

ISSUES AND CHALLENGES OF MAINTENANCES WORKS FOR  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA (UTeM) STUDENT  
ACCOMMODATION UNDER PRIVATE FINANCE INITIATIVE

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## DEDICATION

*Especially for*

*My loving mother and wife*

***Latifah binti Abdullah and Raja Puteri Marlina binti Raja Abd Assis,***

*“Thanks for always been there for me”.*

*My beloved sibling*

*“Thank you for everything”.*

*Greatest Supervisor*

***Mr. Abdul Rahim Bin Abdul Hamid***

*“I am nobody without your support and encouragement”.*

*May Allah repay all of your kindness greater than what had you given to me*

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## **ABSTRACT**

The Ministry of Higher Education has decided to use the Private Finance Initiative (PFI) concept for the development of Public University student accommodation as an effort to reduce the financial burden on the Government and to ensure the projects development to be completed on time as stipulated in contract and all developments risk shall be borne solely by the Concession. Upon project handover, the Asset Management Services (AMS) shall start until the end of the concession period. During AMS period, lack of guideline on how to monitor maintenance works has led to some important components or criteria in the maintenance aspect is ignored. The objective of this study are to determine user satisfaction on hostel facilities maintained by concessionaire, to identify critical issues and challenges in AMS period and to develop maintenance checklist for critical services during AMS period. Hundred (100) questionnaires sets using five point Likert scale method were collected while six (6) respondents involved in interview session. Collected data were analyzed using frequency distribution, average index and content analysis method. Based on the findings, occupant agreed and satisfied with the hostel facilities maintained by the concessionaire. Three (3) services has been identified namely landscape, electricity and Wi-Fi services as critical issues in maintenance works during AMS period. The findings also show that procurement management, others item and failure of maintenance strategies become one of the major issues and challenges faced by the Government and the concessionaire. In order to improve the performance of maintenance works, maintenance checklist has been proposed that can be considered in any Government project on student accommodation.

## ABSTRAK

Kementerian Pengajian Tinggi telah memutuskan untuk menggunakan Inisiatif Pembiayaan Swasta (PFI) untuk melaksanakan pembangunan penginapan pelajar Universiti Awam sebagai usaha untuk mengurangkan beban kewangan Kerajaan serta memastikan pembangunan projek siap pada waktu yang telah ditetapkan dalam kontrak dan semua risiko pembangunan ditanggung sepenuhnya oleh syarikat Konsesi. Selepas penyerahan projek, tempoh Perkhidmatan Pengurusan Aset (AMS) akan bermula sehingga tamat tempoh konsesi. Sepanjang tempoh AMS, kekurangan garis panduan mengenai cara pemantauan kerja penyelenggaraan telah menyebabkan beberapa komponen penting atau kriteria dalam aspek penyelenggaraan telah diabaikan. Objektif kajian ini adalah untuk menentukan tahap kepuasan pengguna terhadap kemudahan asrama yang di selenggara oleh syarikat konsesi, untuk mengenal pasti isu dan cabaran kritikal membangunkan senarai semak penyelenggaraan untuk perkhidmatan kritikal semasa tempoh AMS. Sebanyak seratus (100) set borang soal selidik menggunakan lima tahap skala Likert telah dikumpulkan manakala enam (6) responden telah terlibat di dalam sesi temuduga. Data yang dikumpulkan dianalisis menggunakan kaedah analisis taburan kekerapan, indek purata dan isi kandungan. Hasil kajian mendapati bahawa pengguna bersetuju dan berpuas hati dengan kemudahan asrama yang diselenggara oleh pihak konsesi. Tiga (3) perkhidmatan telah dikenalpasti sebagai isu kritikal yang dihadapi dalam pelaksanaan kerja penyelenggaraan iaitu perkhidmatan landskap, elektrik dan Wi-Fi. Hasil kajian turut menunjukkan bahawa pengurusan perolehan, lain-lain perkara dan kegagalan strategi penyelenggaraan menjadi salah satu isu utama dan cabaran yang dihadapi oleh Kerajaan dan syarikat konsesi. Untuk meningkatkan prestasi kerja-kerja penyelenggaraan, senarai semak penyelenggaraan telah dicadangkan untuk pertimbangan dalam mana-mana projek Kerajaan bagi pembinaan kemudahan penginapan pelajar.

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Introduction**

Student accommodation has become one of issue being raised by student of higher education in Public University. This is due to the existing hostel could not accommodate the increasing of number of students. The Government and Minister of Higher Education are aware of this issue and keep on striving to resolve it. One of the initiative used by the Government to solve this issue is by using Private Public Partnership (PPP) Programme via Private Finance Initiative (PFI) concept.

PFI concept has become one of the Government strategies to ensure continuity of development even in a very challenging period. This approach also promotes private sector to contribute and increase private role in economic development. The scope of PFI is inclusive of Build, Least, Maintain and Transfer.

Upon signing of Concession Agreement, construction stage will be started and will be construct according the agreement. During this stage, client responsibility to check on compliance of Need of Statement. Asset Management Services (AMS) take place as soon as Certificate of Acceptance issued by client to the concessionaires. Asset

Management Services (AMS) period usually will take approximately 20 years depends on the project cost and contract.

## **1.2 Problem Statement**

According to Public-Private Partnership Unit, Prime Minister Department (2009), one of the key features of PPP Project is to promote ‘maintenance culture’ where the concessionaires will be responsible for the long-term maintenance of the assets throughout the operational tenure agreed upon. This statement clearly indicates the importance of AMS and it is client responsibility to implement ‘maintenance culture’ during AMS period.

In other words, the existing KPIs and PMSs designed for construction project evaluation are established after project completion, which are therefore not able to provide a dynamic insight into the performance of a process (Haponava and Al-Jibouri, 2012). According to Khairuddin (2014), the lack of standardized forms of contract for PPP projects is one of the issues and problems that need urgent attention and solutions.

During implementation of pre-contract which is preparing Concession Agreement (CA), there are no specific guideline on preparing tender document which delay implementation of project. Hence it will effect tendering processes where bidders tend to price higher than initial estimated project cost. This shall inflict financial loss to the Government.

During handing over process, a specific maintenance checklist need to be built for the purpose of monitoring all works in AMS period. This checklist shall be assessed together with Key Performance Indicator (KPI) to determine concessionaire performance as well as payment purposes. Since there is no guideline, it has become one of the issue that need to be overcome. Failure to produce an acceptable maintenance checklist may delay handing over and will affect maintenance aspect throughout concession period.

If there is an uncomplete content in contract, it can affect overall performance. An incomplete contract is a contract that fails to state all the parties' rights and obligations, has gaps, missing provisions, and ambiguities in its terms and conditions. In theory, a complete contract cannot be achieved, and many contracts inevitably remained incomplete. This phenomenon also applies to Private Finance Initiative (PFI) contracts (Mansor and Rashid, 2016).

To date, there are not many studies that explain maintenance requirement of public university student accommodation under Private Finance Initiative (PFI). Therefore, it is paramount important and timely that this study is undertaken in order to examine and propose maintenance checklist as one of the tools to monitor the performance of maintenances works.

### **1.3 Aim and Objectives of Study**

The aim of this study is to examine the performance standard for maintenances works of public university student accommodation under Private Finance Initiative (PFI). In order to achieve the aim, the following objectives are stated as below:

- i. To determine user satisfaction on hostel facilities, maintain by concessionaire of PFI project
- ii. To identify critical issues and challenges in AMS for PFI project.
- iii. To develop maintenances checklist on three (3) critical issues based on objective (i) finding under AMS period

#### **1.4 Scope of Study**

This study will only focus on ongoing PPP projects which in AMS period under Minister of Higher Education. Universiti Teknikal Malaysia Melaka (UTeM) has been chosen as a case study since it is under AMS period.

#### **1.5 Methodology of the Study**

Literature review, qualitative approaches will be used for the purpose of this study. To present the report, there are four (4) stages involve in this study.

First (1<sup>st</sup>) stage is Preliminary Study which where the researcher need to identify issues and maintenance problem on project development using PFI method. Based on the issues, the objectives and scope of the study can be determine. Literature review will be

used in this stage to study on any journal papers or other resources in order to justify and to support the study.

Second (2<sup>nd</sup>) stage will be Data Gathering. Quantitative approaches are used to obtain result for first (1<sup>st</sup>) objective while qualitative approaches are used to be adapt for the second (2<sup>nd</sup>) objective which to identify critical and challenges during maintenance work in AMS period. Therefore, questionnaire interview will be used to obtain the information related to the second objective. This interview will be focus on maintenance management which consist of staff of UTeM and concessionaires staff.

Data processing shall be the third (3<sup>rd</sup>) stage. The data obtained will be analyzed and discussed further to relate with the aim and objective of this study.

Fourth (4<sup>th</sup>) stage shall be documentation stage where all the result, summary and conclusion stated in this stage. From the result, the researcher will come up with a summary which will meet the aim and objective of this study. In the conclusion, there will be a suggestion for future study in order to improve the maintenance work especially on PFI projects.

## **1.6 Arrangement of the Report**

The report consists of five (5) chapter. Chapter 1 describe generally about background of the study. The aim and objectives of the study will be related to the



problem statement which being raised by the researcher. This chapter also include scope of study and brief research methodology.

Chapter 2 is literature review where the researcher review past researches by others to relate with the study. It is consisting of literature review of development of PFI project, maintenance work of AMS.

Methodology of study will be explained in Chapter 3. Data collection will be carry out through interviews and questionnaire distributed to respondent consist of Public Universities staff and student.

Chapter 4 present on result and discussion based on data analysis from the interviews and questionnaire. The researcher shall relate findings with the objectives of the study which consists of maintenance scope of work and critical issue in maintenance work during AMS performance.

Chapter 5 mark the end of the study. It will conclude all the finding related to the aim and objectives of the study. In this chapter also, the researcher shall recommend suggestion for future study.

## **1.7 Conclusion**

The study conducted mainly to improve Government's procurement process for all PFI project which can expedite in appointment of contractor and handing over processes. It also will help to improve and to ensure performance of PFI project maintained in high standard which will bring benefit to the end user.

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