2: To Analyze the Current Contract Provision for
		Suspension of Works in the Local Standard Form of Contracts 113
	6.3.3	Objective 3: To Determine the Necessary Improvement to the
		Contractual Procedure for Implementing Suspension of Works in
		Government Projects
	6.3.4	Objective 4: To Assess the Necessary Improvement to the Contractual
		Provision for Suspension of Works in Government Projects
6.4	Limita	ntion
6.5	Recon	nmendation for Future Research
REFE	ERENC	ES

LIST OF FIGURES

Figure 1.6:	Research Methodology Flowchart	8
Figure 1.9:	Summary of the Research Chapters	9
Figure 2.2.1:	Malaysia's GDP growth (1990-2020)	13
Figure 2.2.2:	GDP by Economic Sectors	. 14
Figure 2.3:	Summary for Suspension of Work	. 16
Figure 2.4.1	Registered Cases in Malaysian Construction Industry	. 20
Figure 2.7.3	The Difference Between an Endemic, Epidemic and Pandemic	. 41
Figure 3.2.2	The Styles of Legal Research	. 49
Figure 3.3:	Research Design Process	. 51
Figure 3.4.2:	Data Analysis Process	. 55
Figure 4.2.4:	Suspension of Work Contractual Procedures	. 81
Figure 5.3.2.	Overall Improvement for Suspension of Work	106

LIST OF TABLES

Table 2.4.1:	The Type of Construction Risks
Table 2.4.2:	The Common Standard Form of Contract Used in Malaysia
Table 2.6.3:	Government Guidelines and Procedures in Response to the MCO 35
Table 2.7.4:	Comparative Analysis Between Force Majeure and COVID-19
	Pandemic
Table 3.2.1:	The Common Types of Qualitative Research Approaches
Table 4.2:	Comparison Between Clauses for Suspension of Work 61
Table 4.2.2:	Research Findings for Suspension of Work Provisions
Table 4.3.1:	Preliminary Contractual Provisions Enhancement Proposal for
	Suspension of Work
Table 5.2.2:	Focus Group Questions Structure
Table 5.2.4:	Details of Focus Group Participants
Table 5.3.1:	Summary of Validation Findings on the Suspension of Work Events 97
Table 5.3.2:	Final Contractual Provisions Enhancement Proposal for Suspension of
	Work

LIST OF CASES

2
17
23
24
41
42
63
64
66
66
66
66

Lotterworld Engineering & Construction Sdn Bhd v. Castle Inn Sdn Bhd & Anor	
[1998] 7 MLJ	74
Baldah Toyyibah (Prasarana) Kelantan Sdn Bhd v. Dae Hanguru Infra Sdn Bhd	
and another appeal [2020] 5 CLJ 27	75
PBLT Sdn Bhd v. Prestasi Reka Sdn Bhd & Ors [2020] 1 LNS 1823;	
[2020] MLJU 2056	102

LIST OF APPENDICES

Appendix A:	Focus Group Discussion Interview Guide	130

CHAPTER 1: INTRODUCTION

1.1 Introduction

This chapter contains an outline of the aims and objectives of the research including the research approach on enhancing the contractual procedures and provisions for suspension of works in government projects.

1.2 Research Background

Recently, the issue of suspension of work has been much discussed due to the outbreak of the COVID-19 pandemic that hit the whole world. Many construction projects that don't fall within the definition of "critical works" have to be suspended with the issuance of Movement Control Order (MCO) by the government in Malaysia. The pandemic was an unforeseen event that brought various forms of losses to all parties involved in the project. Approaches from every angle are taken into consideration in preparing and making claims to minimize the losses based on the contract clauses available. As such, the provision of contract and procedure for suspension of works must be detailed and comprehensive to be applied in any situation.

Suspension of works can be instructed by either a site owner or the government to sort out an issue involving any particular part of the project construction. The capacity to suspend works is provided in most government contracts. For instance, in the PWD 203A form, there is a clause regarding the suspension of works but it is not clearly stated the consideration of the situation when the suspension can be given. The absence of a detailed procedure on suspension of works also often causes the suspension instructions to be ignored and subsequently may cause 'time at large' in the project implementation. Surahyo (2018) suggested that it is essential for the contractors to make sure that the

Superintending Officer (SO) has given written instruction/ notice before work is suspended.

Generally, solutions to suspension of works issues are resolved through the extension of time and/or termination of contractor work but to what extent does it solve this problem? Moreover, with all the construction works suspended during the MCO period, what is the impact on the contract itself? Several articles suggest that the contractor should be allowed to claim for an extension of time (EOT) to complete the works but not for loss and expenses (L&E) (Lee, 2020; Naveen Sri Kanth, 2020). However, the contractor's right to claim for EOT or/and L&E shall be subject to the contract that the parties have entered into. In general, under any standard form of contract, the contractor is entitled to claim for any loss and expenses that arise from the project implementation provided it was not caused by the contractor's fault. In *Sunissa Sdn Bhd v Kerajaan Malaysia & Anor [2020] MLJU 283*, the court has decided that the L&E under Clause 44.1 in PWD 203A form only applies for the loss "beyond reasonably contemplated". Thus, allowing the plaintiff to claim L&E within reasonable contemplation for the items in the Preliminaries that are recurring. Lee Swee Seng J also stated:

Both common and commercial sense as well as business reality would combine to allow a claim reasonably contemplated for it is a claim for "loss and expense" that naturally and consequently arises from factors not attributable to any fault or default of the plaintiff contractor such as a change of design and drawing, variation instructed by the S.O., suspension of works by the employer and delay on the part of Nominated Subcontractors to perform their works.

Therefore, if the contractual provisions are properly drafted the contractor may be entitled to claim L&E arising from the MCO for preliminaries items such as idling of the construction plants, insurance coverage, site staff salaries, site office utilities, etc. since

and such claim for preliminaries are considered as beyond reasonably contemplated by the parties. In PAM 2018 form under clause 30.7 stated that the contractor is entitled to suspend the work if payment is not done within fourteen (14) days from the written notice reception to the employer. The employer, on the other hand, might challenge the contractor's right to suspend the works on numerous justifications, including the legitimacy of the notice to suspend works, the reliability of interim certifications, and the right to set off as grounds for non-payment (Lee, 2018).

Suspension of works within a reasonable period must be decided or ordered by the Superintending Officer (SO) to the contractor. If the period of suspension is unreasonable, the contractor reserves the right to submit a written claim for any loss suffered by the contractor. If the suspension of works is based on unreasonable considerations, it may result in the contractor being entitled to terminate the contract and open up opportunities for the contractor to claim losses under the contract. In addition, the contractor can also choose to make a claim through a court summons. Suspension of works will lead to the "Abandonment of Work and Delay Completion Period" which is the type of breach that is most currently fashionable in the Malaysian construction industry (Lawrence, 2009).

1.3 Problem Statement

Suspension of works is widely discussed in the previous study as a remedy for late payment by the contractor. However, some situations may occur during the construction period where the suspension of works has to be taken such as the issuance of Movement Control Order (MCO) due to the Covid-19 pandemic. The procedure of implementing the suspension of works is given less attention due to the absence of detailed guidelines

availability. The lack of understanding of what happens when a project is suspended also causes this matter to be ignored.

Suspension of works is the privilege of the government to direct work on-site either in whole or in part to be stopped or delayed based on Clause 50 of PWD 203A form. Therefore, careful consideration should be given in deciding on the suspension of contractor works at the construction site. Francisco (2016) stated that the probability of extra expenses and budget increase is higher without proper administration due to suspension of work such as:

- i. Possible damage to assets in projects of industrial character, which represent a large percentage of the total cost;
- Lack of planning and control during the suspension, which translates to the loss of time and/or money.

Among the things that need to be taken into account if the suspension of works is decided for a project are the extension of insurances, bond performance, increase in the price of goods, current needs of the customer, the ability of contractors to resume work on site, the safety of goods on construction sites, requirements cost for care of completed work on site and so on. It should be noted that in any contract with a provision for suspension of work, the contractor will not be able to automatically terminate the contract when instructed to suspend work and will be obligated to continue working when the project is reinstated (Wittbrodt & Eaton, 2009). According to Clause 50 in the PWD 203A form, stated that the SO may instruct the contractor to suspend work at any time. The SO also has the authority to issue an EOT due to suspension of work under Clause 43.1(c) in the

PWD 203A form. However, there is a potential that the contract will be 'time at large' if the SO fail to issue an EOT in accordance with this provision.

Hence, lack of attention to the procedure for suspension of works in government projects also causes the government to suffer losses in terms of energy, cost and time. Any postponement or suspension of work or termination of the employment of the Contractor will almost certainly translate into additional cost (Eugene, 2009). A proper instrument should be established to provide some sort of certainty as to the rights and liabilities of the contracting parties in respect of instructions to suspend the works.

1.4 Research Questions

The research questions include the following:

- a) What causes suspension of work in construction projects?
- b) How sufficient is the contract provision for suspension of works in the local standard form of contracts?
- c) What needs to be considered in order to improve the contract procedures for implementing suspension of work in government projects?
- d) What aspects should be considered in order to improve the contract provision for suspension of work in government projects?

1.5 Research Aim and Objectives

The aim of the research is to formulate enhancement to the contractual procedures and provisions for implementing suspension of works in government projects. Particularly, the research has the following objectives: -

- a) To identify the issues on suspension of works in construction projects.
- b) To analyze the current contract provisions for suspension of works in the local standard form of contracts.
- c) To determine the necessary improvement to the contractual procedures for implementing suspension of works in government projects.
- d) To develop the necessary improvement to the contractual provisions for suspension of works in government projects.

1.6 Scope of Research

This research investigates the implementation of suspension of work in government projects that are based on the contractual provisions in the PWD 203A contract form. In addition, this research focuses on potential enhancements that may be made to the contractual procedures and provisions for suspension of work in government projects. Only government officers who managed the contract and were impacted by the suspension of work activities were included in this research.

1.7 Research Methodology

This research used the qualitative method as the main research strategy through a systematic process involving 2-stage of data collection and analysis to achieve the

research objectives. The socio-legal research approach is chosen in this research to explore and identify problems and new solutions relevant to the suspension of works in government projects. According to Banakar and Travers (2014), the socio-legal research approach is one of the qualitative methods for analyzing and interpreting the relationship between the law, legal phenomena, and social situations, which aids in generating innovative improvements to the existing law. The literature review is carried out in order to obtain a comprehensive understanding of the landscape concerning the suspension of work in the construction industry. Construction contract forms available in Malaysia and significant events that contribute to the suspension of work are thoroughly reviewed. This is to explore the possible causes of suspension of work and measures to reduce the risk of disputes arising from the suspension of work. The inputs gathered are then analyzed in the following stage.

The 1st stage of the study is conducted through the analysis of the contract forms related to the suspension of works, as well as current procedures and law cases to determine the constraints in applying the suspension of works and then identify the initial key issues which need to be reformed. Basically, in this 1st stage, the analysis of provisions related to the suspension of works is conducted to formulate enhancement to the PWD 203A contract form. In the 2nd stage of the study, expert validation is conducted through focus group discussion to look into the suggestions, namely, the enhancement to the PWD 203A contract form that has been developed from the previous study. The result from the expert validation shall further improve the research findings and enhance the provisions related to suspension of works in PWD 203A contract form.

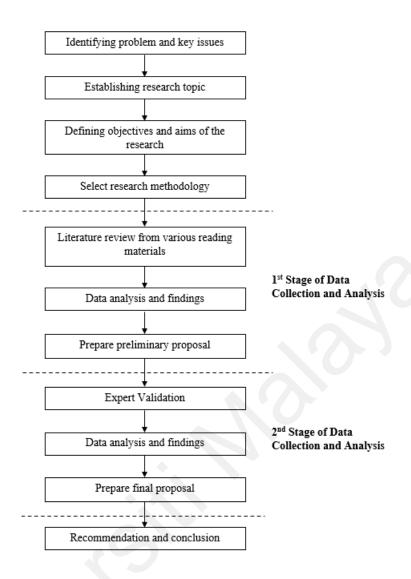


Figure 1.6: Research Methodology Flowchart

1.8 Significant of Research

This research provides an overview of the current practices available in Malaysia for the suspension of works. Understanding the contract and identifying the issues on suspension of works is essential in developing a better procedure for suspension of works to be implemented in government projects. Aside from that, the result of this research will help the parties involved to appreciate the importance of a clear contractual provisions for the suspension of works and to reduce further losses.

1.9 Structure of Research

This research is arranged into six chapters and the summary of the chapters involved is shown in **Figure 1.9** as the following:

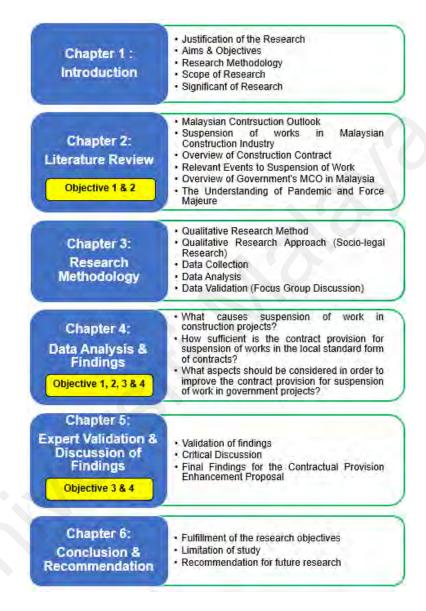


Figure 1.9: Summary of the Research Chapters

1.9.1 Chapter One: Introduction

This chapter presents an introduction to the overall content of the research. It includes a brief research background, problem statement, research aim and research objectives.

1.9.2 Chapter Two: Literature Review

This chapter includes the previous literature review that is related to the research topic. It includes the definition of the main terms and also the discussion on the clause available in the standard form of building contract used in Malaysia. Findings from other research and the problem faced particularly relevant to the research topis are identified and categorized in order to develop this research landscape.

1.9.3 Chapter Three: Research Methodology

This chapter explains the choices of research approach, processes and implementation of data collection methods that have been selected for this research. It also establishes the link between data collections, findings and the research objectives. The primary data was collected through data collection of the standard form of contracts, current procedures and law cases. While the secondary data is collected from the literature review included in Chapter Two.

1.9.4 Chapter Four: Data Collection and Analysis

This chapter compares and analyzed the result from the primary data and secondary data collected from the previous chapter. A holistic discussion approach is undertaken concerning the relation of the findings to each research objective.

1.9.5 Chapter Five: Expert Validation and Discussion of Findings

This chapter is to discuss the findings that have been compiled in Chapter 4 with the development of the proposal to enhance the contract provision for suspension of work. The validation of findings is conducted through focus group discussion participate by the expertise from the government agencies.

1.9.6 Chapter Six: Conclusion & Recommendation

This chapter is the conclusion of the research based on all the discussion and summaries of the project objectives achievement. Furthermore, it also includes the acknowledgment of limitations and constraints of the research together with the recommendation for further study in the same research area.

CHAPTER 2: LITERATURE REVIEWS

2.1 Introduction

This chapter explains the importance of a good contract as well as the conditions of the contract in the standard form used in Malaysia's construction industry. It also helps in gaining a better understanding of the consequences of MCO implementation in the construction industry, including contractual implications.

2.2 Malaysian Construction Industry Overlook

Since Malaysia's independence, the construction industry has grown at a breakneck pace. It enables the establishment and improvement of the infrastructure facilities throughout the country, which also aids in the local economy generation. There is no denying that the construction sector in Malaysia is one of the industries that significantly contributed to the national economy since its independence apart from other major sectors such as service, manufacturing, agriculture and mining. According to Khan et al. (2014), there is a strong link between the construction industry and Malaysia's economic growth, particularly in terms of income generation, capital formation, and employment opportunities for both skilled and unskilled workers. The utilization of locally produced materials and manpower in the construction industry will not only promote local employment but also contribute to the country's economic growth (Anaman & Osei-Amponsah, 2007). Therefore, the construction industry plays a key role and is interdependent with other sectors to influence the country's economic growth (Ofori, 1988; Alaloul et al., 2021). The construction industry, which consists of residential and non-residential buildings, civil engineering, and special trades activities, has no doubt influenced Malaysian socio-economic development to some extent. There are various issues and complications faced in the Malaysian construction industry such as shortages

of workers and material supplies, environmental problem, poor work quality and lack of productivity with one of the main factors are due to the conventional construction approach (Alfan & Zakaria, 2013; Kamar et al.,2010; Hamid & Kamar, 2010). However, the problems that arose accelerated with the recent Covid-19 pandemic outbreak. Malaysia's Gross domestic product (GDP) has also declined significantly at 5.6% which the lowest since 1998, as shown in **Figure 2.2.1**.

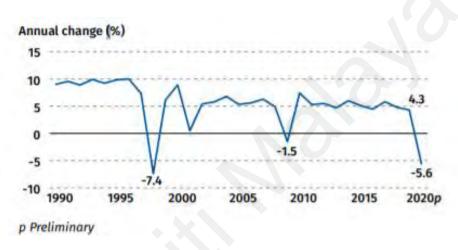


Figure 2.2.1: Malaysia's GDP growth (1990-2020)

Note. Data are from the Department of Statistics, Malaysia

Furthermore, the Malaysian government's implementation of the Movement Control Order (MCO) halted most economic sectors, including the construction sector as shown in **Figure 2.2.2**. During the period of MCO, non-essential industries are not permitted to operate.

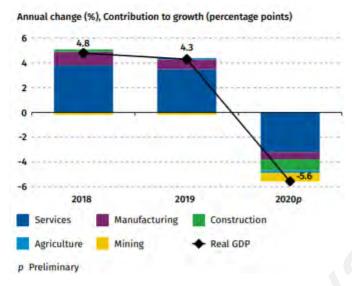


Figure 2.2.2: GDP by Economic Sectors

Note. Data are from the Department of Statistics, Malaysia

However, the construction industry has gradually recovered since permission to operate was granted during CMCO with the condition that the SOP set by the Malaysian government be followed. For instance, the value of construction done in the first quarter of 2021 increased by -10.5% compared to the fourth quarter at -14.2%, amounting to RM31.4 billion. The value of construction done was primarily contributed by three major states; Selangor, Wilayah Persekutuan and Sarawak with a total of 57.6% (Department of Statistic Malaysia, 2021). Consequently, both the pandemic and MCO have had profound and unforeseen impacts on the construction industry, including project suspensions, labor disruptions, job losses, time and cost overruns, and contractual issues which leads to disputes (Gamil & Alhagar, 2020).

2.3 Suspension of Works in Malaysian Construction Industry

Suspension is defined as the act of stopping something from happening, operating, continuing, etc. for a period of time either temporarily or permanently according to the Cambridge English Dictionary (2021). In construction, Wittbrodt & Eaton (2009) stated

that suspension is a contractually allowable delay during the construction of a project. Generally, the term suspension of work describes the situation when the project performance is put to a stop either by the client or the contractor. The Malaysian government's lockdown to reduce the spread of Covid-19 pandemic has created a lot of uncertainty in the construction industry. All project sites were required to be closed in accordance with the government's instructions. However, this does not mean that all construction activities should come to a full cease because the contractor must still perform unaffected work such as keeping the site safe, protecting the work done, keeping the site dry, etc. as required by the contract provision.

Suspension of work is only permitted in Malaysia subject to the applicable contract clause in the contract form used by the contracting parties. In the PWD 203A form, suspension of work is mentioned under Clause 50 which allowed the SO to suspend the whole or part of work. While clause 30.7 of the PAM 2018 form stated that the contractor has the right to suspend work if payment is not made within fourteen (14) days from the written notice reception to the employer. The contractor's right to suspend the works, on the other hand, can be challenged by the employer on a number of grounds, including the validity of the notice to suspend works, the validity of interim certificates, and the right to set off as a ground for non-payment (Lee, 2018).

Suspension of works issues is usually resolved through the extension of time and/or termination of contractor work. Therefore, it is critical to gain a better understanding of the suspension of work situations that occurred during the MCO period particularly the impact on the contract itself. Several articles suggest that the contractor should be allowed to claim for extension of time (EOT) to complete the works but not for loss and expenses

(L&E) (Malaysia Construction & Real Estate, 2020; Naveen Sri Kanth, 2020). However, the contractor's right to claim for EOT or/and L&E shall subject to the contract that the parties have entered into. Thus, the suspension of work during the MCO will be studied from various angles for this research, as shown in **Figure 2.3**.

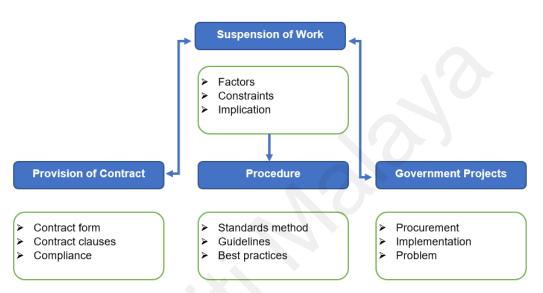


Figure 2.3: Summary for Suspension of Work

2.3.1 Procedure for Suspension of Work

There is no specific and detailed procedure for suspension of work available in the construction industry. In principle, the action to suspend work can only be realized by issuing a written notice of the suspension. It is the most crucial step in the implementation of work suspension under most standard forms of the contract. Failure to give notice will result in the suspension of work being deemed invalid, as well as the denial of the extension of time and claims for losses. The right to suspend work is divided into contractor's right and employer's right. However, the latter is the focus of this research. Provision for suspension of work usually addresses the basic requirements, such as the employer's authority to suspend and resume work, the contractor's actions when work is

ordered suspended, the contractor's right to claim EOT, and what to do if prologue suspension occurs. Clause 50.2 of the PWD 203A form, for example, stated that if the suspension of work prologue more than twelve months, the contractual parties will discuss mutually terminating the contract or suspending the work for a further period. In both scenarios, the government will likely suffer substantial losses in terms of time and monetary. The common dilemmas faced regarding the suspension of work are as the followings: -

- (i) The just causes for suspension of work.
- (ii) The length of time that can be regarded as reasonable for a suspension of work.
- (iii) The reasonableness to prologue suspension of work if the reason for suspension cannot be resolved within 12 months.
- (iv) Factors to be considered for situations that allow suspension of work instead of mutual termination.
- (v) The party who is liable for the additional cost incurred as a result of the suspension.

If this information can be identified early on, it not only saves time but also helps the government to reduce significant losses. Contract disputes are very likely to arise as a result of inadequate contract provisions for suspension of work, particularly when the scenario allowing for suspension is uncertain which may lead to wrongful suspension of work. This was demonstrated in *Ipson Renovation Ltd v The Incorporated Owners of Connie Towers* [2016] HKCFI 2117, where the court concluded that the suspension was unjust because of its indefinite duration. Furthermore, if the period of work suspension is extended, the contract may also become at large due to the absence of a detailed mechanism for the suspension of work. It is critical to exercise caution before

implementing the suspension provisions in order to preserve the interests of the contracting parties. If this privilege is to be exercised, all parties must be fully aware of the grounds for the work suspension and must completely adhere to the contract notice as well as procedural requirements.

2.4 Overview of the Construction Contract

Formal contracts have long been used in the construction industry to establish and enforce contracting parties' obligations and rights (Cheung et al., 2006). In general, a construction contract is also a contract governed by the law of contract which allows the risk to be shared among the contracting parties. A contract is a legally binding agreement that determines the parties' rights (Cheng et al., 2004) as well as protections for the parties if they fail to carry out their responsibilities. The parties' contractual relationship begins once there is an element of offer and acceptance usually through the signing of the letter of acceptance which will affect the rights and responsibilities of those parties throughout the implementation of the contract. Besides, an agreement can only be constituted as a contract if it meets the key requirements specified under section 10 of the Contracts Act 1950 which are:

- a) The parties must be legally capable of entering into a contract
- b) The parties must agree to enter into a contract voluntarily
- c) Both consideration and purpose of the agreement must be lawful
- d) The agreement is not declared null and invalid

Various methods can be used to make an agreement as long as the parties are in communication such as in writing, orally, through the actions of the parties, or a mix of any of these (Major, 1983). Construction contracts between the owner and the contractor

are typically written, using standard forms. According to Vohrah & Wu (2000), the construction contract is formed between two or more parties that specify the roles, responsibilities, and work to be performed, as well as what should and should not be done during construction. A construction contract is a legal document that lays out the specifics of a construction project in great detail. The agreement's contents will vary depending on the project and the client. Several documents may be included in the construction contracts to fulfill the requirement of the construction works, such as the condition of contract, need statements, specifications, bills of quantities, drawings, etc. The condition of contract is the most significant document in a construction contract because it specifies the roles and obligations of the parties participating in the construction, the solution of any disputes, the quality and skill needed, variation, payment, written and oral instructions, damages to the works, insurance, health and safety, and extension of time (Ahamad, 2009). These documents will be compiled into contract documents.

2.4.1 Elements of a Good Construction Contract

The construction industry's high level of fragmentation makes it difficult for contracting parties to work together effectively (Cheung et al., 2006). Additionally, standard contracts do not support contractual and flexibility requirements in the constantly changing construction environments, making it difficult to deal with uncertainty and complexity. As a result, there may be disagreements or disputes about contractual obligations or expectations. Disputes can arise when one party believes that a contractual obligation or expectation has not been honored (Semple et al, 1994). Many factors influenced disputes in the construction industry including the contracting parties' rights, responsibilities, and liabilities (Ariffin et. al., 2016). The inadequacy of contractual provisions was also

discovered to be a key source of disputes according to the study by Mohamad et. al. (2012).

In addition, the Construction Industry Development Board (CIDB) reported that the number of construction court cases involving disputes has increased dramatically from 2015 to 2017, as seen in **Figure 2.4.1**.

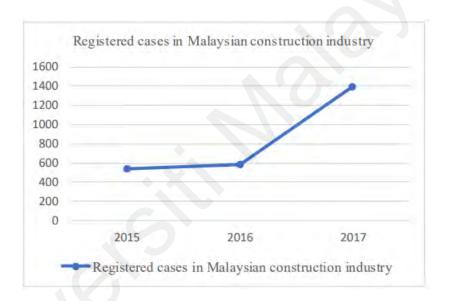


Figure 2.4.1: Registered Cases in Malaysian Construction Industry

Note. Data from CIDB Construction Law Report

As there is no one-size-fits-all approach to conflict resolution, it has become a challenge to appropriately handle and settle disagreements by applying the most effective method (Cheung & Seun, 2002). Hence, the construction contract is one of the important instruments for resolving conflicts and disputes. A good construction contract will likely increase the project's chances of success. The elements in a good construction contract consist of the followings:

a) Fair and Equitable Risk Allocation

The increase in construction disputes arises due to the adversarial relationship and associated risks of the construction industry (Cheung et al., 2006; El-Sayegh, 2008). A good contract should take into account the many risks that may arise throughout the project and clearly define the method by which the dispute will be resolved (Paciaroni, 2013). Furthermore, it has been argued that the existence of a standard form of contract may prompt the injustice of the bargaining power between contracting parties (Mohd Danuri, 2021). When one party urges the other to accept risks over which it has no control, it will lead to disputes that can cause an unproductive contract's performance. As a result, there will be time and cost overruns in the construction project. The types of risk allocation provided under the construction contract to distribute the risks include performance bonds, insurances, and a provision that the Contractor will indemnify the Employer or/and Employer's Personnel from all claims, damages, and losses (Zolkafli @ Zulkifli et al., 2011).

Generally, the contractor in the Malaysian construction industry can only make a takeit-or-leave-it decision because the construction contract has already been decided in the tender document. An unfair contract will also demotivate and hinder cooperation to resolve problems between the contracting parties. The examples of the construction risks are shown in **Table 2.4.1**.

Table 2.4.1: The Type of Construction Risks

Type of risk	Description
Common construction	Hidden site conditions
risk	Safety hazards that lead to work accidents and injuries
	Change in design
	Labour issues like shortages in labour
	Damage or theft to equipment and tools
	Natural disasters
	Issues with subcontractors and suppliers
	Non-availability of building materials
	Poor project management
	Unacceptable quality of work
	Inclement weather
Financial risk	Increase in the Material Cost
	Reduction in the Market Demand
	Improper Estimation
	Inflation
	Unmanaged cash flow due to delays in payment
	Financial incompetence of Contractor
Socio-political risk	Change in laws and regulation or Govt. policies
	Law and order situations
	Change in taxation

Note. Adapted from Risk Management in Construction by Kasapoğlu E., 2018

b) Written in a clear, concise, and unambiguous manner

Although numerous factors lead to construction disputes, one of the most common causes is the poor understanding of contract documents (Bakar, 2011). The poor understanding or misinterpretation of the construction contract may cause conflict between contracting parties over their rights, obligations and expectations. The clauses and provisions should be expressed in simple language, clear description and consistent throughout the contract to ensure that all parties participating in the project can understand especially the project manager and project teams. In a construction contract, the clarity of contract provisions is crucial because the courts will not grant any interpretation other than what is conveyed by the clear terms provided the wording is clear and unambiguous (Duhaime, 2007). Findings from Chong & Zin

(2010), concluded that clarity of the standard form contributes to the avoidance of disputes. Uncertainty in a contract can lead to different interpretations of critical provisions, which can lead to unfavorable outcomes in the event of a dispute (Paciaroni, 2013).

Furthermore, the use of legal terms in contract forms leads to misinterpretation and the inability to determine the true meaning of a clause. The use of formal and technical legal terminology in legal documents, according to Feinman (2003), creates ambiguity in interpretation. Legalese's shortcomings arise mostly from its excessive length and complexity, which has caused significant errors such as the contract clause not being properly understood in the contract (Thomas et al., 1994). Consequently, legalese would cause construction disputes between the contracting parties due to incorrect interpretation of the construction contract as highlighted by previous studies (Thomas et al., 1994; Semple et al., 1994; Broome and Hayes, 1997; Mohamad and Zulkifli, 2006).

Therefore, a contract must be written in a clear, concise, and unambiguous manner for all parties, both internally and externally, to understand the terms and provisions and avoid any misinterpretation. This matter is conquered by Lord Pearson in *Trollope & Colls Ltd v. North West Metropolitan Regional Hospital Board* [1973] 1 WLR 601, where His Lordship remarked:

the court does not make a contract for the parties. The court will not even improve the contract which the parties have made for themselves, however desirable the improvement might be. The court's function is to interpret and apply the contract which the parties have made for themselves. If the express terms are perfectly clear and free from ambiguity, there is no choice to be made between different possible meanings: the clear terms must be applied even if the court thinks some other terms would have been suitable. An

unexpressed term can be implied if and only if the courts find that the parties must have intended that term to form part of their contract.

c) Effective Dispute Resolution Clause

Overall, a good construction contract must be comprehensive and complete as a whole, including a clear, brief and practical dispute resolution clause in the event of any conflict and disagreements. A dispute resolution should outline the process and procedure on how to solve both contractual and non-contractual disputes that arise from the contract. It should not be taken lightly as courts and tribunals are typically inclined to uphold provisions agreed upon by the parties such as dispute resolution procedures. This issue is stressed in the Court of Appeal (Putrajaya) decision of *Kembang Serantau Sdn. Bhd. v YBK Usahasama Sdn. Bhd. [2019] MLJU 1118*, Hasnah Mohammed Hashim JJCA stated:

We agree with the learned Judge that in order to exercise such common law right the Defendant must strictly adhere to the terms and provisions which parties have contractually agreed. The rights and remedies in common law cannot be arbitrarily exercised to deny the Plaintiff of its contractually agreed rights.

The most commonly used dispute resolution procedures in the construction industry are litigation and arbitration as mentioned by El-Adaway and Ezeldin (2007). Many parties are now opting for more cost-effective dispute resolution approaches, as traditional dispute resolution procedures are known to be not only expensive and time-consuming, but also risky (Alshahrani, 2017). Hence, alternative dispute resolution (ADR) methods such as arbitration and mediation also have been included in the construction contract as a means of resolving disputes more quickly and economically. In Malaysia, adjudication has also been introduced as dispute resolution for the construction industry through Construction Industry Payment and

Adjudication Act 2012 (CIPAA 2012). Another approach that has been greatly discussed recently is by inserting a dispute avoidance procedure (DAP) clause in the contract. DAP is a soft-skill dispute resolution technique that is used at the early stage of a dispute (White, 2002). It provides a proactive way to reduce the probability of conflicts arising in a project with a greater understanding of the contract form.

2.4.2 Standard Forms of Contract in Malaysia

The construction industry in Malaysia has long used the standard forms as a document to define the contracting parties' terms and conditions which typically consist of general conditions of the contract and supplemented with special conditions. The standard form of construction contracts gives a basic legal framework specifying the rights, obligations and duties of the parties, determines the contract administrator's authority and responsibilities to manage the contract (Nayagam and Pathmavathy, 2005). The standard form's main objective is to manage the construction process amongst the parties concerned by detailing out the parties' rights and accountability. The following authorities and professional bodies regulate the most common standard form of construction contracts used in Malaysia as shown in **Table 2.4.2.**

Table 2.4.2: The Common Standard Form of Contract Used in Malaysia

Authorities/ Professional Bodies	Type of Standard Form of Contract	Type of Construction
Public Works Departments (Jabatan Kerja Raya – JKR/ PWD)	JKR 203A (Rev.1/2010) with Bills of Quantities JKR 203 (Rev.1/2010) with Drawings and Specifications JKR N (Rev. 1/2010) for Nominated Subcontractor JKR P (Rev. 1/2010) for Nominated Supplier PWD Form DB (Rev. 1/2010) for Design and Build project	Government Project
Institution of Architect Malaysia (Pertubuhan Arkitek Malaysia – PAM)	PAM 2018 with Bills of Quantities PAM 2018 without Bills of Quantities PAM 2018 Nominated Subcontractor Form PAM 2018 Nominated Subcontractor Form	Private Building Project
Construction Industry Development Board Malaysia (CIDB)	CIDB Standard Form of Contract for Building Works (2000 Edition) CIDB Standard Form of Sub-Contract for Nominated Sub-Contractor (2002)	
International Federation of Consulting Engineers	FIDIC Red Book Form of Contract (Second Edition 2017)	
Institution of Engineering Malaysia (IEM)	IEM Form of Contracts for Civil Engineering Works (Third Edition, January 2017) IEM Form of Contracts for Mechanical and Electrical Engineering Works (Third Edition, January 2017) IEM Form of Nominated Sub-Contract for Engineering Works (July 2020)	Private Engineering Project

2.5 Relevant Events to Suspension of Work

The contractor is obligated to perform the work on a regular basis and with diligence under the construction contract. In principle, the right to suspend work does not exist under the common law unless there are express contractual provisions. However, most of the construction contracts include provisions that allow for two types of suspension of work: 1) Employer's suspension and 2) Contractor's suspension. Suspension of work is often due to changes that make it impossible to continue working in the short term with the parties involve requiring time to consider alternatives moving forward. It can be difficult to decide whether to exercise a right to suspension of work when the event is not always clear and there is no express right to suspension of work for the desired cause.

Therefore, it is important to consider the contractual right of related events in which suspension of work can be imposed under the construction contract. The following are the relevant events that contributed to the suspension of work:

2.5.1 National Interest

The key concept of national interest is to protect the country's different interests, such as politics, security, economy, culture, and etc (Yang, 2014). National interests will be defined differently in different countries. The majority of national interests are primarily political, although national security interest is also important. Thus, the national interest will have a significant influence on the formulation and implementation of the country's strategies for achieving these goals. This is also applicable when a project is being implemented. The East Coast Rail Link (ECRL) project is one of the most recent high-profile examples of a local project where the government chose to suspend work on the grounds of national interest on 3 July 2018. The suspension of work was made to allow the government to renegotiate the terms of the contract with the contractor when it was discovered that the contract was unfair and the final cost needed to be drastically reduced in order to be financially feasible (The Sun Daily, 2018).

2.5.2 Antiquities

Antiquities are ancient relics or remains such as fossils, coins, buildings, and other artifacts that have inherent value. When antiquities are discovered on a construction site, work may be suspended entirely or partially to avoid potential damages to the antiquities. For example: The discovery of the remnants of historic Roman baths during the construction of a major drainage system in the capital of Jordan has forced work to be suspended while the government considers solutions (Al-Khalidi & Freij, 2020).

2.5.3 Force Majeure

The term "force majeure" means "superior force" in French. An occurrence that happens externally, unexpectedly, and is unavoidable is deemed force majeure as per Fresh civil law (Azfar, 2012). It is one of the common events for a suspension of work order to be issued. There is no specific definition of a force majeure event, except as provided in the contract. In general, a contracting party may be prevented to perform its obligations for reasons beyond its control due to a force majeure event. Most cases of force majeure can only cause a temporary halt in contract performance, and the contract is expected to be resumed once the cause of the impossibility has been removed (Ezeldin & Abu Helw, 2018). Examples of force majeure events include war, insurrection, revolution, earthquakes, floods, riots and etc. The execution of the contract will be suspended rather than terminated in such cases according to Amkhan (1991). Recently, the Covid-19 pandemic has sparked heated debate over whether it qualifies as a force majeure event under the existing construction contract. There was a lot of uncertainty when the Malaysian government enforced the MCO order, which required all construction work to be suspended immediately in order to combat the spread of Covid-19 infections. Hence, these issues will be examined in greater depth in the next topic in order to gain a better grasp on the context of suspension of work.

2.6 Overview of the Movement Control Order (MCO) in Malaysia

The Covid-19 epidemic is creating broad global disruption, prompting lockdowns in many nations, including Malaysia, in a drastic attempt to stem a surge in coronavirus infections. In Malaysia, the government issued and enforced a Movement Control Order (MCO) under the Control and Prevention of Infectious Diseases Act 1988 and the Police Act 1967 on 18 March 2020 as a preventive measure against the Covid-19 pandemic. Generally, the MCO is known as 'cordon sanitaire' is a restriction on people's movement

from one location to another, either locally or internationally to prevent the transmission of infectious diseases (Esa et al., 2020). All businesses including both government and private sectors were obliged to close except for the essential services under the Industrial Relations Act 1967 (Act 177). Therefore, it was also inevitable that the construction site had to be shut down during MCO to comply with the government's order. The lockdown lasted approximately three months before the government then announced that certain major services, including construction projects, would be permitted to operate during CMCO beginning on 4 May 2020. This was an important move in ensuring the economic viability of the country is not severely affected, reducing the risk of job losses among the Malaysian and maintaining continuous access to basic needs and critical necessities. However, permission to resume construction works was only granted if it had received approval from the Ministry of International Trade and Industry (MITI) and fulfilled the government's Standard Operating Procedure (SOP).

2.6.1 Categories of MCO

The Malaysian government has imposed four categories of MCO with each category having its own Standard of Operation (SOP) in an effort to tackle the spread of Covid-19 such as the followings:

a) Movement Control Order (MCO)

The Malaysian government has implemented the MCO nationwide from 18 March 2020 until 31 March 2020, prohibiting most major industries from operating during this period and most Malaysian are advised to work from home or stay at home (PMO, 2020). The MCO restriction's order includes:

- Restriction on all mass movements and gatherings, including religious, sports, social, and cultural events. All places of worship and businesses must be closed except for supermarkets, public markets, grocery stores, and convenience stores that offer daily essentials.
- Restriction on traveling abroad for all Malaysians. Those who have just returned from abroad must have a medical checkup and participate in a 14day voluntary quarantine or self-quarantine.
- Restrictions on the entry of all foreign tourists and visitors into the country
- Closure of all kindergartens, government and private schools including day schools, boarding schools, international schools, Tahfiz centers and other primary, secondary and pre-university educational institutions.
- Closure of all public and private higher education institutions (IPTs) as well as skills training institutes.
- Closure of all government and private premises except those involved with essential services such as water, electricity, energy, telecommunications, postal, transportation, irrigation, oil, gas, fuel, lubricants, broadcasting, finance, banking, health, pharmacy, fire, prisons, ports, airports, security, defense, cleaning, retail and food supply.

b) Enhanced MCO (EMCO)

Several identified areas with high cases of Covid-19 were subjected to a sterner restriction order known as the EMCO on 27 March 2020 for 14 days or until the cases were reduced to a satisfying level. due to the high case of Covid-19. The areas involved were Simpang Renggam, Johor; Sungai Lui, Selangor; City One, Kuala Lumpur; Selangor Mansion and Malayan Mansion, Kuala Lumpur; Jalan Masjid

India, Kuala Lumpur and Wholesale Market in Selayang. Saiful Sham (2020) stated that the implementation of this order includes:

- All locals and visitors who have been in both areas are not allowed to leave their homes during the PKPD period.
- Non-locals and visitors are not allowed to enter both areas during the period
 PKPD is enforced.
- All business activities are stopped.
- Adequate basic food for a period of 14 days will be provided to all locals by the Department of Social Welfare.
- Medical Base will be opened in the PKPD area.
- All entrances and exits of the PKPD area are closed.
- To ensure compliance with this order, the Royal Malaysian Police (PDRM), the Malaysian Armed Forces (ATM), the Malaysian Civil Defense Force (APM) and the Malaysian Volunteer Department (RELA) will control the entire area.

c) Conditional MCM (CMCO)

When the Covid-19 cases dropped, CMCO was introduced from May 4 to June 6, 2020. It has a more lenient restriction than the prior MCO restrictions which allowed 13 sub-sectors to resume their businesses. The major goal of CMCO is to assist the Malaysian government in regenerating and restoring economic momentum. According to Bernama (2020), the activities that are allowed under CMCO regulation:

Sectors that have received permission to resume their businesses from MITI
are allowed to operate, but only under strict SOPs set by the government such
as social distancing and recording the customer's details.

- Outdoor sports activities are permitted on condition it does not includes
 physical contact, are conducted in small groups without an audience and
 involve not more than 10 persons with social distancing.
- Interstate travel is only allowed for work purposes and to return home after being stranded in the hometowns or elsewhere.

d) Recovery MCO (RMCO)

The government implements the RMCO started on 10 June 2020 until 31 August 2020, as a form of the final step of the MCO, where certain activities and sectors are allowed but with strict SOPs such as social, religious, educational, commercial, business and domestic travel. However, any activities which involve mass gathering are still prohibited. The construction industry's productivity can be increased with the implementation of RMCO as the number of skilled manpower and working hours return to normal (Esa et al., 2020).

2.6.2 The Impact of Pandemic Covid-19 on Malaysia Construction Industry

The Malaysian government has permitted certain construction activities to resume operations starting 13 April 2020 after taking into consideration of the negative effects of prologue closure. Minister of Work Department, Dato' Sri Hj Fadillah Yusof stated that Malaysia's construction industry lost an estimated RM18.5 billion (S\$6.1 billion) during the MCO and inspections by the Construction Industry Development Board (CIDB) on 7,590 construction sites nationwide from 20 April to 20 September 2020 found that 1.96 percent had not resumed operations (Bernama, 2020; The Star, 2020). The pandemic Covid-19 pandemic has severely impacted the construction industry in terms of financial, project deliveries and workforce limitations. Most contractors experienced cash flow issues as project payment were directly affected because almost all construction

operations were suspended during MCO. Besides, the findings from Gamil & Alhagar (2020) discovered that the most significant effects of pandemic Covid-19 are project suspension, labor impact and job loss, time overrun, cost overrun, and financial implications. This will subsequently increase the probability of contract disputes, particularly over liquidation damages and termination in the worst-case scenario.

The government has also set a specific SOP for construction sectors on 1st May 2020 under Act 520 with the reopening of the construction industry. The developers and contractors are solely responsible for ensuring that their site workers adhered to all terms and conditions stated in the SOP, particularly the condition of the construction sites, worker accommodation and the movement from one site to another. The construction site will be shut down immediately if the SOP is violated. According to Esa et al. (2020), the MCO has caused several major impacts such as regulatory compliance, safety, additional project time delivery, increase in development cost and limited project resources availability.

2.6.3 Measures Taken for Government Construction Projects

All government premises has been instructed to close until further notice, in accordance with the Prime Minister's Movement Control Order (Covid-19) issued on 16 March 2020. The construction site had to be closed as well, as per the government's instructions, until it was approved work can resume by a written instruction by the SO. The instructions are as per the force majeure clause which can be used as a result of the Covid-19 pandemic outbreak. The government can still implement the force majeure principle and procedure for non-allocating procurement, as long as the contractor is notified in writing of the suspension instructions. Furthermore, Kementerian Kerja Raya (KKR) through the

Frequently Asked Questions (FAQs) of the KKR issued on 18 March 2020 stated that all construction and maintenance works are prohibited during the MCO period except for "critical works". The "critical works are described as works that may cause injury and danger to the employees, community and the environment if not continued such as:

- a) Slope repair work
- b) Fixing of potholes
- c) Traffic Management Control (TMC)
- d) Periodic inspection and repairing of Mechanical and electrical equipment
- e) Maintenance and facility upgrading works at critical services premises
- f) Repair work for traffic lights
- g) Construction of Bailey Bridge at the site of the collapsed bridge
- h) Tunneling work
- i) Emergency works under the contract
- j) Maintenance works on construction sites to prevent the breeding of Aedes mosquitoes and other pests.
- k) Other work which if not completed could be dangerous.

The "critical works" may be carried out on the recommendation of the SO to obtain an exemption letter from the authorized officer based on their respective jurisdiction. In accordance with the contract's provisions, the contractor is eligible to request an extension of time. However, it has been stressed that the government cannot be held liable for any losses because the spread of the pandemic is beyond the government's control. The government-implemented construction projects are no exception to adopting the new norms of Covid-19 prevention based on strict SOPs. The contractor is permitted to work without having to apply to the Ministry of International Trade and Industry (MITI) based on the Prime Minister's announcement on 4 May 2020. Nevertheless, the contractor still

needs to register the project information in the MITI and CIDB links before starting work on site for the "Pledge of Commitment" to comply with the set SOPs. Various guidelines and procedures have been issued by the government throughout the MCO as a guide to assist all the parties involved with the government construction project as shown in **Table 2.6.3**.

Table 2.6.3: Government Guidelines and Procedures in Response to the MCO

No.	Description	Date Issued	The issuing party
1	FAQs On Government Procurement Following the Execution of The Movement Control Order Under Prevention and Control of Infectious Diseases Act 1988 And Police Act 1967 Due to The Covid-19 Outbreak (18-31 March 2020)	17 March 2020	MOF
2	FAQs KKR On Movement Control Orders 18 - 31 March 2020	18 March 2020 (Updated on 20 March 2020)	KKR
3	FAQs On Government Procurement Following the Execution of The Movement Control Order Under Prevention and Control of Infectious Diseases Act 1988 And Police Act 1967 Due to The Covid-19 Outbreak (18-24 April 2020)	10 April 2020	MOF
4	General Standard Operating Procedures & General Guidelines on Permission to Operate and Movement of Employees for Construction Projects During MCO (Document 1)		KKR/ CIDB
5	Guidelines for Prevention of Covid-19 On Construction Site (Document 2)	19 April 2020	KKR/CIDB
6	Guidelines for Operation of Centralized Labor Quarters (CLQ) and Accommodation of Construction Workers During Movement Control Orders (Document 3)		KKR/ CIDB
7	Regulations Regarding Extension of Time (EOT) Or Extension of Contract Period (LTK) For Government Contracts Affected by MCO (In Force On 18 March 2020 Until 31 December 2020) – PK 2.4	23 April 2020	MOF
8	FAQs On Government Procurement Following the Fourth Extension Period of The MCO from 29 April until 12 May 2020, Under Prevention and Control of Infectious Diseases Act 1988 And Police Act 1967 Due to The Covid-19 Outbreak	24 April 2020	MOF

Table 2.6.3, continued

No.	Description	Date Issued	The issuing party
9	FAQs Related to The Ministry of Public Works Conditional Movement Control Order (CMCO)	7 May 2020	KKR
10	FAQs PWD on Government Procurement Following the Execution of the Movement Control Order	12 May 2020	PWD, KKR
11	FAQs On Government Procurement Following the Fifth Extension Period of The MCO from 13 May until 9 June 2020, Under Prevention and Control of Infectious Diseases Act 1988 And Police Act 1967 Due to The Covid-19 Outbreak	15 May 2020	MOF
12	Standard Operating Procedures (SOP) to Prevent the Risk of Covid-19 Transmission at Construction Sites of PWD projects	1 Jun 2020	PWD, KKR
13	Additions to FAQs PWD on Government Procurement Following the Execution of the Movement Control Order	2 Jun 2020	PWD, KKR
14	Rules Relating to Extension of Time (EOT) for Work Contracts Affected by the Enforcement of the MCO	22 Jun 2020	PWD, KKR
15	Further Clarification on Rules Relating to Extension of Time (EOT) for Work Contracts Affected by the Enforcement of the CMCO and RMCO	23 December 2020	PWD, KKR
16	FAQs On Government Procurement Following the Execution of the MCO, CMCO and RMCO Starting 13 May 2021 Under Prevention and Control of Infectious Diseases Act 1988 And Police Act 1967 Due to The Covid-19 Outbreak	12 January 2021	MOF

Furthermore, the recently gazetted Temporary Measures for Reducing the Impact of Coronavirus Disease 2019 (COVID-19) Act 2020 aids in providing temporary measures to reduce the consequences of the COVID-19 pandemic.

2.6.4 Contractual Implication on the Government Projects

The government project was hampered by the unexpected and uncontrollable Covid-19 pandemic. Aside from the need to minimize the number of manpower on-site and encourage work from home basis, contractors would almost certainly face legal issues as a result of non-compliance with contractual terms triggered by project suspension and material price fluctuations (Gamil & Alhagar, 2020). The numerous problems and risks that occur due to the strained workforce, material and equipment shortages and project cash flow would eventually cause the progress of the project to be greatly affected. Therefore, the parties to the construction contract have recently been debating if there are any exceptions to the contract's obligations and liabilities as a result of the MCO's implementation. In general, a Covid-19 pandemic is an unforeseeable event that has contractual implications such as delay and loss of expenses arising between the employer and the contractor. Each term in the standard form of contract is given attention and being scrutinized particularly the clauses for suspension of work, force majeure, epidemic and extension of time. However, the main concern is to what extent do this pandemic can be accounted for in the existing contract provisions.

2.7 The Understanding of Pandemic and Force Majeure

It is crucial to consider the term for "pandemic" and "force majeure" under the contract provisions to determine which clauses apply and what action can be taken later. The standard of forms to be referred to under this section are the PWD 203A form, PAM 2018 form, CIDB 2000 form and FIDIC RB2017 form.

2.7.1 Pandemic

According to the World Health Organization (2010), a pandemic is the global outbreak of a new epidemic which is an infectious disease that affects a large number of citizens. Covid-19 was declared a pandemic by the World Health Organization (WHO) when it became apparent that the disease was critical and rapidly spreading across a large area. Seasonal epidemics, on the other hand, are not considered pandemics such as influenza. While Robinson (2020) defines a pandemic as a contagious disease or illness that occurs in unexpectedly large numbers, spreads rapidly to more people than experts predicted, and crosses countries or continents. It has a larger impact and causes more deaths than an epidemic. Therefore, a pandemic can be classified as a particularly severe and large-scale form of an epidemic that is spreading worldwide.

Initially, none of the conditions of contracts had a pandemic provision. However, the pandemic has been included recently as one of the events of force majeure under clause 58 Effects of Force Majeure following the amendment to the condition of contract through KPKR Instruction Letter No. 26/2021 on 30 September 2021:

58.0 EFFECT OF FORCE MAJEURE

58.1 Events of Force Majeure

Neither the Government nor the Contractor shall be in breach of its obligations under this Contract if it is unable to perform or fulfil any of its obligations under this Contract (or any part of them) as a result of the occurrence of an Event of Force Majeure. An event of "force majeure" shall mean an event, not within the control of the Party affected, which that party is unable to prevent, avoid or remove and shall mean —

- (a)....
- (f) pandemic or epidemic; or
- (g).....

This demonstrates that the pandemic has been recognized as a significant event that necessitates contract amendments to accommodate for the pandemic's impact on the contract itself.

2.7.2 Epidemic

An epidemic is defined as a disease infection that occurs more frequently and spreads more rapidly than normal, resulting in an unexpected increase in the number of disease cases in a specific community or region where it is not persistently common (World Health Organization, 2018); Porta, 2014). In contrast to a pandemic, an epidemic occurs when a disease spreads quickly within a community or region. While a pandemic occurs when an epidemic spreads across continents or around the world affecting far more people.

Generally, only the PWD 203A form has an epidemic provision under Clause 77 Epidemics and Medical Attendance as the followings:

- 77.1 The Contractor shall maintain the Site in clean and sanitary condition and shall comply with all requirements of the Government Health and Sanitary Authorities. In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or health authorities for the purpose of dealing with and overcoming the same.
- 77.2 The Contractor shall ensure sufficient first aid kits are made available at suitable locations on the site.

It can be seen that the implementation of the SOPs for construction projects in response to the Covid-19 outbreak is in line with the above clause's requirements. Furthermore, the epidemic has also been included as a force majeure event under the new amended Clause 58 Majeure Effect through KPKR Instruction Letter No. 26/2021 on 30 September 2021.

2.7.3 Endemic

An Endemic is an outbreak of a disease that usually occurs continuously over the years but is limited to a specific area or population in a predictable rate of spread (Porta, 2014; Cambridge Dictionary, 2021; Columbia University Mailman School of Public Health, 2021). It has also been discovered that epidemics can become endemic when the community has established immunity to the disease through vaccination or infection (Medley & Vassall, 2017). Furthermore, an endemic does not always imply a mild outbreak, but it does signify that the disease is less dangerous and has fewer cases of infection. Many experts believe Covid-19 will never be eradicated but there is a possibility that it will transition from a "pandemic" to an "endemic" phase. This is evidenced by the Prime Minister of Malaysia's recent announcement on 8 March 2022 that Malaysia will enter the "Transition to Endemic" phase of Covid-19 on 1 April 2022 (Kaos, 2022). It is a temporary period before the country enters the endemic phase, which is subject to the announcement of the World Health Organization (WHO). The major changes of the standard operating procedures (SOPs) to be implemented are the abolishment of the business operating hours restriction and religious activities can be conducted without physical distancing.

Currently, there is no specific provision addressing endemic in any of the existing contract conditions documents. The need for endemic provision should be considered due to the risk of a surge in Covid-19 cases if a new variant of the Covid-19 virus emerges despite current measures such as vaccination, booster injections, and ongoing usage of face

masks. Particularly if the execution of a project is affected by the fact that the majority of the project's workers tested positive for Covid-19. Several studies on the impacts of the sudden outbreak have increased awareness of the importance of taking the necessary steps to avoid the worst-case scenarios during the planning stage of a construction project.

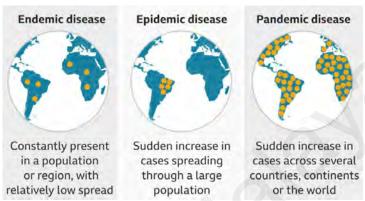


Figure 2.7.3: The Difference Between an Endemic, Epidemic and Pandemic *Note*. Data from Wellcome

2.7.4 Force Majeure

The definition and scope of force majeure varies around the world because different laws and countries adopt different methods of assessing the occurrence of force majeure (Augenblick and Rousseau, 2012). Force majeure is usually defined as an unexpected event or circumstance beyond the control of the parties in the contract. As in *Magenta Resources* (S) Pte. Ltd. v China Resources (S) Pte. Ltd. [1996] 3 SLR 62 where Rajendran, J remarked:

What is referred to as force majeure in our law (as opposed to French law from which that term originates) is really no more than a convenient way of referring to contractual terms that the parties have agreed upon to deal with situations that might arise, over which the parties have little or no control, that might impede or obstruct performance of the contact. There can therefore be no general rule as to what constitutes a situation of force majeure. Whether such a (force majeure) situation arises, and, where it does arise, the rights and obligations that follow, would all depend on what the parties, in their contract, have provided for.

One or both parties in the contract will be exempted to perform the obligation under a force majeure clause. The contractual entitlements for force majeure are determined by the contract provision for force majeure according to the standard form of contract that has been agreed upon such as the requirement for a written notice of such event to the SO. The contractor is usually entitled to an extension of time but is not able to claim any compensation incurred in the event of a force majeure. One of the conditions for applying a force majeure provision is that the contractor has taken all necessary steps to avoid and minimize the effects of the force majeure. In *Golden Bay Realty Pte Ltd v. Orchard Twelve Investments Pte Ltd* [1989] 2 MLJ 70, the Court of Appeal (Singapore) has ruled that the force majeure clause did not apply when the cause of the delay was within the control and power of the Appellant as per the following statements:

- (9) No evidence was produced to show that the government authorities took more time than normal to give their approval. A vendor of property should not be allowed to rely on a force majeure clause if he has underprovided the time required to do the necessary things.
- (10) In tort, a party may not be liable for the wrong of an independent contractor, but in contract this was not the position. Thus cl 15 which excused the appellants for 'any other cause or causes over which the vendor had no control' was not wide enough to excuse the appellants for the delays of their consultants.

The contractor must prove that the contract is physically or legally impossible to perform due to the force majeure event (Moore, 2020). Under Clause 43.1(a) in PWD 203A form, the contractor is entitled to claim for an extension of time if the delay is due to a force majeure event but Clause 43.1(a) is not covered in the provision of the contract for loss and expense under Clause 44.1. The definition of force majeure event in the PWD 203A was recently improved through KPKR Instruction Letter No. 26/2021 on 30 September 2021 under Clause 58.1 where it is apparent that the pandemic, as well as MCO, fall within a force majeure event. However, the probability for the contractor to claim under different circumstances can be considered. If there is a written instruction from the S.O.

to suspend or stop all the works during MCO, the contractor may claim for loss and expenses under Clause 43.1(c)&(e), Clause 44.2 and Clause 50. In the PAM 2018 form, there is no clear provision for force majeure, though Clause 23.8(a) Article 7(ad) defines a force majeure event as, "Any circumstances beyond the Contractor's control caused by terrorist acts, governmental/regulatory action, epidemics and natural disasters."

Therefore, the pandemic and MCO are likely to be classified as force majeure events under the PAM 2018 contract. Similar to the PWD 203A form, the contractor is entitled to claim an extension of time under Clause 23.8(a) but it does not cover any loss of expense claims. Besides, the right to claim for loss and expenses is considered when there is a written instruction to suspend and stop work.

CIDB 2000 form also does not have a specific clause for force majeure but it is mentioned under Clause 24.1 Extension of Time:

Provided that the Contractor has carried out the Works or any section of the Works with due diligence and has taken all reasonable steps to avoid or reduce such delay, the Time for Completion of the Works or any section of the Works may be extended by the Superintending Officer by such further period or periods of time as may reasonably reflect delay in completion of the Works or any section of the Works which has been or is being caused by any or more of the following events:

- (a) Force majeure;
- (b)

The CIDB 2000 form allowed the contractor to claim for an extension of time due to force majeure but similar to the other standard form of contract discussed earlier, the contractor is not entitled to claim for loss of expenses. While in FIDIC RB2017 form, the force majeure event could be addressed under Clause 18 Exceptional Events, which is defined as an event or circumstance that:

- (i) is beyond a Party's control;
- (ii) the Party could not reasonably have provided against before entering into the Contract;
- (iii) having arisen, such Party could not reasonably have avoided or overcome; and
- (iv) is not substantially attributable to the other Party.

The pandemic and MCO may possibly fit as an exceptional event even though they are not part of the examples listed under Clause 18.1. Nevertheless, the contracting parties must determine which obligations are affected by this exceptional event and issue a notice according to Clause 18.2. The contractor may only be entitled to an EOT for any consequent delay and/ or claims for payment once the contract requirements for the exceptional event are met as per Clause 18.4.

Hansen (2020) has summarized the comparative analysis of the COVID-19 pandemic in terms of force majeure fundamental characteristics as shown in **Table 2.7.4**.

Table 2.7.4: Comparative Analysis Between Force Majeure and COVID-19
Pandemic

Note. Data from Hansen (2020)

Characteristic	Force Majeure	Covid-19 pandemic
Unforeseeable	not reasonably foreseeable by	This sudden outbreak appeared in
	parties when they are entering	Wuhan, China, which later spread
	into the contract	throughout the world on an
		unprecedented scale
Unavoidable	neither party could prevent the	All sectors including construction were
	occurrence of the event or	affected by this outbreak. The labor-
	circumstance	intensive industry is at a greater risk
Uncontrollable	the incapability of contracting	The development and impact of this
	parties to control the event and its	outbreak is beyond the control of the
	impact	contracting parties
Impracticable	the event and its impact have	This outbreak has direct and indirect
	adversely affected the	impacts on the
	fulfillment of contractual	construction industry including
	obligations	disruption to supply chain logistics,
		delays, suspensions, terminations, and
		insolvencies
Beyond responsibility	the event is not substantially	It is a global health disease that many
	attributable to a party	countries declared as a national disaster

2.8 Chapter Summary

Standard forms of contract are commonly used in the construction industry and provide a variety of functions in project contract management. The Covid-19 pandemic and the Malaysian government's implementation of MCO have caused various conflicts and disputes over the construction contracts. In order to manage conflict and dispute, it is important for the contracting parties to have a clear understanding of the contract provisions stipulated in the standard form as well as their responsibilities and obligations under the contract. The true interpretation of the MCO event must be determined and examined from various perspectives and approaches to ensure appropriate and effective action. The uncertainty and inadequacy of the contract provision, on the other hand, leads to disagreements and disputes over which clause should be used to enable the contractor to claim delays and damages during the MCO. Given that the Covid-19 pandemic outbreak is an uncontrollable event, the main question is how much the contractor has the right to demand and whether the current standard of contract form used in government projects is sufficient.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The research paradigm for this study is described in detail in this chapter. The chapter also examines the research processes in order to discover the necessary improvement that needs to be done to the contract provision. A qualitative approach using socio-legal research was implemented for this study.

3.2 Research Method

A research method is a set of practical strategies, procedures, or techniques implemented to collect and analyze data (Birks & Mills, 2011). Establishing your research methods is an essential component of your research design that effectively answers the research questions. There are different types of research methods that use different tools for data collection (University of Newcastle Library, 2020). Generally, the common research methods used are quantitative methods, qualitative methods and mixed methods as the followings:

a) Quantitative Research Methods

Quantitative research methods entail a numerical or statistical approach to research design that aims to quantify data and generalize findings from a sample of a target population, as well as statistical methods for objective analysis (Macdonald & Headlam, 2008). Quantitative research is focused on surveying and experimenting with the goal of establishing, confirming, or validating relationships and developing generalizations that contribute to existing theories (Leedy & Ormrod, 2001). The researcher has no influence on the research

outcome because the data will be analyzed objectively to measure the research findings, which can be predictive, explanatory, or confirming.

b) Qualitative Research Methods

Qualitative research methods include gathering and processing non-numerical data in order to comprehend the contextualization and interpretation of the information gathered while developing new theories. This research method is subjective and necessitates a smaller sample size of selected respondents (Bouchrika, 2021). The qualitative research method is designed to produce a comprehensive and detailed discussion of your observations as a researcher. (Macdonald & Headlam, 2008). The social phenomenon being investigated from the participant's point of view is one identifier of qualitative research (Williams, 2007). Qualitative research can also be defined as an effective strategy for allowing the researcher to gain a better understanding of the actual experiences of the studies conducted (Creswell, 2003). Typically, qualitative research is used to explain social behavior phenomena in new and emerging theories.

c) Mixed Research Methods

The combination of traditional quantitative and qualitative approaches resulted in a modern method known as a mixed research method. It incorporates the concept of triangulation in social research which allows researchers to present multiple findings of a single phenomenon by combining quantitative and qualitative approaches in one study (Haq, 2014). The existence of these mixed methods is to help the researcher to have a better understanding of the social relations and their complexity through both quantitative and qualitative approaches.

The key factors such as the type of data to be collected and how the data will be analyzed in order to achieve the research objectives influence the research methods used. Therefore, the qualitative research method was chosen for the purpose of carrying out this study because it involves the collection of non-numerical data. The data was then analyzed to determine the effectiveness of work suspension implementation in order to develop improvements to enhance contract provisions used in government projects.

3.2.1 Qualitative Research Approach

Generally, qualitative research is a systematic investigation of social phenomena in natural settings based on people's experiences and opinions on any events that occurred with the questions of why, what, and how. A qualitative research approach tends to be flexible and focuses on retaining rich meaning when interpreting data (Bhandari, 2020). The most common qualitative approaches are shown in **Table 3.2.1**.

Table 3.2.1: The Common Types of Qualitative Research Approaches

Qualitative Research Approaches	Purpose
Grounded Theory	To develop inductive theories with the data collected in the study.
Ethnography	To develop an in-depth understanding of the culture of context from the point of view of the study subjects through immersion in the groups or organizations selected.
Action Research	To develop changes by connecting theory and practice through collaboration between researchers and participants.
Phenomenology	To investigate the viewpoints of people who have experience dealing with a phenomenon.
Narrative Research	To investigate and conceptualize human experience as it is represented in text.

Note. Adapted from Teherani et al. (2015) and Bhandari (2020)

However, as part of a qualitative study, the socio-legal research approach was used in this study, which can be described as a combination of several common qualitative research

approaches mentioned. This study involves a thorough investigation into the sufficiency of existing contract provisions and procedures with regard to work suspension during MCO. It also investigates the impact of legal cases to establish the enhancement that could be made to the contract provision.

3.2.2 Socio-legal Research

The research approach that has been carried out for this research was based on socio-legal research. Banakar & Travers (2014) stated that socio-legal research involves an interdisciplinary approach to analyzing the relationship between law, legal studies and social science. There is often a misconception that the methodological approach of the social sciences cannot be applied to law and legal. According to Schiff (1976), the law is usually viewed as a unique form of "is" for research purposes. The question of whether the rule of law falls in the category of "is" or "should" is one that is frequently discussed in legal philosophy (Summers, 1963; Schiff, 1976). For a better understanding of the nature of legal research, Arthur (1983) has provided a useful classification for the style of legal research as shown in Figure 3.2.2.

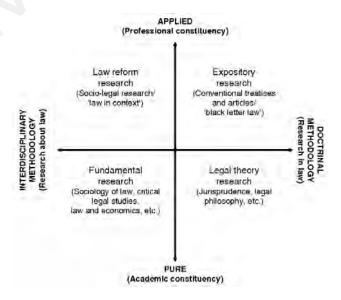


Figure 3.2.2: The styles of Legal Research

Note. Data from Arthurs (1983)

It is clear from the figure that socio-legal research comprises research about the law in the context of multidisciplinary field with the goal of facilitating any change in the legislation or how it is applied (Knight & Ruddock, 2008). This demonstrates the interrelationship between law and social science, as law can be viewed as either shaping or shaping other social factors. Socio-legal research is an approach to studying the relationship between legal theory and social structure from different perspectives, such as the social relationship of law or the social system that is a component of the law (Schiff, 1976). The main purpose of socio-legal research is to identify "the law as it is" and to establish the law "as it ought to be" which assist in determining the need for new laws, changes to existing laws, and difficulties in their implementation. Therefore, socio-legal research is the ideal way for conducting this research as enhancing the provision of a contract cannot be done arbitrarily and necessitates careful consideration of various factors such as contract, implementation, and law.

The primary data for this research was obtained from standard form of contract, current procedures, law cases and focus group discussions. While the secondary data was produced through the literature reviews. The data collected will be analyzed to provide a comprehensive review of issues and the impact of suspension of works in construction projects. Furthermore, socio-legal research does not only assist in identifying the factors and constraints for suspension of work, but it also provides a better understanding and gathers opinions in enhancing the contract provision for suspension of work. Expert validation through focus group discussions were held as part of socio-legal research to validate recommendations made to the expertise of government agencies.

3.3 Research Design

Saunders et al. (2007) proposed the concept of the research onion model to help researchers develop a methodology and construct a research design within the field of future studies. The design for this research is to collect information from Malaysia's construction industry and also professional expertise to identify and establish a proper enhancement to contract provision for suspension of work. Generally, the research design is developed from the literature review and the research question that was produced based on the research theme as shown in **Figure 3.3**.

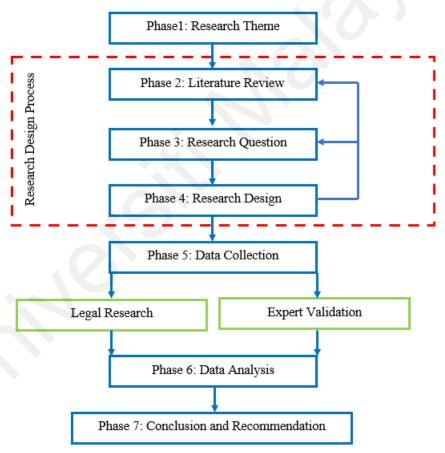


Figure 3.3: Research Design Process

The research theme for this research is Suspension of Work. Once the research theme was set, a list of keywords was prepared to assist in the data collection for the literature review.

A literature review is essential for this research in order to gain a better understanding of

the research theme and provide an overview of the current issues related to the topic. Subsequently, the problem statement was established based on the research gap identified from the literature review. The research questions are defined from the literature review. Development of the research design is done by taking into consideration the data required for further analyses in achieving the research objective. Research data and information are collected through a qualitative approach involving non-numerical data. The primary data consist of the standard form of contract, current procedures and law cases. While the secondary data was from the literature review. The data gathered are then analyzed to develop a proposal on how to enhance the contract provision for suspension of works in government projects. The proposal was then validated through focus group discussion involving a group of experts from the government agency. Finally, the research result and findings are then compiled and documented for further research.

The socio-legal research approach is chosen in this research to explore and identify problems and new solutions relevant to the suspension of works in government projects. This research used a qualitative data collection method through a systematic process to collect data and then achieve the research objectives. This research involves 2-stage of data collection and analysis. The 1st stage of the research is conducted through the analysis of the contract provisions related to the suspension of work in various standard contract forms, as well as current procedures and guidelines available for suspension of works and legal cases. During this stage, the data analysis which mainly involves document analysis was employed. Document analysis is a qualitative method where the researcher interpreted the document to express clear meaning on an assessment topic (Bowen, 2009). The document analysis aims to get an in-depth understanding of the contract provisions, determine the constraints in applying the suspension of work and then identify the initial key issues which need to be reformed.

Subsequently, expert validation is conducted through focus group discussion sessions with the experts in the field of assessment in the 2nd stage of the research. This stage is important to support the reasonableness, accuracy and reliability of the findings in enhancing the current contractual provisions for the subject matter. The objective of the focus group discussion is to look into the suggestions, namely, the enhancement to the PWD 203A contract form that has been developed from the previous study. The result from the expert validation shall further improve the research findings and enhance the provisions related to the suspension of works in the PWD 203A contract form by analyzing the views and comments from the experts.

3.4 Research Technique

As mention before, the primary data for this research is collected from the standard form of contract, current procedures and law cases. The secondary data is obtained for journals, articles, newspapers, books, websites, magazines and much more. Documents are analyzed and compare in gaining an in-depth understanding to identify and determine the enhancement needed for the suspension of works. This incorporates cross-referencing between Chapters 2 and Chapter 4 to help demonstrate the connection between the two. Thus, three steps of the research technique were used in this research which consists of data collection, data analysis and data validation.

3.4.1 Data Collection

The main data collection instrument in qualitative research is the researcher. In general, primary and secondary data are used to collect information and answer specific research objectives. The data collection for this research includes;

a) Standard Form of Contract

Initially, the standard form of contract which is commonly used was collected such as the PWD 203A form, PAM 2018 form, CIDB form and FIDIC RB2017 form. The contract provision for suspension of work and the correlations with other related clauses were also studied under each of these standard forms.

b) Current Procedures

The current procedures and guidelines related to work suspension and the implementation of MCO by the Malaysian government were gathered to determine the issues that arose.

c) Law cases

Relevant legal cases in Malaysian and internationally were collected to assist in the understanding of the legal effect of the contract provision available in the standard form of contracts.

3.4.2 Data Analysis

This research involves qualitative data analysis as the data collected are all non-numeric data that cannot be quantified. There are no specific rules in analyzing the qualitative data but grounded theory analysis is used for this research purpose. Bernard (2000) described the grounded theory as a set of techniques that includes identifying categories from data and linking the categories into substantive and formal theories. The data analysis consists of five stages as shown in **Figure 3.4.2**.

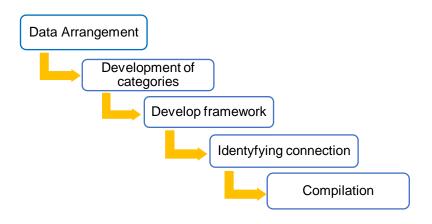


Figure 3.4.2: Data Analysis Process

All data collected are arranged according to the research questions defined earlier. Then the data must be organized to identify the relevant categories available. This process will assist in developing a data framework for data coding. Proper coding of the data collected is an important stage as it does not only help to minimize the quantity of information collected but also helps to extract relevant research findings. Once the data coding is completed, the process of identifying the pattern and connection of the data is done by comparing it with the research questions. Finally, the data is systematically compiled in order to develop a contractual provisions enhancement proposal for suspension of work.

3.4.3 Data Validation

Data validation was conducted through expert validation process in order to validate the research findings. According to Ireste & Katane (2018), the expert validation method is widely utilized in social sciences research to collect, analyze, evaluate, and validate data to obtain the necessary results based on the opinions and assessments of qualified experts. The intended data includes a researcher's recommendation for innovation implementation

such as the contractual provisions enhancement proposal for suspension of work in this research.

3.4.3.1 Experts Validation

According to Escobar-Pérez & Cuervo-Martínez (2008), expert validation is defined as an informed view of a qualified expert in a certain field who can provide knowledge, evidence, judgment, and evaluation on a particular aspect. Elangovan and Sundaravel (2021) concurred, stating that the expert validation process involves subject matter experts (SME) consisting of individuals with expertise, experience, or direct involvement in a particular field of research and able to provide an overview of the subject being researched. Therefore, expert validation is often applied to enhance the accuracy or validity of qualitative findings. There are several techniques for obtaining expert validation in research. However, the focus group discussion was deemed to be the most appropriate technique for validating the research findings. This technique allows participants to share their knowledge on emerging issues related to the suspension of work while also gaining new perspectives or opinions for further improvement.

A focus group discussion is a type of group interview which concentrates in-depth on the research theme with an element of interaction between participants to generate ideas (Morgan, 1996). It aims to obtain data from a purposely selected group of experts rather than from a statistically representative sample of a broader population (O.Nyumba et al., 2018). Focus group discussions have the advantage over individual interviews in that they allow group members to communicate and reflect on each other's perspectives (Krueger and Casey, 2001). While Saunders et al. (2007) stated that focus groups were utilized for group interviews with clearly specified topics and a focus to allow for interactive

discussion between participants. As a result, high-quality data will be produced and previously unknown areas of knowledge may be revealed (Kitzinger, 1995).

3.4.3.2 Sampling Method

Focus groups frequently employ purposive or convenience sampling, in which the focus group's sample comprises individuals with specified characteristics that represent the overall population and can help the researcher better understand the research topic. This type of sampling enables the researcher to choose suitable participants for the research in order to get vital data that might otherwise be unavailable (Maxwell, 1996). The ability of the participants to provide diversity in the information provided determines the sample size for the focus group. The optimal focus group size has been mentioned in various studies to be between 5 and 10 participants (Beyea & Nicoll, 2000; Krueger & Casey, 2000; Morgan, 1998; Sim, 1998). However, a smaller focus group of 3 to 4 people has been found to be more effective for an in-depth conversation with participants who have specific expertise, especially if the research topic is complex (Cote-Arsenault & Morrison-Beedy, 1999; Morgan, 1997; Krueger, 1994). The size of the focus group should be sufficient enough to encourage discussion but not so large that it creates an uncomfortable environment for the participants to share their ideas within the time allotted (Krueger & Casey, 2000). Therefore, the focus group discussion for this research involved an in-depth interview with the participants selected from a group of professionals and experts in the government agency, particularly those with experience in contract administration.

3.5 Chapter Summary

This chapter has described the research methodology of this study including the qualitative research approach chosen is social-legal research. The collected data is analyzed and the findings are compiled to generate a proposal to enhance the contract provision for suspension of work suspension in government projects. Expert validation of the findings is conducted through focus group discussions participated by the experts in the government agency.

CHAPTER 4: DATA COLLECTION & ANALYSIS

4.1 Introduction

This chapter covers the data collection approach and analysis of contract forms in relation to Chapter 2 along with current procedures, law cases, and statutory law. The process of constructing a preliminary contractual provisions enhancement proposal is by obtaining a comprehensive understanding of the problem identified through comparing contract forms, identifying provision of contract related to the suspension of work, and exploring potential solutions available to overcome the issues. Following that, analyses of the results are presented for expert validation.

4.2 Comparison Between Standard Forms of Contract

The construction industry has made a significant contribution to the national economy, which in turn helps to support Malaysia's GDP and socioeconomic growth. In Malaysia, the construction industry is divided into client and contractor sides, each with different obligations throughout the contract stage (Robinson et al., 1996). Standard forms of contract are typically utilized to establish legal relationships between these contractual parties in order to facilitate effective and efficient contract administration (Yunus et al., 2018). It specifies the contractual parties' rights, responsibilities, and roles by equitably transferring risks between them to avoid dispute. Most standard forms of contract have been tested and practitioners are aware of their effectiveness, constraints, and disadvantages. There are four Standard Forms of contract that are widely implemented in the Malaysian construction industry:

- a) Public Works Department (PWD) 203A form
- b) Pertubuhan Akitek Malaysia (PAM) 2018 form
- c) Construction Industry Development Board (CIDB) 2000 form
- d) International Federation of Consulting Engineers (FIDIC) RB2017

The appropriateness of the standard forms of contract used is determined by the project's type, financial method, and project owner (Zakaria et al., 2022). Additionally, the procurement method chosen has a substantial impact on a project's ability to meet its time, cost, and quality standards according to Wilkinson and Scofield (2010). Most government projects will use PWD 203A form while the private sector will use PAM 2018 form and CIDB 2000 form for local projects and FIDIC RB2017 form for international projects. Even if different standard forms of contract are used, the provisions included therein are what matter. An ideal standard form of contract would include all of the unique requirements and conditions that a project would necessitate. Thus, a standard form of contract would be useful if it not only defines the parties' obligations but also provides reasonable clarity regarding the project's scope. A comparative analysis of the standard forms of contract is conducted to provide a deeper knowledge and better understanding of the provisions relating to the suspension of work.

Table 4.2: Comparison Between Clauses for Suspension of Work

Standard Forms of Contract	Suspension of Work Events	
PWD 203A	As instructed by the SO	
PAM 2018	Non-payment by the employer	
	Architect's withdrawal from supervision	30.8
CIDB 2000	 As instructed by the SO Force majeure Excepted risks Drawings/information for work not provided to the contractor in a timely manner To resolve a contract document discrepancy Additional tests and inspections to be carried out as instructed by SO Failure to give site possession Work execution by other others employed by the employer Damage to work caused by the risk covered by insurance, Antiquities and fossils discoveries 	19.0
	Non-payment by the employer	42.10
FIDIC RB2017	As instructed by the SO	8.9
	 Engineer fails to certify payment The employer fails to provide reasonable financial arrangements Non-payment by the employer Employer fails to comply with the binding agreement and determination Employer fails to comply with a decision of the DAAB 	16.1

4.2.1 Provisions of Contract Related to Suspension of Work

Suspension of works can be ordered by either a site owner or the government to resolve an issue involving any aspect of the construction process. The ability to suspend works is in most government contracts. In the PWD Form Conditions of Contract, there is a clause

regarding the suspension of works but it is not clearly stated the consideration of the situation when the suspension can be given. The absence of procedure on the suspension of works also often causes the suspension instructions to be ignored and subsequently 'time at large' in the project implementation. Contractors need to ensure before work is suspended that the Superintending Officer (SO) has provided written instruction/ notice (Surahyo, 2018). Generally, solutions to suspension of works issues are resolved through the extension of time and/or termination of contractor work but alternative approaches may need to be considered with all the construction works suspended during the MCO period.

There are various opinions and views on the extent of suspension of work that will impact both client and contractor. The inability to enforce the suspension of work during MCO is due to the absence and ambiguity of the contract provisions. The MCO which was imposed by the government has caused inevitable disruptions and delays in construction projects due to restricted site access, labor shortages, and interruptions in the supply chain of materials. Assessment of the contract to ascertain the necessary contract relief in mitigating possible problems that arise relating to time, money, or a complete release of obligations. When a relevant authority issues a suspension order, the contract must be referred for any additional conditions that may also be imposed. Upon the issuance of written notification, delays resulting from the suspension of work shall be deemed excusable non-compensable delays, entitling the Contractor to a time extension only (Ahmed et al., 2003). Therefore, the provisions related to the suspension of work are further analyzed using the selected standard forms of contract in the succeeding section.

4.2.1.1 PWD 203A Form

The suspension of work clause in the PWD 203A form is for the convenience of the government to suspend the whole project or part of the work in a project. Generally, the contractor has no legal right to suspend work in the PWD 203A form as stated under Clause 50.1. It clearly states that the S.O. has the authority to order the Contractor to suspend part or all of the Works at any time. The contractor must immediately suspend all required work and take necessary measures to protect completed work and materials left on-site upon receipt of written instructions. Even if construction has been suspended, the contractor is still obliged under the contract to complete all work that is not compromised continuously, such as maintaining the project site's security, keeping the site dry, and ensuring the validity of insurance. Furthermore, the contractor is required to give a notice for EOT under Clause 43 and other provisions related to claims if the contractor anticipates a delay and/ or losses as a result of the instruction to suspend but provided it is not due to the Contractor's fault. Richard Malanjum J has said in *Pembinaan Jo Tar (Sarawak) Sdn Bhd v Hume Industries (Sarawak) Sdn Bhd [1995] MLJU 325*:

the Defendant should be liable for the costs [*14] incurred for the standing time of resources due to suspension of works. No doubt the suspension was not anticipated by the parties when the contract was concluded. But in such a situation the Defendant could have taken other options so as to minimize the costs for the Plaintiff. I found nothing of that nature being done. In fact, from the evidence of PW1 it would appear that the Plaintiff was told to wait for further instruction. And even after PW1 had submitted Exh.P12 on the 19/11/1986 the Defendant did not react in anyway. In such a situation the Plaintiff could not be expected to do much other than to wait for further instruction. As for the amount claim I think it should be as per claim as Exh.P12 was available to the Defendant during the suspension period and if the rate was not agreed it should have protested or alternatively, terminated the service of the Plaintiff. That might have been cheaper and beneficial for both sides. But on the evidence adduced Exh.P12 did not meet any objection from the Defendant.

Therefore, the contractor needs to prove that necessary precaution has been taken to mitigate losses due to suspension of work in order to claim costs for standing time of resources due to suspension of works. Under Clause 50.2 in PWD 203A form also mentioned:

In the event such suspension shall continue for a period exceeding twelve (12) months, the Parties shall then discuss whether to mutually terminate the Contract or suspend the Works for a further period.

This clause is a one-of-a-kind contract provision found only in the PWD 203A form that allows the contracting parties to reach a mutually beneficial agreement. In the Covid-19 pandemic incident, suspension of work occurred due to the implementation of the MCO. As a pandemic has been declared an event of force majeure under the new amendment of Clause 58.0, the contractor is only entitled to an extension of time under Clause 43.1(a) and is not eligible to claim losses & expenses under Clause 44.1. This has been supported by the judgement made by Tee Geok Hock J in the case of *Syarikat Pembinaan Anggerik Sdn Bhd V. Malaysia Airports Holdings Berhad* [2021] 1 LNS 2143:

- [252] Following the aforesaid decision of the Court of Appeal and in the context of clause 44 of PWD 203A contract, a contractor is not entitled to claim for loss and/or expense or prolongation cost under clause 44 of the PWD 203A standard from of contract if the contractor fails to fulfil any one of the following four (4) mandatory prerequisite conditions for such claim:
- (1) the recognised category of delay must materially affect the regular progress of the work, or, in other words, an excusable delay event which has caused a <u>critical delay</u> to the overall completion of the Works under the contract, as the term is explained by the learned author of Hudson's Buidling and Engineering Contracts and cited with approval by Hasnah JCA (now FCJ) in the Court of Appeal case of Kerajaan Malaysia (Jabatan Kerja Raya) v. Global Globe (M) Sdn Bhd [2019] 9 CLJ 191 paragraph [41] and by Harmindar Singh JCA (now FCJ) in the Court of Appeal case of Yuk Tung Construction Sdn Bhd v. Daya CMT Sdn Bhd [2020] 1 LNS 1314 paragraphs [29];
- (2) the type or category of delay must be that which is stated under one of the limbs of clause 43(c), (f) or (i) (and no other), or in other words, compensable excusable delay event, and not any other delay under one of limbs of clause 43(a), (b), (d), (e), (g), (h), (j) or (k) which are

- excusable but non-compensable delay events: see Court of Appeal's decision in Perbadanan Menteri Besar Kelantan v. Syarikat Perusahaan Majubina Sdn Bhd [2016] 1 LNS 505; [2016] 4 MLJ 570;
- (3) the loss and expense must be direct loss or expense which 'would not be reimbursed by a payment made under any other provisions in this Contract' this incorporate the principle against double recovery, and "direct loss or expense" has been interpreted in various decided cases to mean the losses and expenses which under the common law are recoverable as damages for breach of contract and which are not too remote: see English Court of Appeal cases of FG Minter v. WHTCO [1980] 13 BLR 1 and Rees & Kirby v. Swansea City Council 30 BLR 1 at page 11; and
- (4) It is mandatory that the notice of such a claim must be made within one month from the occurrence of the event or circumstance, together with the notice, the contractor must provide an estimate of the amount of such loss and expense: see Court of Appeal's decision in Perbadanan Menteri Besar Kelantan v. Syarikat Perusahaan Majubina Sdn Bhd [2016] 1 LNS 505; [2016] 4 MLJ 570.

In the event that a contract is likely to be breached, the force majeure provision allows for the temporary suspension of contractual obligations (Miller, 2020). However, consideration still needs to be given in circumstances where there is an issuance notice of suspension of work then the contractor is entitled to claim for both extension of time under Clause 43.1 (c) as well as loss & expenses under Clause 44. The contractor is solely responsible for proving not just the quantum of alleged prolongation costs, but also for establishing a causal link between the delay event and the estimated prolongation costs.

4.2.1.2 PAM 2018 Form (With Quantities)

Even though there is no specific suspension of work as PWD 203A form but under Clause 23.8 (w) in PAM 2018 form stated: "23.8(w) suspension by the Contractor of his obligations under Clauses 30.7 and 30.8." The PAM 2018 form is widely used in private projects and has two types of suspension of work allowed; (1) Suspension of works for non-payment under Clause 30.7, and (2) Compulsory suspension of works under Clause

30.8. The contractor is allowed to suspend the work and/or claim interest for the unpaid payment if the client fails to honor the interim payment under Clause 30.7. Careful consideration must be taken as it may lead to a repudiatory breach (The Entrusty Group, 2008). This is also highlighted in *SK Styrofoam Sdn Bhd v Pembinaan LCL Sdn Bhd* [2004] 5 MLJ 385 by Faiza Tamby Chik J that suspension of work without a valid reason will become a repudiatory breach that allows the employer to determine the contract itself. Moreover, the High Court decision of Kah Seng Construction Sdn Bhd v Selsin Development Sdn Bhd [1997] 1 CLJ 448 stated that a contractor's response to actual or alleged breaches of contract by the owners by suspending or deliberately going slow is extremely perilous.

There are also situations where the contractor himself suspends the works due to the issue of late payment or non-payment. In PAM 2018 form, Clause 30.7 stated that the contractor can suspend the execution of works if payment is not made within fourteen (14) days from the receipt of a written notice by the contractor to the employer. However, the contractor's right to suspend works can be challenged by the employer on several grounds such as the validity of the notice to suspend works, the validity of interim certificates, and the right to set off as grounds for non-payment (Lee, 2018). As in *Fletcher Construction Co Ltd v Spotless Facility Services (NZ) Ltd [2020] NZHC 1942*, Fletcher has contested Spotless' notice of suspension for the work under its subcontract which alleges Fletcher had failed to issue a valid payment schedule within the time required by the subcontract and had failed to pay the claimed amount. Van Bohemen J. has concluded that the suspension notice by Spotless was valid with a reference to Harrison J statement in *Metalcraft Industries Ltd v Christie [2007] BCL 342* as follows: "The specific purpose of the payment schedule is to give the contractor full and

unequivocal notice of all areas of difference or dispute to enable it to properly assess its future options."

The Compulsory Suspension of Works under Clause 30.8 is a delaying occurrence when the Contractor receives written notification from the Architect that they are withdrawing from project supervision under the local building by-laws and the work will be suspended until the supervision is resumed. The contractor also must obtain a separate cessation insurance policy in addition to the existing insurance for the duration of the suspension under Clause 30.9. Any expenses incurred by the contractor in providing appropriate work protection will be added to the contract total. Moreover, the contractor's entitlement to claim EOT and/or L&E from the suspension instruction is not clearly stated in both clauses addressing suspension of work in the PAM 2007 form.

In the event of a Covid-19 pandemic, other applicable provisions, such as force majeure, may be useful in dealing with the suspension of work caused by MCO implementation. Most construction contracts do not list a pandemic among the events that trigger the Force Majeure provision as in PAM 2007 form. However, Article 7(ad) of the PAM 2007 form defined a force majeure as follows: "Force Majeure means any circumstances beyond the control of the Contractor caused by terrorist acts, governmental or regulatory action, epidemics, and natural disaster."

Therefore, the MCO imposed by the government in response to the COVID-19 pandemic can be regarded as a government or regulatory action. the pandemic is covered in the definition of a force majeure event as well. If the MCO obstructs the work progress, then the contractor is entitled to an EOT under Clause 23.8 (a). The Covid-19 pandemic is a

EDF v Total Direct Energie. since the prerequisites for establishing force majeure events were met as the judge considered that "the spread of the virus is obviously extraneous to the parties, is irresistible and was unforeseeable, as proven by the sudden nature and extent of its appearance", which is in line with the force majeure definition in the framework agreement (Mohd Zin et al., 2021). Another option is to treat MCO as a suspension order issued by the Relevant Authority, allowing the contractor to claim EOT under Clause 23.80 (w). The Malaysian government has issued MCO to prevent the spread of COVID-19, which has become mandatory implementation by several agencies in the construction sector. As a result, MCO could be construed as a Relevant Authority suspension order.

4.2.1.3 CIDB 2000 Form

In contrast with PAM 2018 form, the CIDB 2000 form have a specific clause for suspension of work under Clause 19. There are also two types of work suspension in the CIDB 2000 form; (1) Suspension of work instructed by the S.O. under Clause 19, and (2) Suspension of work due to non-payment under Clause 42.10. Suspension of work by the S.O. for the CIDB 2000 form is similar to the PWD 203A form, where the SO has the authority to instruct the contractor to suspend all or part of the work at any time and in any manner considered appropriate by the SO. The contractor is responsible for taking the required steps to protect and secure the site. Furthermore, the contractor is entitled to claim losses and expenditures, as well as an extension of time, as a result of the SO's instruction to suspend work, provided that the suspension is not due to the contractor's misconduct and is for the safety of the works. The major difference from other contracts is Clause 19.2 in the CIDB 2000 form, which lists the events that led to the suspension of work as follows:

19.2 Prolonged Suspension

If the carrying out of the whole or any part of the Works is suspended due to:

- (a) force majeure; or
- (b) one or more of the Excepted Risks; or
- (c) the Contractor not having received from the Superintending Officer within a reasonable time necessary Drawings, instructions or other information in regard to the Works for which notice has been given by the Contractor in accordance with Clause 4.6; or
- (d) An instruction from the Superintending Officer to resolve a Discrepancy in or between any of the Contract Documents pursuant to Clause 7.4; or
- (e) ordering of test by the Superintending Officer which is not intended by or provided for in the Contract pursuant to Clause 15.4 and the uncovering or making openings for inspection of any work which is not intended by or provided for in the Contract pursuant to Clause 15.6, unless the test or inspection shows that the Works, Equipment, materials, goods or workmanship were not in accordance with the provisions of the Contract; or
- (f) failure of the Employer to give possession of the Site or any part of the Site to the Contractor as required by Clause 17.2; or
- (g) acts or omissions of other persons or contractors employed by the Employer in executing work not forming part of the Contract; or
- (h) subject to Sub-Clause 19.1(b), an instruction by the Superintending Officer to suspend any work; or
- (i) damage, loss or injury to the Works or part of the Works caused by any one or more of the risks covered by the insurance policies referred to in Clause 38A, 38B or 38C, whichever is applicable; or
- (j) the issue of an instruction by the Superintending Officer in respect of antiquities and fossils pursuant to Clause 39;

It can be seen that a force majeure event allows instruction for suspension of work to be made, but the question arises whether the Covid-19 pandemic falls under a force majeure event in CIDB 2000 form. In the absence of an explicit reference to what is known as force majeure in CIDB 2000 form, the interpretation of other relevant clauses in the contract can be considered to address the consequences of a pandemic, such as a lockout, delays caused by suspension orders from the appropriate authority, changes in law, etc. (Mohd Zin et al., 2021). Furthermore, if the contractor's work is suspended for an

extended period due to an event described in Clause 19.2, the contractor may issue a notice to the SO requesting permission to resume the suspended works within 14 days of the SO's receipt of the notice. Consequently, if the request is denied and the suspension continues, the Contractor may take the following actions under Clause 19.3:

- a) If the suspension is for the entire work, the contractor is entitled to determine his employment in compliance with Clause 45.1.; or
- b) If the suspension is for some part of the work, the contractor is entitled to omit the suspended part with Clause 28.

Similar to the PAM 2018 form, Clause 42.10 allows the contractor to suspend work for non-payment. If payment is not received within fourteen (14) days of the due date, the contractor may give notice to the employer stating his intent to stop work. The contractor has the right to suspend the work if the employer still fails to make payment within 14 days of receiving the written notice. As a result, the contractor gains the rights to EOT and L&E.

4.2.1.4 FIDIC RB2017 Form

The FIDIC RB2017 form has a similar provision for suspension of work as the CIDB 2000 form which consists of two types of suspension: 1) Suspension by the employer under Clause 8.9 and 2) Suspension by Contractor under Clause 16.1. However, the provision for suspension of work by the employer allocated under Clause 8.9 – 8.13 is much clearer and more detailed compared to both the CIDB 2000 form and PWD 203a form which consists of five parts; 1) Employer's suspension, 2) Consequences of employer's suspension, 3) Payment for plant and materials after employer's suspension, 4) Prolonged suspension, and 5) Resumption of work. The instruction to suspend work

issued by the engineer who essentially acts for the employer under clause 3.1(a) and the reason for suspension of work is not necessarily needed as stated in Clause 8.9: "The Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works, which instruction shall state the date and cause of the suspension."

This indicated that the provision for suspension of work is not restricted to the necessity of specific events, but rather a unilateral entitlement of the employer. When the suspension of work is issued, the contractor must cease all work on-site and take the appropriate precautions to protect the work during the suspension period. The most significant difference between FIDIC RB2017 and other forms is that it includes a provision for payment on materials and plants that have been extended due to the employer's suspension of work under Clause 8.11:

8.11 Payment for Plant and Materials after Employer's Suspension

The Contractor shall be entitled to payment of the value (as at the date of suspension instructed under Sub-Clause 8.9 [Employer's Suspension]) of Plant and/or Materials which have not been delivered to Site, if

- (a) the work on Plant, or delivery of Plant and/or Materials, has been suspended for more than 28 days and
 - (i) the Plant and/or Materials were scheduled, in accordance with the Programme, to have been completed and ready for delivery to the Site during the suspension period; and
 - (ii) the Contractor provides the Engineer with reasonable evidence that the Plant and/or Materials comply with the Contract; and
- (b) the Contractor has marked the Plant and/or Materials as the Employer's property in accordance with the Engineer's instructions.

The existence of Clause 8.11, which explains the contractor's right to be paid for plant and materials following the instruction to suspend work, can minimize the possibility of payment disputes. In terms of prolonged suspension, Clause 8.12 of the FIDIC RB2017

is comparable to Clause 19.3 of the CIDB 2000 form, which allows the contractor to give notice to the engineer requesting permission to resume work if the suspension has lasted longer than 84 days. If the engineer does not give permission to resume work within 28 days of receiving the contractor's notice, the contractor has two options:

- Agree to continue the suspension of work, with the parties agreeing to EOT and/or cost expenditures borne by the contractor resulting from the duration of the suspension; or
- b) After giving the engineer a second notice, the contractor can treat the suspension as an omission if it only affects a portion of the work or gives a notice of termination if it affects the entire work.

The consequence of an employer's suspension is also clearly mentioned in Clause 8.10 in which the contractor shall be entitled to EOT and/or payment of such Cost Plus Profit. Overall, the provision for suspension of work in FIDIC RB2007 is clearly explained. However, if there is no written instruction to suspend work then unforeseen events such as COVID-19 are most likely to fall under two scenarios; 1) 'Exceptional Event' under Clause 18.1 and 2) 'Changes in Law' under Clause 13.7. The latter contractual provision pertains to any changes in law or instructions issued by authorities in response to the pandemic which could have a distinct legal impact (Yadeta, 2020). Unlike Force Majeure, the provision for Change in the Law gives the contractor the right to an EOT and/or compensation for unavoidable expenditures.

Suspension by the contractor under Clause 16.1, on the other hand, encompasses not only late and non-payment but also the following:

a) Failure of the Engineer to certify payment in accordance with Sub-Clause 14.6

- b) Failure of the Employer to provide reasonable evidence relating to the Employer's Financial Arrangement (Sub-Clause 2.4)
- c) Failure of the Employer to comply with payment requirements (Sub-Clause 14.7)
- d) Failure of the Employer to comply with a binding agreement or binding determination made by the Engineer (Sub-Clause 3.7)
- e) Failure of the Employer to comply with a decision of the "Dispute Avoidance/ Adjudication Board" (DAAB) (Sub-Clause 21.4)

All above failure is a serious breach of the Employer's contract obligations. It can be seen that this provision is much more comprehensive compared to PAM 2018 form and CIDB 2000 form. The reason for this could be due to the nature of the work, as FIDIC standard forms of contracts are commonly utilized for complex international projects (A. Saleh, 2014). The contractor has the right to suspend work if the employer fails to resolve the default within 21 days after receiving notice. During this suspension of work, the contractor is also entitled to EOT and L&E. Hence, the contractor's entitlement is explicitly specified in the FIDIC RB2017 under both the employer's and contractor's suspension circumstances.

4.2.2 Issues of Concerns

Several issues of concern have been identified through the review of the provisions concerning the suspension of work for four standard forms of contract in Malaysia. The focus of this research is on issues pertaining to suspension by the employer/ owner. Generally, issues occur between parties to a contract during construction when the interpretation of an event or situation encountered differs according to the wording of the

same contract and/or the legal provisions governing the contract. This will inevitably mislead the parties as to what should happen, who should do what, and, in many cases, who should bear the financial burden. Therefore, having a good construction contract is the most important factor to consider when addressing these issues. The following is a summary of the elements of a good construction contract that were reviewed in Chapter 2:

- a) Fair and equitable risk allocation
- b) Written in a clear, concise, and ambiguous manner
- c) Effective dispute resolution clause

A contract is an agreement between two or more parties to bind each other according to the terms of the agreement which is not always fair. The insufficiency of legislation in preventing unfair contract terms raises the issue of risk disparity between the contracting parties (Abdul Razak & Abd Ghadas, 2020). The contracting parties must understand the terms used in the contract, particularly in the construction contract, which is complex and often causes contractor dissatisfaction due to an unfair risk allocation (Kamaruzaman, 2011). In the case of *Lotterworld Engineering & Construction Sdn Bhd v. Castle Inn Sdn Bhd & Anor [1998] 7 MLJ*, the judge denied the contractor's effort to recover the "Performance Bond" and set aside the ex parte injunction. This demonstrates that in order to perform the work, the contractor must accept the risk of non-payment. However, the contractor is now provided with a fairer risk allocation with the introduction of the Construction Industry Payment and Adjudication Act (CIPAA) 2012 which addressed the issue of payment disputes through statutory adjudication (Arzlee Hassan et al., 2019).

When a construction project owner decides to suspend work, the contractor is left with several concerns regarding the contract's future direction. In order to avoid further liabilities, contractors must fully comprehend their contractual and legal obligations under the construction contracts in the event of a suspension. This is why having a good construction contract is crucial in providing clear solutions to such uncertainties. If there is any uncertainty in the contract, it will not be enforceable. The judgment made by Hamid Sultan Abu Backer J in the Court of Appeal case of *Baldah Toyyibah (Prasarana) Kelantan Sdn Bhd v. Dae Hanguru Infra Sdn Bhd and another appeal [2020] 5 CLJ* 27, has emphasized:

A memorandum of understanding is usually a bilateral or multilateral parties' agreement to the terms in a non-formal way. It usually reflects the intent of the parties. It is often said to be a gentleman agreement. If the terms are clear and parties have acted upon it, the court may hold that the memorandum of understanding is enforceable. The general rule is that to determine the existence of an intention to create legal relations, the courts look at the language, the substance and the terms. If it lacks certainty, it may not be enforceable.

Finding from the analysis showed that under most construction contracts, the owner has the exclusive right to suspend all or part of the project work for their own convenience. The justification and consequences of the suspension, on the other hand, are determined by the language of the provision for suspension of work in each standard form of contract. As such, the provision available must be well-written, clear, and unambiguous. One of the purposes of the analysis is to enable an assessment of the legal rights and obligations of each contracting party in the event of a suspension. Since the scope of research focuses on the PWD 203A form, it's critical to first establish the principles for a government construction contract. According to MOF (2007a), the government contract has several important principles, although only four (4) key principles have been identified for the

purposes of this research: 1) Public accountability, 2) Transparency, 3) Value for money, and 4) Fair dealing.

Malaysian government contracts such as the PWD 203A form, have the primary objective of safeguarding the government's interests, which indirectly means protecting the public interest. Zamroni (2019) has explained that government construction contracts do not only reflect the common contract law principles and norms (e.g., consensus and goodwill), but they also rely on the principles of accountability and transparency as they deal with public funds. Therefore, the construction contract should express the government's commitment to public accountability and transparency. The term "transparency" relates to contract provisions that should be explicit to allow for greater understanding between the contracting parties. In addition, the contract must be able to acquire the best value for money by yielding the best returns for every Malaysian Ringgit spent in terms of quality, time, and cost because it involves taxpayer money on the line. All contract provisions must be founded on fair dealing, which means they must not be biased and must take into account the contractual parties' equal rights. This includes a fair risk allocation where the government must bear a portion of the risk rather than relying solely on the contractor. Overall, government construction contracts should be fair and balanced in terms of legal rights.

The provisions for suspension of work can be compared in two categories: 1) government contracts vs. private contracts, and 2) local contracts vs. international contracts. In the first category, it was discovered that the PAM 2018 form lacks a clear provision for suspension of work, indicating that the project owner does not have the authority to stop work at any time. While the events that could lead to suspension of work are only

mentioned in the CIDB 2000 form. The distinction between local and international contracts is undeniable, as the latter frequently entail not only larger and more complex projects but also a more extensive project management framework. For instance: Clause 8.11 of the FIDIC RB2017 form is a one-of-a-kind provision that allows the contractor to be compensated for plant or materials that have not been delivered to the construction site. However, it must meet the condition that the work has been suspended for more than 28 days and that the contractor has marked the plant and materials as the employer's property in accordance with the engineer's instructions. Furthermore, the FIDIC RB2017 form provides a more complete clarification of the work suspension provision than the JKR 203A form. In comparison to the JKR 203A form, which contains just three subclauses, FIDIC RM2017 has five sub-clauses involving suspension of work.

The most crucial aspect of this provision is the general nature of the suspension and the contractor's capacity to reimburse the costs associated with it (Zhe Huei & Sim Nee, 2010). As discussed in the previous section, a contractor's right to claim damages is usually limited to situations in which the contractor is not at fault. Incomplete and unclear provisions for suspension of work may cause contract complications. Any uncertainty in the provision for work suspension must be eliminated. The research findings on the provisions relating to suspension of work in each standard form of contract are summarized in **Table 4.2.2**.

Table 4.2.2: Research Findings for Suspension of Work Provisions

Provision related to Work Suspension	PWD 203A	CIDB 2000	FIDIC RB2017
Suspension of work	Clause 50.0	Clause 19.0	Clause 8.9
Extension of time	Clause 43.0	Clause 24.0	Clause 20.2
Loss & expenses	Only costs arise from protecting and securing the work under clause 50.1 (b), as well as any repairs under clause 50.1 (d).	Only costs arise in complying with suspension instructions under Clause 32 and Clause 42.	Only costs arise from protecting and securing the work under clause 8.9, as well as any repairs under clause 8.12.
Prolonged suspension	If suspension exceeds 12 months, mutual termination may be considered.	A list of relevant events that led to the suspension of work is provided. The contractor may issue a notice to the SO for permission to resume work within 14 days of receiving the notification of suspension of work.	If suspension exceeds 84 days, the contractor may issue a Notice requesting authorization to resume work. If Engineer does not give a Notice for resumption of work, the contractor may either: agree to a further suspension or give a second Notice to omit the affected part of the works or terminate if the suspension involves the whole project.
Findings	Incomplete Unclear Ineffective	Complete Clear Effective	Complete Clear Effective

4.2.3 Solutions Available to Overcome the Issues

Upon analyzing the data collection, the solutions to overcome the issue have been discovered for the PWD 203A form: 1) Identifying potential events that could lead to a suspension of work and incorporating them into the present suspension of work provision and 2) Developing and implementing a fair time restriction procedure for suspension of work. Both of these solutions will enhance the contract provision for suspension of work in government contracts by providing a clearer explanation of how the suspension of work is implemented and ensuring that the contracting parties bear the same risk, resulting in a win-win situation. Consequently, minimizing the possibility of the contract dispute occurring.

4.2.3.1 Potential Suspension of Work Events

In terms of time and complexity, work suspension can be classified into two categories:

- a) Suspension of work Contract performance cannot be fulfilled in less than 12 months on a temporary basis. Once the relevant event has been resolved, work can be resumed.
- b) Prolonged suspension of work Contract performance cannot be fulfilled for more than 12 months in a row, and/or there is a significant probability of ambiguity about when work may be resumed. Consequently, the contract will be terminated.

Hence, it is crucial to list explicitly the circumstance in the suspension of work provision in PWD 203A in order to prevent suspension instructions implemented arbitrarily by improving the contracting parties' interpretation and understanding. The relevant event that allows the issuance of an instruction to suspend work has been identified based on the data analysis of Chapter 2 and Chapter 4 as the followings:

- > Force majeure
- > Agreed risks
- Technical requirements such as the engagement of a third party hired by the employer, test and inspection order that was not specified in the contract, and instruction to resolve the discrepancy in the contract documents.
- Failure to give site possession to the contractor
- > National interest
- Discoveries of antiquities and fossils

➤ Special events include any event that does not fall into the other categories above. For instance, Covid-19 may now be considered going to the endemic stage but there is still a high risk for an outbreak.

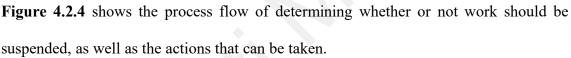
4.2.3.2 Fair Time Restriction Procedure

Currently, the clause in Clause 50.2 of the PWD 203A form merely mentions that if the suspension lasts longer than 12 months, the contracting parties can mutually terminate or suspend further. However, if one of the parties does not agree to extend the suspension, the question may arise as to whether mutual termination can be enforced automatically. For example, if the contractor does not agree to continue to suspend work, then the contractor's rights to termination need to be considered under the contract. In a situation when the contractor's rights are not expressly stated in the contract, frustration as a contractual remedy alternative may be considered subject to certain circumstances.

Furthermore, one of the most common issues with suspension of work is determining how much time is fair. Even if no work is being done on-site during the suspension period, construction is regarded to be ongoing. Thus, it is crucial to determine the reasonable period for suspension of work. If it takes too long, both parties will suffer significant losses, particularly the government, because not only will the project not be completed for public use, but the number of resources spent will also increase. The condition may worsen, resulting in 'time at large.' As a result, the government contract principle of value for money is not fulfilled. Therefore, a fair time restriction procedure must be included in the provision for suspension of time such as provided in the CIDB 2000 form and FIDIC RB2017 form.

4.2.4 Suggestions for Improvement

The main improvement that is to be considered according to the findings, is to establish a properly-drafted suspension of work provisions. This is to include a list of relevant events, as well as a time restriction procedure in the PWD 203A form. A previous study conducted by Abu Bakar (2011) showed that the use of "simple plain English", not too long sentences, and not too legal terms and phrase, influence the level of understanding of the contract requirements among the construction professionals. Another improvement that can be made is to review the procedures in which the suspension of work provisions is implemented to ensure that it is in line with the modified provisions. Therefore, this research proposes suspension of work decision procedures to aid contracting parties in evaluating whether suspension of work under the PWD 203A contract can be executed.



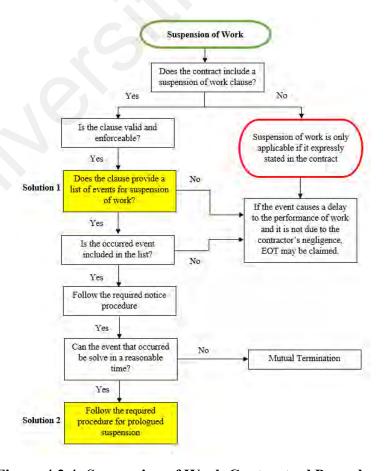


Figure 4.2.4: Suspension of Work Contractual Procedures

4.3 Preliminary Contractual Provisions Enhancement Proposal

All of the findings from the preceding sub-chapters data analysis of contract forms in relation to the suspension of works, as well as current procedures, law cases, and statutory law, were compiled, cross-analyzed, discussed, and theoretically evaluated. Before carrying on with the proposal, several other factors are taken into consideration such as issues of concern on suspension by the employer and the solutions to address those issues. As a result, a preliminary contract provision enhancement is proposed. There are two key recommendations based on the data analysis conducted: 1) To incorporate the potential event that allows for the suspension of work; and 2) To develop a more detailed instruction on dealing with the issue of prolonged suspension in terms of fair time restriction mechanisms.

The researcher is aware that some of the events specified in Clause 50.1(a) may contradict the EOT provisions under Clause 43.0 and L&E under Clause 44.0. However, the researcher will include these events in the initial proposal in order to obtain further feedback from experts during the focus group discussion. It is important to take note that there are times when a suspension of a work order is required as an immediate action when work is halted and cannot be resumed for a certain period, particularly in the event of a sudden natural disaster. For instance: Project A is a school building project located near a steep slope. The contractor is responsible for providing the necessary slope protection based on the contract document's specifications. Despite the contractor's best efforts, a landslide occurred during the piling works. Following that, the SO issued a suspension of work order, citing the high risk that continuing the operation might result in a more serious slope collapse, endangering the safety of workers and surrounding local residents. Furthermore, the period for suspension of work is projected to be lengthy

because the latest soil test results are required for the consultant to review the project's original design.

This similar case can also be related to the agreed risks event in which certain risks have been identified early in the project development phase. Usually, the first inquiry posed is "Who is at fault?". EOT is well-known as a form of compensation for contractors in the event of employer negligence or circumstances beyond contracting parties' control. If despite taking all reasonable preventative or protective measures, an accident or incident still occurs, the contractor is entitled to claim L&E subject to the contract provision. Thus, careful judgment must be made during the expert validation process for any contradictions in the clauses amended, as other clauses must also be cross-checked. Agreed risks refer to risks that have been known since the early stages of the project. It is the probability of unwanted outcomes occurring. There are many risks that can be expected in government projects such as political risk, financial risk, social risk, legal risk, design risk, etc. In situations where the risk fails to be addressed to the point of hindering the execution of work on-site, the SO may consider suspending work while trying to find solutions. For example: During earthworks, there is a risk of uncovering boulders that were not indicated in the survey plan, preventing the work from being constructed according to the original construction drawings. Subsequently, the work had to be suspended in order for the consultants to review the overall earthwork design.

Suspension of work should be considered carefully because it can be perceived as an employer-caused delay and misinterpreted as an 'act of prevention'. An employer's act of prevention in a construction contract could be a breach of contract. This 'act of prevention' usually occurs when the employer causes a delay but the contract does not include a provision that allows an extension of time for the delay (Godwin et al., 2009). Clause

23.8(n) of the PAM 2018 form and Clause 8.5(e) of the FIDIC RB2017 form both contain provisions concerning the employer's act of prevention. Scenarios involving 'agreed risk,' on the other hand, refer to incidents that are not solely the fault of the government, but also include contractors or/ and third parties. A project-based approach is recommended for identifying the risk of a project that is likely to have a major impact on the overall project's performance because each project is different and unique in nature. Risk management is an important instrument in comprehensive project management to achieve the cost, schedule, and quality levels that have been specified (PWD, 2017). It is usually implemented in the early stage of project development for government projects. Therefore, a discussion with the contractor on the 'agreed risks' should be held once the project has begun to ensure that all contracting parties are aware of the project risks. Besides, it should be emphasized that not all risks will be deemed 'agreed risks' events, allowing for work suspension. Only risks that fulfill certain criteria will be considered, such as those that have a high potential of causing work to be suspended even if all treatment actions have been performed to the best of the contracting parties' ability and will require immediate action to be resolved.

Other than that, the overall preliminary enhancement is developed based on the requirement of good construction elements as discussed in sub-chapter 4.2.2, 4.2.3, and 2.4. Provisions that are unclear and too brief lead to the suspension of work implementation being taken lightly without considering the significant consequences to the contract as a whole. This is evident in the event of a prolonged suspension, as stated in the original Clause 50.2 of the PWD203A form. Therefore, improvement to the provision has been developed in response to the necessity for a mechanism to control the duration of prolonged suspension in order to reduce the risk of "time at large." The reasonable time limitation for prolonged suspension is suggested to be 90 days

considering that according to MOF circular letter PK 4.5, a project is classified as a 'projek sakit' when physical work progress is delayed by more than two (2) months or 20% (whichever comes first) in comparison to the contract schedule. While the period for the contractor to give the notice to apply for permission to resume work and the SO to take necessary action has been suggested as being within 14 days based on the norm period that has been applied in most of the provisions related to the issuance of any notice or follow-up action in PWD203A form.

The preliminary contractual provisions enhancement proposal provides an initial recommendation for improving the contractual provisions for suspension of work in government projects as tabulated in **Table 4.3.1**. This proposal will be validated through an expert validation process and discussed in the next chapter to assess the findings' reliability.

Table 4.3.1: Preliminary Contractual Provisions Enhancement Proposal for Suspension of Work

Clause	Original Provision	Revised Provision	Suggestion	Reasons for Suggestion
50.1 (a)	The S.O. may at any time instruct the Contractor to suspend part or all of the works	The S.O. may at any time instruct the Contractor to suspend part or all of the works due to (but not limited to any of the following events or circumstances): (i) force majeure in clause 58.0; or (ii) one or more of the agreed risks; or (iii) to resolve technical issues that may disrupt the work performance as specified by the S.O; or (iv) failure of the government to give site possession to the contractor in clause 38.0; or (v) national interest; or (vi) discoveries of antiquities and fossils; or (vii) special events as specified by the S.O.	To include relevant events which lead to suspension of time	 The absence of elaboration concerning the events that allow for the suspension of work causes the probability of the suspension of work order being issued arbitrarily regardless of the consequences. Allowing for more coverage in the event of unforeseen circumstances, such as the Covid-19 pandemic, which, despite being in a phase of transition to endemic, still has the potential to trigger a massive outbreak. The enhancement corresponds to the elements of a good construction contract which require the provision to be written in a clear, concise, and ambiguous manner.
50.2	If the Contractor suffers delay and/or incurs expenses in complying with the instruction under clause 50.1(a), and in resumption of the Works, and if such delay and/or expenses was not foreseeable by the Contractor, the Contractor shall give notice for extension of time under clause 43 and the provisions thereof shall apply accordingly. PROVIDED THAT the Contractor shall not be entitled to such extension if the suspension is due to a cause attributable to the Contractor and he shall not be entitled to payment of loss and expense if he- (a) fails to take measures specified in clause 50.1 (b); and (b) fails to take all necessary action to mitigate the expenses incurred. In the event such suspension shall continue for a period exceeding twelve (12) months, the Parties shall then discuss whether to mutually terminate the Contract or suspend the Works for a further period.	thereof shall apply accordingly. PROVIDED THAT the Contractor shall not be entitled to such extension if the suspension is due to a cause attributable to the Contractor and	To omit the part of "In the eventsuspend the Works for a further period."	 When work is suspended for an extended length of time, more clarity is needed to ensure that the contracting parties' interests are protected through a fair and risk-sharing strategy. Therefore, it is necessary to have a specific provision for prolonged suspension.
50.3		Prolonged Suspension In the event such suspension under clause 50.1(a) has continued for more than 90 days, the Contractor may give a notice to the S.O. requesting permission to resume the Works. The S.O. shall take necessary action within 14 days after receiving the Contractor's Notice: (a) to give permission to resume the Works in accordance with clause 50.1(d); or (b) to discuss on suspending the Works for a further period; or (c) to discuss on treating the suspension as an omission if the suspension affects only a part of the Works under clause 24.0; or (d) to discuss on mutual termination of the Contract.	suspension. The original	included in the provision to avoid 'time at large', which inevitably leads to contractual disputes between the contracting

4.4 Chapter Summary

This chapter provides an overview of the analysis of the findings from the contract forms in relation to Chapter 2 along with current procedures, law cases, and statutory law. The analysis was organized according to the relevant topic that requires attention in order to improve the provision. Next, the findings of the analysis were tabulated to aid the readers' understanding. The following chapter shall discuss in detail the findings obtained from the expert validation based on the preliminary contractual provisions enhancement proposal prepared in this chapter.

CHAPTER 5: EXPERT VALIDATION & DISCUSSION OF FINDINGS

5.1 Introduction

This chapter is intended to validate the preliminary contractual provisions enhancement proposal for suspension of work presented in Chapter 5. The criteria developed for the expert validation process are described in detail, including the aims and objectives of validation, the process of developing the focus group questions, the selection criteria of the experts, the sampling method as well as the response rate. Thereafter, the findings gathered during the validation process are critically discussed incorporating comments, suggestions, ideas, and further enhancements to the findings. The final contractual provisions enhancement proposal for suspension of work is then presented at the end of this chapter.

5.2 Criteria Development for Expert Validation

Researchers must meet two quality standards in their studies: validity and reliability (Fernández-Gómez et al., 2020; Brink H. I., 1993). This research performs expert validation to guarantee that the preliminary findings are valid and reliable. The process of reviewing, modifying, and validating the reliability of findings in order to enhance them is known as expert validation. (Moreira et al., 2014). Expert validation emphasizes the experts' critical role in clarifying, adding, and/or improving the required aspects of the finding that were overlooked. (Dimitrov, 2012). Thus, the expert validation process adopted in this study through focus group discussion aids in obtaining opinions on the findings from credible sources, which in turn contributes a higher probability to the reliability and validity of the research findings. The development of expert validation

criteria has been identified in the following section to ensure the efficient implementation of this expert validation.

5.2.1 The Purpose of Expert Validation

Generally, the main purpose of validation in qualitative research is to determine the 'accuracy' of the research findings in terms of reliability and comprehensiveness (Creswell & Poth, 2013; Molwus, 2014). The purpose of the expert validation in this research was to assess the sufficiency, suitability, and comprehensiveness of the preliminary contractual provisions enhancement proposal for suspension of work while taking into account the necessary element as discussed in Chapter 4. According to Beecham et al. (2005), validation is a process of confirming that the research findings are accurate enough for their intended purpose. The following are the specific expert validation objectives:

- a) To evaluate the overall applicability and effectiveness of research findings for government projects.
- b) To assess whether the overall research findings cover all the important aspects required in implementing the suspension of work in government projects.
- c) To obtain feedback, comments, and suggestions from potential end-users for further improvement.

5.2.2 Development of Validation Focus Group Questions

A set of questioning structures was developed to guide the data validation process in assessing the credibility and reliability of the overall research findings. The question

structure is divided into three (3) stages, beginning with a general overview of the individual's experience and followed by specific questions that explicitly address the research question. **Table 5.2.2** shows the questions derived for the focus group discussion. An interview guide was also prepared as attached in **Appendix B**.

Table 5.2.2: Focus Group Questions Structure

	Introductory Question	Please introduce yourself including your background, job designation, and years of working experience in government projects?		
Stage 1	Transition Question	Can you tell us in one word what comes to mind when you think about the suspension of work? Can you tell us briefly about your experiences with significant events that may cause suspension of work?		
	Key Question No. 1	What are the provisions related to the suspension of work in the PWD 203A form? In your opinion, is the current provision for suspension of work in the PWD 203A form adequate?		
Stage 2	Key Question No. 2	What do you think are the most pressing issues that may occur as a result of the suspension of work in government projects? What is the most efficient way for us to address the issue?		
	Key Question No. 3	Do you think the findings provide a clear interpretation of the suspension of work? Do you think the findings address the critical issues that may occur as a consequence of the suspension of work to avoid contract disputes?		
Stage 3	Final Question	In your opinion, is there anything else that should be included in the contractual provisions for suspension of works for government projects?		

5.2.3 Criteria Selection of the Experts

The selection of experts required for the validation process is determined based on the specific criteria appropriate to the study. This is done not only to ensure that the validation process can provide critical reviews and constructive comments to the researcher but also to allow the overall credibility and reliability of the study findings to be examined. Hence, the experts were selected using the following criteria: -

- a) The experts must come from government agencies and are directly involved with contract administration. The rationale behind this criterion is that the findings to be validated involve improvements to the contractual provisions for suspension of work in the JKR 203A form which is used in the government project itself. It has been proved to be beneficial if potential participants are chosen based on their abilities to share information, expertise, and experience, as well as express their opinions on pertinent issues related to the research topic (Krueger & Casey, 2000; Morgan, 1997). Another key factor to consider is group dynamics, which can be achieved when participants' experiences with the research topic are similar. Thus, appointing participants from "stakeholders" will aid in resolving ambiguities and provide a greater understanding of conflicting issues concerning the research findings.
- b) The expert should have at least ten (10) years of experience in the construction industry. There is no specific standard on the number of years of experience that should be adopted. However, previous studies employed a baseline of at least five (5) years of experience in a particular industry (Castillo Martínez & Ramírez Montoya, 2020; Luque-Vara et al., 2020; Fernández-Gómez et al., 2020; Haron, 2013). In addition, the number of years of experience is taken into account based

on job advancement for government officers approximately after 8 years of service, which demonstrates the officer's qualification to assume positions that entail decision-making. This indirectly contributes to the credibility of participants to provide comments and opinions.

5.2.4 Focus Group Validation

The focus group discussions were conducted through online platforms due to the expert's availability to attend psychically and time constraints. The invitation for the focus group discussion has been extended to fourteen (14) potential participants but only a total of five (5) participants were able to take part in the event. The session lasts nearly three (3) hours. **Table 5.2.4** lists the details of experts who attended the focus group discussion.

Table 5.2.4: Details of Focus Group Participants

Code	Designation	Department	Background	Years of Working Experience	Numbers of Projects Involved	Experience with Suspension of Work
E1	Senior Quantity Surveyor	Contract	Quantity Surveyor	17	> 100 projects	Yes
E2	Senior Quantity Surveyor	Project Team	Quantity Surveyor	20	> 100 projects	Yes
E3	Senior Quantity Surveyor	Contract	Quantity Surveyor	14	> 100 projects	Yes
E4	Senior Quantity Surveyor	Project Team	Quantity Surveyor	17	> 50 projects	Yes
E5	Senior Quantity Surveyor	Contract	Quantity Surveyor	18	> 100 projects	Yes
E6	Senior Quantity Surveyor	Contract	Quantity Surveyor	21	> 100 projects	Yes

Each participant was assigned a code name to help keep track of their responses and protect the confidentiality that had been agreed upon before the focus group discussion. It can be observed from the table that a total number of 6 participants joined the focus group discussion with the maximum working experience being 21 years and the minimum working experience being 14 years. The majority of the participants have worked on over 100 projects in various stages of development. Moreover, it is easier to acquire top management's perspectives on the suspension of work since all of the participants hold top management positions in government agencies and have encountered issues related to the suspension of work in government projects.

5.3 Critical Discussion on Validation Findings

In the following section, the results of the expert validation data analysis are compiled and discussed based on the two (2) important parts of improvements made which are suspension of work events and prolonged suspension. The findings of the focus group discussion were analyzed in line with the objectives of the expert validation process for this research.

5.3.1 Suspension of Work Events

During the focus group discussion, it was discovered that all experts had in-depth knowledge and awareness of the suspension of work including its implementation, provisions, and consequences. All the experts in this validation agreed that the provision for work suspension under Clause 50.0 is inextricably linked to the provisions for EOT (Clause 43.0) and L&E (Clause 44.0). In addition, all experts believe that the current provision for suspension of work in the PWD 203A form should be updated and amended

to address complications originating from the provision for suspension of work by referring to lessons and experiences acquired from past projects. The most pressing issues that may occur as a result of work suspension are not only EOT and L&E but also the prospect of mutual termination. There were mixed responses received from the experts regarding the suggestion to incorporate a list of events for work suspension in Clause 50.1(a). The following are the remarks made by the experts:

"There is a need to create a list of events that may lead to suspension of work so that all contracting parties are aware of when the suspension of work can be used. However, in government projects, the SO will usually refrain from issuing a suspension of work order unless all work cannot be performed and the government has contributed to the event that led the work to be temporarily suspended. If there is still other work that can be performed then the project will not be suspended and instead, EOT will be awarded." (Expert E1)

"Suspension of work under Clause 50 will only be considered in the event of an unforeseen situation requiring an impromptu decision from the SO, such as the discovery of antiquities on a construction site. Additionally, the top management often avoids adopting the suspension approach in such situations and instead opts for EOT which has a more straightforward approach. It is difficult for SO to issue a suspension of work order since it has such a significant financial impact, particularly concerning L&E claims. Failure to provide solid reasons for the suspension order will result in disciplinary action against the SO. Therefore, the solution of giving EOT is preferred." (Expert E2)

"The events specified are necessary to help the SO identify events that will allow the suspension of work to be imposed." (Expert E3)

"It gives the SO the confidence to make decisions in an emergency. However, consideration for the suspension of work events must be examined since it may provide an opportunity for the contractor to request suspension from the SO if any of the specified events causes a delay." (Expert E4)

"The purpose and requirement to list the events in the provision for suspension of work must consider numerous factors, especially if it involves an event with no source of authority. This is due to the fact that the events described in Clause 43.0 Delay and Extension of Time are divided into two categories: 1) The events that allow the contractor to claim both EOT and L&E; and 2) The events that only allow the contractor to claim EOT." (Expert E5)

"In government projects, the strategy of suspending work is implemented when work onsite is not allowed to be executed for a period of time owing to unavoidable conditions that the SO considers critical at that point of time. The event that permitted the suspension of work to be taken was not mentioned in the provision since it was left to the SO's discretion." (Expert E6)

Nevertheless, the experts were of the view that the proposal to include the list of events for suspension of work in Clause 50.1 (a) is relevant as a guideline for contracting parties.

All the experts agree that having this list of events will make it easier for the SO to identify the suspension of work events and take appropriate action. There are several recommendations suggested by the expert which are interrelated with other clauses in the PWD 203A form. Expert E5 suggested emphasizing Clause 50.1 (a) to demonstrate that, despite the presence of a list of events, the SO only has the authority to determine whether the situation warrants the implementation of a suspension of work. This is consistent with the elements of a good construction contract discussed in Chapter 4 that serve to prevent misinterpretation of the contract provision. Furthermore, expert E2 believes that the term "any other event" is more appropriate than "special event," as the latter may cause misinterpretation of what constitutes a special event. Among other issues that were much discussed among the experts are events related to force majeure and the government's failure to provide site possession. In both of these events, the contractor is only eligible for EOT under Clause 43.0. If the events are listed under Clause 50.1, there will be a contradiction between Clause 43.0 and also Clause 44.0. The discussion on these events will be explained further in the next section. Table 5.3.1 summarizes the validation findings on the suspension of work events, which will be incorporated into the final proposal.

Table 5.3.1: Summary of Validation Findings on the Suspension of Work Events

Suspension of work events	Findings	Issues	Solutions
Force Majeure	An alternative option for the SO if the force majeure involves a long time and requires immediate action	There is a conflict with Clauses 43.0, 44.0 and 58.0: a) The definition of force majeure has limited the scope of the event, requiring it to meet certain criteria. b) Force majeure only allows EOT as the event does not prevent work from continuing (work is just halted during the incident).	To be covered under the term "any other events specified by the SO" in order to avoid conflict with other clauses in the PWD 203A form.
Agreed Risks	Only involve certain risks that are considered critical for the project's successful completion.	There is concern that the contractor may use this event indiscriminately.	Both the SO and the contractor must take proactive measures to ensure that the agreed-upon risks are closely monitored and controlled to avoid unintended consequences through risk management as required for government projects.
Failure of the Government to Give Site Possession to the Contractor	The contractor may argue on: a) the right to gain the site possession of the entire site. b) the delay of site possession caused by government failure in planning must also be considered.	There is a conflict with Clauses 38.0, 43.0 and 44.0: a) The event involves failure to provide site possession for the whole site. b) The contractor is not allowed to claim any L&E due to the delay in giving site possession	To be covered under the category "any other events specified by the SO" as it may only occur in certain situations.
Special Events	The term "special events" is deemed to be not appropriate.	The term used may cause misinterpretation of what constitutes a special event.	To change the term using "any other event".

• Force Majeure Event

Expert E2 has argued on the relevance to include the event of force majeure event under the provision for suspension of work by elaborating on the government's approach in the case of the Covid-19 pandemic:

"During the first implementation of the MCO, there were many uncertainties over the direction of project implementation as originally the Covid-19 pandemic was not covered in the PWD 203A form. However, there are two major criteria that prevent the suspension of work orders from being issued by the SO, namely that the work is not fully affected if it has obtained MITI approval and the MCO order is mandatory under the government acts. Therefore, government agencies only issued a letter to the contractor notifying their obligation to comply with the MCO order instead of instruction to suspend work." (Expert E2)

Based on the above statement, it can be seen that it is in the contracting parties' best interests to analyze the extent of such triggering events in their contracts. Even if the contract does not contain an express definition or specific provisions for Force Majeure events, the contracting parties are still liable for events beyond their control (Mohd Zin et al., 2021). Necessary measures were taken by the government agencies to ease the impact of the Covid-19 pandemic on government projects by providing several guidelines on methods for issuing EOT for contracts affected by the enforcement of the MCO. The contractor is automatically given an EOT for 84 days for the period starting from PKP to PKPB. Following that, Addendum No. 5 to the conditions of contract PWD 203A was also released, which amended Clause 58.0 Effect of Force Majeure to account for the

pandemic. In the case of the Covid-19 pandemic, a force majeure does not necessitate a suspension of work. This is consistent with Clause 77.1 of the PWD 203A form, which specifies that in the event of an outbreak, the contractor must adhere to any government or local medical or health authorities' regulations, orders, or requirements. However, expert E4 shared different perspectives as follows:

"Force Majeure events should be taken into account under the provision for suspension of work, since there may be times when the SO needs to order the suspension of work for reasons of urgency or to ensure site safety. For instance, if a landslide occurs on-site, the SO may decide to suspend work in part or entirely, depending on the severity of the disaster." (Expert E4)

On the other hand, Expert E5 stated:

"I came upon a project where the SO has issued an order to suspend work on-site as per the municipal council's instruction to stop work immediately. The project was suspended due to opposition from local residents. Work was suspended for over a year before it was resumed. The suspension directive was made because the incident was a sensitive issue involving local residents, and prompt action was required to ensure the contractor stopped all work while waiting for further instructions from the municipal council." (Expert E5)

The action to suspend the work, as indicated by expert E5, is in accordance with the provisions in Clause 21.1 regarding compliance with the law:

The contractor shall comply in all respects (including the giving of all notices and the paying of all fees required) with any law, regulation or by-law, or any other directive issued by any public authority or public service company (hereinafter referred to as "Statutory Requirement"),

Following this discussion, it is observed that the force majeure event in Clause 50.1(a) is relevant since it can be an alternative for the SO if the force majeure involves a long time and requires immediate action. The justification to include the force majeure event can be further analyzed from several angles. First, the definition of force majeure in Clause 58.0 itself has limited the event of force majeure and the event must fulfill certain criteria. Second, force majeure only allows EOT as the event does not prevent work from continuing (work is just halted during the incident) such as inclement weather. As a result, a clear definition of when work should be suspended is required.

Currently, all events that cause suspension of work are entitled to claim L&E and EOT under the provision for the suspension of work. It is necessary to separate events that allow contractors to claim simply EOT or both EOT and L&E. According to the contract provisions, events beyond both parties' control are only eligible for EOT because it would not be financially fair to claim from the employer, who also bears the losses in terms of time. In conclusion, the event of force majeure will be covered under the term "any other events specified by the SO" to avoid conflict with other clauses in the PWD 203A form.

• The Government's Failure to Provide Site Possession

In most cases, the employer's failure to give possession of the site is considered a contract breach. Based on the discussion, expert E1 and expert E6 have stressed the following points:

"Procurement for a government project will only begin if three key components have been confirmed: the project brief, project cost, and project location. If one of these components is not solved, it will have a significant influence on the project's implementation, such as failing to give site possession." (Expert E1)

"The suspension of work due to the government's failure to grant site ownership to the contractor has already been covered in Clause 38.0 Site Possession. It would be redundant to place it in Clause 50.1(a) because the event does not require a suspension of work." (Expert E6)

The majority of experts agreed that Clause 50.1(a) should not include the event of failure to give site possession. Nonetheless, the delay of site possession caused by government failure in planning must also be considered. If the contractor can prove that the government is at fault, the contractor is entitled to claim EOT and L&E under the law. This is contrary to Clause 38.5 and Clause 38.6 which state that the contractor is not allowed to claim any L&E due to the delay in giving site possession. Experts E5 and E3 had raised the following concerns by giving project examples:

"Procurement of Project A continues even though the approval of planning permission has not been completed. This caused the entire project site could not be handed over to the contractor based on the date stated in the letter of acceptance (LA). The SO has issued an order to suspend work as the estimated period to resolve the issue cannot be determined and ascertained." (Expert E5)

"Only a part of the site was handed over to the contractor for Project B due to land ownership issues for the main entrance area. The action was taken to allow the contractor to start and proceed with work in the unaffected area. However, the SO had issued an order to suspend work on the affected area since the land issue remained unresolved even though other works were nearly completed." (Expert E3)

In both cases, the contractor may argue about the right to gain the site possession of the entire site. If the government violates this right, the contractor may be permitted to claim L&E for hidden costs which may consist of prolongation costs. According to King (2021), prolongation costs are defined as additional costs incurred by the Contractor as a result of work delays caused by the employer or another party. However, the contractor must still prove that the L&E claim is based on the contractor's actual expenses incurred in line with Clause 44.0 Claims for Losses and Expenses. This is supported by the judgment made by Lim Chong Fong J in *PBLT Sdn Bhd v. Prestasi Reka Sdn Bhd & Ors* [2020] *I LNS 1823*; [2020] *MLJU 2056*, which established several general principles of law relating to the recovery of a contractor's claim for prolongation costs as follows:

- (a) The burden of proof of loss or damage lies on the contractor;
- (b) The contractor may be denied recovery if at the material times he was in concurrent delay; and

(c) The contractor must be able to substantiate its claim with the necessary evidence of loss rather than to claim based on estimate of loss derived from the preliminaries as priced in the contract document. The formulae method of computation based on average preliminaries costs extracted from the Bills of Quantities of the Contract multiplied by the number of days of delay is not an acceptable method to claim for prolongation loss and expense.

The contractor is responsible for proving not only the amount of the prolongation costs claim but also the causal link between the delay event and the alleged prolongation costs. Therefore, it is more appropriate that the suspension of work due to failure to give site possession by the employer be covered under the category "any other events specified by the SO" as it may only occur in certain situations.

5.3.2 Prolonged Suspension

In general, the experts agreed on an additional clause for prolonged suspension. All of the experts in this discussion shared the same opinions as they emphasized the importance to set a certain duration of time for suspension of work as well as providing further information in the event of prolonged suspension. As experts E2 further explained:

"The purpose of prolonged suspension is to compensate for work that has been put on hold for an extended period which is usually more than 90 days. Moreover, a clear explanation of the action to be taken by contracting parties will help to avoid the occurrence of time at large." (Expert E2)

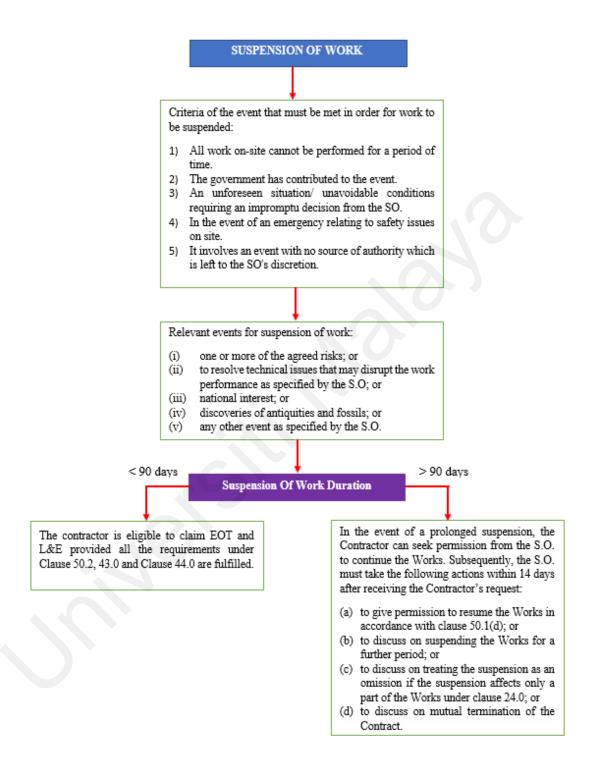
Meanwhile, expert E4 viewed that both the employer and contractor need to take initiative to be proactive in solving the issue that may lead to prolonged suspension. This is because the longer the project is suspended, the greater losses both parties suffer. As a result, the proposed Clause 50.3 provision is aimed to meet the requirement to reduce losses incurred by forcing the contractual party to take necessary action once the suspension has lasted more than 90 days. The experts also assessed that a 14-day response time for the SO to the notice of permission to resume work by the contractor was adequate. Expert E6 also proposed that in the event of a prolonged suspension, the time limit for submitting full details of all L&E claims be enhanced. The supporting documentation should be submitted within three (3) months after the date of the job resume to avoid administrative complications with processing the L&E claim due to a change in the person in charge. Considering the overall implications of the contract, it is proposed that a separate provision be drafted to address the issue of L&E for prolonged suspension through the improvement of the provisions in Clause 44.0 of PWD 203A form.

Finally, all expert opinions and suggestions based on the focus group discussion are included in the final proposal, which is summarized in **Table 5.3.2**. Whereas, the overall improvement generated from the research discussions and findings is illustrated in **Figure 5.3.2**.

Table 5.3.2: Final Contractual Provisions Enhancement Proposal for Suspension of Work

Clause	Original Provision	Revised Provision	Suggestion	Reasons for Suggestion
50.1 (a)	The S.O. may at any time instruct the Contractor to suspend part or all of the works	The S.O. may at any time instruct the Contractor to suspend part or all of the works. A "suspension of work" event may include but is not limited to any of the following events or circumstances provided it has been approved by the SO: (i) one or more of the agreed risks; or (ii) to resolve technical issues that may disrupt the work performance as specified by the S.O; or (iii) national interest; or (iv) discoveries of antiquities and fossils; or (v) any other event as specified by the S.O.	To include relevant events which lead to suspension of	 The absence of elaboration concerning the events that allow for the suspension of work causes the probability of the suspension of work order being issued arbitrarily regardless of the consequences. Allowing for more coverage in the event of an emergency and unforeseen circumstances which require immediate action by the SO. The enhancement corresponds to the elements of a good construction contract which require the provision to be written in a clear, concise, and ambiguous manner.
50.2	If the Contractor suffers delay and/or incurs expenses in complying with the instruction under clause 50.1(a), and in resumption of the Works, and if such delay and/or expenses was not foreseeable by the Contractor, the Contractor shall give notice for extension of time under clause 43 and the provisions thereof shall apply accordingly. PROVIDED THAT the Contractor shall not be entitled to such extension if the suspension is due to a cause attributable to the Contractor and he shall not be entitled to payment of loss and expense if he- (a) fails to take measures specified in clause 50.1 (b); and (b) fails to take all necessary action to mitigate the expenses incurred. In the event such suspension shall continue for a period exceeding twelve (12) months, the Parties shall then discuss whether to mutually terminate the Contract or suspend the Works for a further period.	was not foreseeable by the Contractor, the Contractor shall give notice for extension of time under clause 43 and the provisions thereof shall apply accordingly. PROVIDED THAT the Contractor shall not be entitled to such extension if the suspension is due to a cause attributable to the Contractor and he shall not be entitled to payment of loss and expense if he- (a) fails to take measures specified in clause 50.1 (b); and (b) fails to take all necessary action to mitigate the expenses incurred.	To omit the part of "In the eventsuspend the Works for a further period."	 When work is suspended for an extended length of time, more clarity is needed to ensure that the contracting parties' interests are protected through a fair and risk-sharing strategy. Therefore, it is necessary to have a specific provision for prolonged suspension.
50.3		Prolonged Suspension In the event such suspension under clause 50.1(a) has continued for more than 90 days, the Contractor may give a notice to the S.O. requesting permission to resume the Works. The S.O. shall take necessary action within 14 days after receiving the Contractor's Notice: (a) to give permission to resume the Works in accordance with clause 50.1(d); or (b) to discuss on suspending the Works for a further period; or (c) to discuss on treating the suspension as an omission if the suspension affects only a part of the Works under clause 24.0; or (d) to discuss on mutual termination of the Contract.		 Further instruction on fair time restriction measures needs to be included in the provision to avoid 'time at large', which inevitably leads to contractual disputes between the contracting parties. Based on the time required for a project to be "projek sakit," an acceptable time limit for the prolonged suspension is proposed approximately 90 days. This will help to reduce the idling period as the contract is still considered ongoing even during the suspension period. The proposed period of 14 days for the notice to be issued by the contractor and necessary action to be taken by the SO are based on the norm period applied in most of the PWD203A provisions.

Figure 5.3.2: Overall Improvement for Suspension of Work



5.4 Final Contractual Provisions Enhancement Proposal

NO.

AMENDMENTS

1. Page 33, Clause 50.0

Substitute the whole Clause 50.0 with the new Clause 50.0 as follows:

50.0 SUSPENSION OF WORKS

- 50.1 Suspension and Resumption of Works
- (a) The S.O. may at any time instruct the Contractor to suspend part or all of the works.
 A "suspension of work" event may include but is not limited to any of the following events or circumstances provided it has been approved by the SO:
 - i. one or more of the agreed risks; or
 - ii. to resolve technical issues that may disrupt the work performance as specified by the S.O; or
 - iii. national interest; or
 - iv. discoveries of antiquities and fossils; or
 - v. any other event as specified by the S.O.
- (b) Upon receipt of such written instruction, the Contractor shall suspend part or all of the Works for such time and in such manner as specified in the instruction and shall duly protect, store and secure the Works or such part of the Works against any deterioration, loss or damage.
- (c) During the suspension period, the Contractor shall continue to perform its obligations under this Contract, which are not affected by the instruction to

suspend, including the obligation to effect and maintain insurances and Performance Bond.

(d) The SO may instruct the Contractor to resume the Works at any time thereafter.

Upon receipt of such instruction, the Contractor shall resume the Works and the Parties shall jointly examine the Works affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works which has occurred during the suspension. The Contractor shall also take all necessary actions to mitigate the expenses incurred.

50.2 Extension of Time

If the Contractor suffers delay and/or incurs expenses in complying with the instruction under clause 50.1(a), and in resumption of the Works, and if such delay and/or expenses was not foreseeable by the Contractor, the Contractor shall give notice for extension of time under clause 43 and the provisions thereof shall apply accordingly. PROVIDED THAT the Contractor shall not be entitled to such extension if the suspension is due to a cause attributable to the Contractor and he shall not be entitled to payment of loss and expense if he -

- (a) fails to take measures specified in clause 50.1 (b); and
- (b) fails to take all necessary action to mitigate the expenses incurred.

50.3 Prolonged Suspension

In the event such suspension under clause 50.1(a) has continued for more than 90 days, the Contractor may give a notice to the S.O. requesting permission to resume the Works.

The S.O. shall take necessary action within 14 days after receiving the Contractor's Notice:

- (a) to give permission to resume the Works in accordance with clause 50.1(d); or
- (b) to discuss on suspending the Works for a further period; or
- (c) to discuss on treating the suspension as an omission if the suspension affects only a part of the Works under clause 24.0; or
- (d) to discuss on mutual termination of the Contract.

50.4 Consequences of Mutual Termination

- a. If the Contract is mutually terminated under this clause
 - (i) Clause 51.1(c)(i) shall be applicable; and
 - (ii) Payment obligations including all costs and expenditure incurred by the Government and the Contractor shall be ascertained in accordance with clause 54.

5.5 Chapter Summary

The findings from the preliminary contractual provisions enhancement proposal for suspension of work were validated in this chapter through focus group discussion. Each enhancement was verified and evaluated during the validation process to obtain valuable input as well as constructive comments from experts on the proposal. In general, the validation findings indicate that the proposal is viable and suitable for government projects, although the experts have made several recommendations for additional changes. The next chapter provides the conclusion of this research as well as the study's limitations.

CHAPTER 6: CONCLUSION AND RECOMMENDATION

6.1 Introduction

This chapter gives an overview of the research, including the fulfillment of the research objectives. The research focused on developing a contractual provisions enhancement proposal for the suspension of work in government projects. At the end of this chapter, the limitations of the research are discussed, as well as recommendations for further research.

6.2 Overall Summary of the Research

The research was initiated following much debate on the suspension of work when the government issued the MCO in response to the Covid-19 outbreak, due to several factors including the absence of detailed guidelines for suspension of work, a lack of understanding of what happens when a project is suspended and the need to establish a proper instrument for suspension of work. This research aimed to formulate enhancement to the contractual procedures and provisions for suspension of work in government projects. The enhancements were made to provide some certainty concerning the contracting parties' rights and liabilities in respect of the instruction to suspend the works. The research objectives are as follows:

- a) To identify the issues on suspension of works in construction projects.
- b) To analyze the current contract provisions for suspension of works in the local standard form of contracts.
- c) To determine the necessary improvement to the contractual procedures for implementing suspension of works in government projects.

d) To develop the necessary improvement to the contractual provisions for suspension of works in government projects.

A qualitative method using a socio-legal research approach was used to accomplish both the research aim and objectives. The literature review was first conducted to obtain a comprehensive understanding of the landscape concerning the suspension of work in the construction industry. Subsequently, the preliminary contractual provisions enhancement proposal was developed and validated by experts through focus group discussion. The findings from the expert validation process refined the preliminary proposal further into the final contractual provisions enhancement proposal. It was concluded that the research aim has been met satisfactorily as experts agreed that the proposal is reliable and acceptable in enhancing the contractual provisions for suspension of work in government projects.

6.3 Conclusion of the Research Objectives

The following sections reflect on the research objectives that have been fulfilled in this research.

6.3.1 Objective 1: To Identify the Issues on Suspension of Works in Construction Projects

A comprehensive literature review (Chapter 2) was conducted to identify the issues involving the suspension of work in construction projects, which will be used as part of the key information in constructing the contractual provisions enhancement proposal at

the end of this research. The main contributing factor to the issues arising from the suspension of work is the lack of elements of a good construction contract in the standard form of contract particularly the provision for suspension of work. The research analysis performed in **Chapter 4** satisfied the Objective 1 of this research through the review of the provisions concerning the suspension of work of the four standard forms of contract in Malaysia. Following were the key issues on suspension of work identified:

- a) Misinterpretation of an event or situation based on the contract provision for suspension of work.
- Lack of understanding of contractual and legal obligations among the contracting parties.
- c) Risk of contract dispute for extension of time (EOT), as well as loss and expenses(L&E) in the event of suspension of work.
- d) Risk of 'time at large' to the construction projects.

6.3.2 Objective 2: To Analyze the Current Contract Provisions for Suspension of Works in the Local Standard Form of Contracts

Further analysis of the current contract provisions for suspension of work in the local standard form of contracts was conducted as have been presented in **Chapter 4** to meet Objective 2 of this research. There was four (4) standard form of contracts analyzed: PWD 203A form, PAM 2018 form, CIDB 2000 form, and FIDIC RB2017 form. The purpose of this analysis was to determine the following:

- a) What causes suspension of work?
- b) How sufficient is the contract provision for suspension of works?

- c) What needs to be considered in order to improve the contract procedures for implementing suspension of work in government projects?
- d) What aspect should be considered to improve the contract provision for suspension of work in government projects?

Additionally, comparisons of the provisions for suspension of work for each of the construction contracts were undertaken to acquire a better understanding of the rationale for its drafting and its relations to the other provisions such as EOT and L&E. The result of the analysis obtained from both the literature review (Chapter 2) and contract provisions (Chapter 4) for suspension of work contributed to the development of the preliminary contractual provisions enhancement proposal for the PWD 203A form.

6.3.3 Objective 3: To determine the necessary improvement to the contractual procedures for implementing suspension of works in government projects.

The findings of the analysis conducted in **Chapter 4** also fulfilled Objective 3. Along with discovering solutions to the contractual provision's shortcomings, improvements to the current processes for suspension of work were reviewed in order to ensure it is in line with the modified provisions. The process flows that determine whether or not work should be suspended as well as the actions that can be performed to implement prolonged suspension of work are the main improvements to the procedures for suspension of work in government projects as discussed in **Chapter 4**. This enables an overall evaluation of the suggested solution's efficacy before proceeding to the preparation of the preliminary contractual provision enhancement proposal.

6.3.4 Objective 4: To Assess the Necessary Improvement to the Contractual Provisions for Suspension of Works in Government Projects

Objective 4 of this research was attained through the discussion presented in **Chapter 4** and **Chapter 5**. The information gathered from the extensive literature review and the results obtained from the data analysis in **Chapter 4** were utilized to assess the necessary improvements to the provision for suspension of works in PWD 203A form as follows:

- a) Identifying potential events that could lead to a suspension of work and incorporating them into the present suspension of work provision.
- b) Developing and implementing a fair time restriction procedure for suspension of work.

A preliminary contractual provisions enhancement proposal was developed based on the improvements discovered in **Chapter 4** and then validated by the experts through focus group discussion. Despite several recommendations for additional improvement, the experts unanimously agreed that the preliminary proposal was reliable and acceptable for use in government projects. The final contractual provisions enhancement proposal which took into consideration the expert recommendations from the focus group discussion was presented in **Chapter 5**.

6.4 Limitation

This research encountered several limitations throughout the course of the research such as the following:

- a) Difficulty in finding adequate literature material relevant to the study area due to the restricted amount of work available, particularly on the suspension of work by the employer. Optimistically, this research has contributed to the current literature context by contributing to the tiny amount of knowledge previously accessible.
- b) The constraint of time was one of the most significant challenges faced in completing the overall research. The attempts to increase the sample size for expert validation were also limited due to the time constraint. It would be useful if more participants with different backgrounds for the focus group discussion were obtained to increase the accuracy of the research findings.
- c) This research only focused on enhancing the contractual provisions for suspension of work in the PWD 203A form. According to the study's findings, any amendments to the provision for suspension of work may have an impact on the provision for extension of time (EOT) as well as loss and expenses (L&E). Therefore, the selection of enhancement has been made restricted to the provision for suspension of work only.
- d) The experts chosen to validate the findings are limited to government employees such as PWD officers which are from technical departments with substantial expertise and direct participation with contract administration for government projects. As a result, the research's validity is restricted to information acquired from a professional technical standpoint. It is suggested that future studies expand the pool of experts to include construction lawyers in order to acquire legal perspectives.

6.5 Recommendation for Future Research

The contractual provisions enhancement for suspension of work proposal that has been established in this research would serve as a catalyst for the implementation of a more effective suspension of work in government projects. Further research on the related provisions to the suspension of work in the PWD 203A form in terms of EOT and L&E will be beneficial to the government projects as a whole. In addition, extensive research in this area of research can be utilized as a guidance and reference to provide strategic mitigation actions that would not only minimize contract disputes caused by the suspension of work but also eliminate suspensions caused by government misconduct. Future research should include case studies on the implementation of suspension of work in various types of construction contracts. More research in this area can potentially provide a more conclusive and comprehensive knowledge of the challenges that arise from the suspension of work in the construction industry.

REFERENCES

- A. Saleh, A. A. (2014). Common contractual issues faced by Malaysian contractors operating in Middle East using fidic form of contracts [Master's thesis, University Technology Malaysia].
- Abu Bakar, N. (2011). Level of understanding the contract requirements of PWD 203A (rev. 2007) standard form of contract among the construction professional [Master's thesis, University Technology Malaysia].
- Abdul Razak, F., & Abd Ghadas, Z. A. (2020). Legal Issue Due to Unfair Contract Term: The Malaysia Perspective. *Journal of Critical Reviews*, 7(19), 7457–7463. https://doi.org/10.31838/jcr.07.19.849
- Ahamad, N. (2009). The importance of condition of contract in contract document [Unpublished master's thesis]. University of Technology Malaysia.
- Ahmed, S. M., Azhar, S., Kappagantula, P., & Gollapudi, D. (2003). Delays in Construction: A Brief Study of the Florida Construction Industry. *Proceedings of ASC the 39th Annual Conference*, 257–266.
- Alshahrani, S. (2017). Dispute resolution methods in the construction industry sector in the Kingdom of Saudi Arabia. *MATEC Web of Conferences*.
- Alaloul, W. S., Musarat, M. A., Rabbani, M. B., Iqbal, Q., Maqsoom, A., & Farooq, W. (2021). Construction Sector Contribution to Economic Stability: Malaysian GDP Distribution. *Sustainability*, 13(9), 5012.
- Alfan, E., & Zakaria, Z. (2013). Review of financial performance and distress: A case of Malaysian construction companies. *British Journal of Arts and Social Sciences*, 12, 143-157.
- Al-Khalidi, S., & Freij, M. (2020, December 29). Drainage works unearth Roman baths in heart of Jordan's capital. *The Star*. https://www.thestar.com.my/news/world/2020/12/29/drainage-works-unearth-roman-baths-in-heart-of-jordan039s-capital.

- Amkhan, A. (1991). Force majeure and impossibility of performance in Arab contract law. *Arab Law Quarterly*, 6(3), 297–308. https://doi.org/10.1163/157302591x00359
- Anaman, K. A., & Osei-Amponsah, C. (2007). Analysis of the causality links between the growth of the construction industry and the growth of the macro-economy in Ghana. *Construction Management and Economics*, 25(9), 951–961. https://doi.org/10.1080/01446190701411208
- Ariffin, H.L., Aziz, Z., Raslim, F.M., & Jaafar, M. (2016). Identify disputes in the construction industry: the way forward for innovative procurement system in Malaysia. *Research Journal of Fisheries and Hydrobiology*, 11(3). 98-104.
- Arthurs, H. W. (1983). Law and learning: report to the Social Sciences and Humanities Research Council of Canada = Le droit et le savoir. Information Division, The Council.
- Augenblick, M., & Rousseau, A. B. (2012). Force majeure in tumultuous times: Impracticability as the new impossibility. *The Journal of World Investment Trade*, 13(1), 59–75. https://doi.org/10.1163/221190012x621535
- Arzlee Hassan, A., Adnan, H., Izz Mohammad Kamil, A., & Aisyah Asykin Mahat, N. (2019). Challenges against adjudication decisions on payment disputes within the construction industry. Proceedings of the *IOP Conference Series: Earth and Environmental Science*, 233, 022035. https://doi.org/10.1088/1755-1315/233/2/022035.
- Azfar, F. (2012). The force majeure 'excuse.' *Arab Law Quarterly*, 26(2), 249–253. https://doi.org/10.1163/157302512x628369
- Bakar, N. A. (2011). Level of understanding the contract requirements of PWD 203A (Rev. 2007) standard form of contract among the construction professional [Unpublished master's thesis]. University of Technology Malaysia.
- Banakar, R., & Travers, M. (2014). *Theory and Method in Socio-Legal Research*. Hart Publishing.

- Bernard, H.R. (2000). Social research methods: Qualitative and quantitative approaches. Sage Publication.
- Beyea, S. C., & Nicoll, L. H. (2000). Learn more using focus groups. *AORN Journal*, 71(4), 897–900. https://doi.org/10.1016/s0001-2092(06)62276-x
- Bhandari, P. (2020, July 30). What is Qualitative Research?: Methods & Describer.
- Bouchrika, I. (2021, May 2). How to Write Research Methodology: Overview, Tips, and Techniqueshttps://www.guide2research.com/research/how-to-write-research-methodology. Guide 2 Research.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Brink H. I. (1993). Validity and reliability in qualitative research. *Curationis*, 16(2), 35–38. https://doi.org/10.4102/curationis.v16i2.1396
- Broome, J.C., & Hayes, R.W. (1997). A comparison of the clarity of traditional construction contracts and of the New Engineering Contract. *International Journal of Project Management*, 15, 255–261.
- Cambridge English Dictionary. (n.d.). Suspension. https://dictionary.cambridge.org/dictionary/english/suspension
- Cambridge Dictionary. (n.d.). *Endemic*. https://dictionary.cambridge.org/dictionary/english/endemic
- Castillo Martínez, I. M., & Ramírez Montoya, M. S. (2020). Experts' validation of an instrument for self-perception of research skills to develop academic literacy. *Eighth International Conference on Technological Ecosystems for Enhancing Multiculturality*. https://doi.org/10.1145/3434780.3436636
- Creswell, J., & Poth, C. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Los Angeles: SAGE Publications.

- Cheng, T. Y. W., Wong, E., & Soo, G. (2004). Construction law and practice in Hong Kong. Sweet & Maxwell Asia.
- Cheung, S. O., Yiu, K. T., & Chim, P. S. (2006). How Relational are Construction Contracts? *Journal of Professional Issues in Engineering Education and Practice*, 132(1), 48–56.
- Chong, H.-Y., & Zin, R. M. (2010). A case study into the language structure of construction standard form in Malaysia. *International Journal of Project Management*, 28(6), 601–608.
- Columbia University Mailman School of Public Health. (2021). *Epidemic, endemic, pandemic: What are the differences?*. https://www.publichealth.columbia.edu/public-health-now/news/epidemic-endemic-pandemic-what-are-differences
- Côté-Arsenault, D. & Morrison-Beedy, D. (1999). Practical advice for planning and conducting focus groups. *Nursing Research*, 48(5), 280-283.
- Creswell, J. W. (1994). Research design: Qualitative and quantitative approaches. Thousand Oaks, CA: SAGE Publications.
- Dimitrov, D. M. (2012). Statistical Methods for Validation of Assessment Scale Data in Counselling and Related Fields. American Counseling Association.
- Duhaime, L. (2007, May 7). Part 7: Interpretation of Contracts 20. Duhaime.org.
- El-Adaway, I. H., & Ezeldin, A. S. (2007). Dispute Review Boards: Expected Application on Egyptian Large-Scale Construction Projects. *Journal of Professional Issues in Engineering Education and Practice*, 133(4), 365–372.
- Elangovan, N., & Sundaravel, E. (2021). Method of preparing a document for survey instrument validation by experts. *MethodsX*, 8, 1-9. https://doi.org/10.1016/j.mex.2021.101326

- Esa, M. B., Ibrahim, F. S., & Kamal, E. B. (2020). Covid-19 Pandemic Lockdown: The Consequences Towards Project Success in Malaysian Construction Industry. *Advances in Science, Technology and Engineering Systems Journal*, 5(5), 973–983.
- Escobar-Pérez, J., & Cuervo-Martínez, Á. (2008). Content validity and expert judgment: an approach to its use. *Avances en medición*, 6(1), 27-36.
- Ezeldin, A. S., & Abu Helw, A. (2018). Proposed force majeure clause for construction contracts under civil and common laws. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 10(3), 04518005. https://doi.org/10.1061/(asce)la.1943-4170.0000255
- Fernández-Gómez, E., Martín-Salvador, A., Luque-Vara, T., Sánchez-Ojeda, M. A., Navarro-Prado, S., & Enrique-Mirón, C. (2020). Content Validation through Expert Judgement of an Instrument on the Nutritional Knowledge, Beliefs, and Habits of Pregnant Women. *Nutrients*, *12*(4), 1136. https://doi.org/10.3390/nu12041136
- Feinman, J.M. (2003). 1001 Legal Words You Need to Know. Oxford University Press. Francisco, M. C. (2016). Temporary Suspension of Construction Projects. Proceedings of the Construction Research Congress 2016, 2149-2159. https://doi.org/10.1061/9780784479827.214
- Gamil, Y., & Alhagar, A. (2020). The impact of pandemic crisis on the survival of construction industry: A case of covid-19. *Mediterranean Journal of Social Sciences*, 11(4), 122. https://doi.org/10.36941/mjss-2020-0047
- Godwin, P., Roughton, D., Gilmore, D., & Kratochvilova, E. (2009, August 21). The prevention principle, time at large and extension of time clauses. Lexology. Retrieved June 2, 2022, from https://www.lexology.com/library/detail.aspx?g=09e90e60-fa47-411b-813d-0e3c6427f836
- Hamid, Z. A., & Kamar, K. A. M. (2010). Modernising the Malaysian construction industry. *Proceedings of the 18th CIB World Building Congress*, 267-280.

- Hansen, S. (2020). Does the COVID-19 outbreak constitute a force majeure event? A pandemic impact on construction contracts. *Journal of the Civil Engineering Forum*, 6(1), 201. https://doi.org/10.22146/jcef.54997
- Ireste, S., & Katane, I. (2018). Expertise as a research method in education. *Proceedings* of the Rural Environment Education Personality, 11, 74-80. Doi: 10.22616/REEP.2018.008
- Kamar, A.M., Hamid, Z.A., Ghani, M.K., Egbu, C., & Arif, M. (2010). Collaboration initiative on green construction and sustainability through Industrialized Buildings Systems (IBS) in the Malaysian construction industry. *International Journal of Sustainable Construction Engineering Technology*, 1(1), 119–127.
- Kamaruzaman, S. H. (2011). Risk In Construction Contractual Term And Condition [Academic exercise, University Technology Malaysia].
- Kasapoğlu, E. (2018). Risk Management in Construction. *Proceedings of the Sustainable Buildings Interaction Between a Holistic Conceptual Act and Materials Properties* (pp. 49-71). IntechOpen. http://dx.doi.org/10.5772/intechopen.76341
- Kaos, J. (2022, March 25). PM: M'sia will transition into endemic phase from April 1. *The Star*. https://www.thestar.com.my/news/nation/2022/03/08/pm-msia-will-enter-endemic-phase-from-april-1
- Khan, R. A., Liew, M. S., & Samp; Ghazali, Z. (2014). Malaysian Construction Sector and Malaysia Vision 2020: Developed Nation Status. *Procedia Social and Behavioral Sciences*, 109, 507-513.
- King, C. (2021, December 16). Contractor claims for prolongation costs: A comprehensive guide. Lexology. Retrieved May 24, 2022, from https://www.lexology.com/library/detail.aspx?g=d7387b12-5408-49ed-8c9c-9036814634c4#:~:text=Prolongation%20costs%20are%20those%20time,the%2 0Contractor%20is%20not%20responsible.

- Kitzinger, J. (1995). Qualitative Research: Introducing focus groups. *BMJ (Clinical research ed.)*, 311(7000), 299–302. https://doi.org/10.1136/bmj.311.7000.299
- KPK Research. (2009). Postponement or Suspension of Works Think Before You Leap!.
- Knight, A., & Ruddock, L. (2008). *Advanced research methods in the built environment*. Wiley-Blackwell.
- Krueger, R. A., & Casey, M. A. (2001). Designing and conducting focus group interviews. *Social Development Department The World Bank*, 4-23. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.607.4701&rep=rep1 https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.607.4701&rep=rep1
- Krueger, R. A., & Casey, M. A. (2000). Focus groups: A practical guide for applied research (3rd ed.). Thousand Oaks, CA: Sage.
- Lawrence, Y. K. (2009). *Breaches of Contract in Construction Industry* [Unpublished doctoral dissertation]. Universiti of Teknology Malaysia.
- Lee, A. (2020, April 27). Time and Costs Issues in The Construction Industry Arising from The Movement Control Order. Concentus Law.
- Leedy, P. & Ormrod, J. (2001). Practical research: Planning and design. (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. Thousand Oaks: SAGE Publications.
- Luque-Vara, T., Linares-Manrique, M., Fernández-Gómez, E., Martín-Salvador, A., Sánchez-Ojeda, M. A., & Enrique-Mirón, C. (2020). Content validation of an instrument for the assessment of school teachers' levels of knowledge of diabetes through expert judgment. *International Journal of Environmental Research and Public Health*, 17(22), 8605. https://doi.org/10.3390/ijerph17228605
- Macdonald, S., & Headlam, N. (2008). Research Methods Handbook: Introductory Guide to Research Methods for Social Research. Manchester, London: CLES.

- Major, W.T. (1983). *The Law of Contract(Handbook Series)*. (6th ed.). Macdonald and Evans.
- Maxwell, J. A. (1996). Qualitative Research Design: An Interactive Approach London, Applied Social Research Methods Series.
- Mohamad, M.I. & Zulkifli, M.(2006). Understanding contract documentation. Proceedings of Asia-Pacific Structural Engineering and Construction Conference, 12-18.
- Mohamad, M. I., Nekooie, M. A., & Kamaruddin, N. C. (2012). The Adequacy of Contractual Provisions in Managing Construction Failure in Malaysia. *European Journal of Business Management*. 4(1). 22–38.
- Moreira, R. P., Guedes, N. G., Lopes, M. V. O., Cavalcante, T. F., & Araujo, T. L. (2014). Nursing diagnosis of sedentary lifestyle: Expert validation. *Texto Contexto Enferm*, 23(3), 547-554. http://dx.doi.org/10.1590/0104-07072014000590013
- Medley, G. F., & Vassall, A. (2017). When an emerging disease becomes endemic. *Science*, 357(6347), 156–158. https://doi.org/10.1126/science.aam8333
- Mills, J., & Birks, M. (2014). Qualitative Methodology: A Practical Guide. Thousand Oaks, CA: Sage. ResearchOnline.
- Miller, J. (2020). *Coronavirus and Construction Contracts*. Fenwick Elliott. Retrieved from https://www.fenwickelliott.com/research-insight/articles-papers/covid-19/coronavirus-covid-19-construction-contracts
- Ministry of Finance Malaysia (MOF). (2007, February 27). Surat Pekeliling Perbendaharaan Bil. 5 Tahun 2007: Tatacara Pengurusan Perolehan Kerajaan Secara Tender.

- Mohd Zin, S., Rahmat, N. E., Abdul Razak, A. M., Fathi, N. H., & Putu Budiartha, I. N. (2021). A proposed pandemic clause for force majeure events under construction contracts in Malaysia. *Environment-Behaviour Proceedings Journal*, *6*(16), 33–37. https://doi.org/10.21834/ebpj.v6i16.2733
- Molwus, J. J. (2014). Stakeholder management in construction projects: A life cycle-based framework. [Doctoral dissertation, Heriot Watt University, Edinburgh].
- Moore, F. (2020, March 26). Will Covid-19 trigger a force majeure clause?. Pinsent Masons.
- Morgan, D. L. (1996). Focus Groups. *Annual Review of Sociology*, 22, 129-152. http://dx.doi.org/10.1146/annurev.soc.22.1.129
- Morgan, D. L. (1997). Focus groups as qualitative research (2nd ed.). Thousand Oaks, CA: Sage.
- Morgan, D. L. (1998). The focus group guidebook. Thousand Oaks, CA: Sage.
- Nayagam, K. & Pathmavathy, N. (2005, May). Drafting Construction Contracts. *Legal Insight*, 2, 5-7.
- Naveen S.K (2020, April 15). Is Covid-19 Or The Movement Control Order ("MCO") A Force Majeure Event In Construction Contract?. Thomas Philip.
- Ofori, G. (1988). Construction industry and economic growth in Singapore. *Construction Management and Economics*, 6(1), 57–70.
- O.Nyumba, T., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018, January 11). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*.
- Paciaroni, R. (2013). Attributes of a Good Construction Contract. *The Voice The Official Magazine of the Construction Users Roundtable*.

- Porta, M. S. (2014). A Dictionary of epidemiology. Oxford University Press.
- Prime Minister's Office of Malaysia (PMO). (2020, March 18). Perutusan Khas COVID-19 (18 Mac 2020) Stay at home.
- Prime Minister's Office of Malaysia (PMO). (2020, March 16). *The Prime Minister's Special Message on COVID-19 16 March 2020*.
- Public Works Department (PWD). (2017). Project Risk Management Guidelines for Government Projects. Ministry of Works Malaysia.
- Robinson, J. (2020, April 2). *Pandemics: Definition, Prevention, and Preparation*. WebMD. https://www.webmd.com/cold-and-flu/what-are-epidemics-pandemics-outbreaks.
- Robinson, N. M., Lavers, A. P., Tan, G. K. H., & Chan, R. (1996). *Construction law in Singapore and Malaysia* (2nd ed.). Butterworths Asia.
- Saiful Sham, N. (2020, March 26). COVID-19: PKPD dikuat kuasa di dua kawasan di Simpang Renggam. Astro Awani..
- Schiff, D. N. (1976). Socio-Legal Theory: Social Structure and Law. *The Modern Law Review*, 39(3), 287–310. http://www.jstor.org/stable/1095549
- Semple, C., Hartman, F.T., & Jergeas, G., 1994. Construction claims and disputes: causes and cost/time overruns. Construction Engineering and Management, 120 (4), 785–795.
- Sim, J. (1998). Collecting and analysing qualitative data: Issues raised by the Focus Group. *Journal of Advanced Nursing*, 28(2), 345–352. https://doi.org/10.1046/j.1365-2648.1998.00692.x
- Summers, R. S. (1963). 'Is' and 'Ought' in Legal Philosophy. *The Philosophical Quarterly*, 13(51), 157. https://doi.org/10.2307/2217191

- Surahyo, A. (2018). Suspension and Termination of Construction, Understanding Construction Contract (pp. 205-214). Springer International Publishing.
- Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa, A., & Varpio, L. (2015). Choosing a Qualitative Research Approach. Journal of Graduate Medical Education, 7(4), 669–670.
- The Entrusty Group. (2008). Is Late Payment A Ground For Determination Or Termination?. Master Builders.
- The Star/Asia News Network. (2020). Malaysia's construction industry records \$6b losses in first three lockdown phases. *The Straits Times*.
- The Sun Daily. (2018, July 6). MoF: ECRL, pipeline projects suspended. *The Sun Daily*. https://www.thesundaily.my/archive/mof-ecrl-pipeline-projects-suspended-CUARCH561939.
- Thomas, H.R., Smith, G.R., & Mellott, R.E. (1994). Interpretation of construction contracts. *Journal of Construction Engineering and Management*, 120 (2), 321–336.
- University of Newcastle Library. (2020, December 15). Research Methods: What are research methods?.
- Vohrah, B., & Wu, M. A. (2000). The commercial law of Malaysia. Longman Malaysia.
- Williams, C. (2007). Research Methods. Journal of Business & Economics Research (JBER), 5(3), 65–72.
- Wilkinson, S., & Scofield, R. (2010). *Management for the New Zealand Construction Industry* (2nd ed.). New Zealand: Pearson Education New Zealand Ltd.
- Wittbrodt, B. R. J., & Eaton, L. M. (2009). Project Suspension: What Owners And Contractors Need To Know Now!. Gibbs Gidden.

- World Health Organization. (2010, February 24). What is a pandemic?.
- Yang, J. (2014). China's diplomacy: Theory and practice. World Century.
- Yadeta, A. E. (2020). Analysis of the global impact of the pandemic (COVID-19) on construction industry: Possible scenarios. *Current Trends in Civil Structural Engineering*, 6(4). https://doi.org/10.33552/ctcse.2020.06.000641
- Yunus, A. I., Muhammad, W. M., & Saaid, M. N. (2018). Comparative analysis of JKR Sarawak form of contract and Malaysia standard form of building contract (PWD203A). *IOP Conference Series: Earth and Environmental Science*, 140, 012110. https://doi.org/10.1088/1755-1315/140/1/012110
- Zamroni, M. (2019). Accountability in government contracts: A measure of performance from the commitment-making officials? *Hasanuddin Law Review*, *5*(2), 199. https://doi.org/10.20956/halrev.v5i2.1074
- Zakaria, Z. B., Ismail, S. B., & Yusof, A. B. (2022). An overview of comparison between construction contracts in Malaysia: The roles and responsibilities of contract administrator in Achieving Final Account Closing Success. *International Journal of Applied Mathematics and Informatics*, 16, 1–8. https://doi.org/10.46300/91014.2022.16.1
- Zhe Huei, L., & Sim Nee, T. (2010). Time provisions in standard forms of local and international construction contract. *Journal of Civil Engineering, Science and Technology*, *I*(2), 1–7. https://doi.org/10.33736/jcest.78.2010
- Zolkafli @ Zulkifli, U. K., Zakaria, N., Salleh, H., Ali, A. S., & Yeah, C. L. (2011). International Engineering Education Conference 2011. In The Comparative Study Of International Standard Form Of Building Contract (Fidic Conditions Of Contracts For Construction The New Red Book 1999) And Malaysian's Standard Form Of Building Contract (PWD 203A). International Engineering Education Conference 2011.