

## THESIS^ APPROVAL STATUS FORM

JUDUL: LEASED CIRCUIT MAINTENANCE DATA SYSTEM FOR TELEKOM KOTA BHARU

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Leased circuit maintenance data system for Telekom KB /  
Junaidah Muhamad.

## **LEASED CIRCUIT MAINTENANCE DATA SYSTEM FOR TELEKOM KB**

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This report is submitted in partial fulfillment of the requirements for the  
Bachelor of Computer Science (Software Development).

FAKULTI TEKNOLOGI MAKLUMAT DAN KOMUNIKASI  
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2006

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## **DEDICATION**

I wish to dedicate this thesis to my beloved parents. I thank them for performing this difficult task, and the journey does not end here.

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## ABSTRACT

TELEKOM Malaysia is a world class and super telecommunication company, which is originated and based in Malaysia. O&M is a short form of "Operation & Maintenance". *The O&M Data* or Special Service Unit is a division under O&M management. It is a special division, which is conducting all the data service by TELEKOM Malaysia Berhad. The installation, repairing and recording the data entrances into the terminal system are on the responsibility of this division. The Leased Circuit Maintenance Data System For Telekom is developing to help staffs of O&M Data Kelantan to manage their work or task without waste their time. But the systems were being developed and have the problem from existing system. The problems are the system is standalone, application is not user friendly and not have level for authenticate user. In developing the Leased Circuit Maintenance Data System for Telekom can get a lot of achievement. The system has two modules such as Maintenance Leased Circuit Data and Generate Report. For the Maintenance Leased Circuit Data include the Display Record, Update Record, Delete Record, Search Record and Add new record. For the Generate Report Module that includes the Report refer to for all the circuit, statistic, and Vendor, Exchange, PR/Cancel and Installation status. For develop the system use the Macromedia Dreamweaver MX 2004 is a professional HTML, PHP, CSS and Java Script editor for designing, coding, and developing websites, web pages, and web applications and use MySQL for database.



## ABSTRAK

Telekom Malaysia adalah satu Syarikat yang bertaraf antarabangsa dan mempunyai system telekomunikasi yang terbaik yang marta telah diorganisasikan dan menjadi asas komunikasi di Malaysia.O&M adalah singkatan daripada “Operasi dan Penyelenggaraan Data”. O&M Data adalah Unit yang menyediakan perkhidmatan yang Istimewa. O&M Data Kelantan adalah di bawah Pengurusan Bahagian O&M.Bahagian ini adalah salah satu bahagian yang mengawal perkhidmatan data oleh Telekom Malaysia Berhad. Pemasangan, pembaikan dan mrekod data kepada terminal sistem yang bertanggungjawab ke atas bahagian tersebut.Sistem Penyelenggaraan Data Penyewaan Litar kepada Telekom adalah dibangunkan untuk membantu staff di bahagian O&M Data Kelantan bagi menguruskan tugas mereka tanpa membuang masa dan sistematik. Sistem ini dibangunkan kerana sistem semasa mempunyai masalah tertentu. Antara masalah bagi sistem semasa ialah sistem tersebut adalah ‘standalone’, penggunaan sistem yang tidak mesra pengguna dan tidak mempunyai peringkat untuk setiap pengguna sebelum memasuki sistem. Dengan pembangunan Sistem Penyelenggaraan Data Penyewaan Litar akan tercapai kehendak pengguna.Sistem ini mempunyai dua modul iaitu penyelenggaraan rekod untuk penyewaan litar dan penghasilan laporan. Untuk modul penyewaan litar rekod terdapat beberapa fungsi antaranya ialah paparan maklumat litar,kemaskini data, padam data , carian data dan maklumat baru. Untuk modul laporan pula terdapat laporan yang merujuk kepada Semua Litar iaitu DPQ, DPG, PRI dan DPC, Statistik, Vendor, Ibusawat, Pemotongan Litar dan Pemasangan Litar.Bagi membangunkan system ini dengan menggunakan Macromedia Dreamweaver MX 2004 iaitu satu bahasa Komputer seperti HTML, PHP, Java Script dan CSS. Bahasa ini digunakan Untuk merekabentuk,koding dan membangunkan web site , web pages dan penggunaan web yang lain. Menggunakan MySQL sebagai Pangkalan Data.

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## TERMS AND ABBREVIATIONS

<b>O&amp;M</b>	Operations & Maintenance
<b>LCDM</b>	Leased Circuit Database Management
<b>LCMDS</b>	Leased Circuit Maintenance Data System
<b>CMMS</b>	Computerized Maintenance Management System
<b>CNO</b>	Customer Network Operation
<b>POPD</b>	Pusat Operasi Dan Penyelenggaraan Data
<b>MDF</b>	Main Distribution Frames
<b>CIC</b>	Customer Information Card
<b>CSS</b>	Cascading Style Sheets
<b>JSP</b>	Java Server Pages
<b>ASP</b>	Active Server Pages
<b>GITN</b>	Government Integrated Telecommunications Network
<b>PC</b>	Personal Computer

## APPENDICES

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## **CHAPTER 1**

### **INTRODUCTION**

Introduction chapter will describe the whole project briefly. It is very important to understand this project before it will discuss more detail in next chapter. The most important part to be viewed clearly is project background, problems statement that bring out this project, project scope, the objectives to achieve project scope, project significance and conclusions.

TELEKOM Malaysia is a world class and super telecommunication company, which is originated and based in Malaysia. Their services are covering all around the country for over many years. Their core business in telecommunication services provider always returns them a high and stable profit.

Leased Circuit Maintenance Data System is developed for O&M Data Kelantan staffs and replaces the current system. O&M is a short form of "Operation & Maintenance". The O&M Data or Special Service Unit is a division under O&M management. It is a special division, which is conducting all the data service by TELEKOM Malaysia Berhad. The installation, repairing and recording the data entrances into the terminal system are on the responsibility of this division.



## 1.1 Project Background

Leased Circuit Maintenance Data System For Telekom Kota Bharu is to use for staffs at unit O&M Data Kelantan at Telekom Malaysia Kelantan Berhad , Kota Bharu.They can use this system for manage their leased circuit database management. This system is developed to web based system.

Leased circuit service is important for vendor or company to make their management .Leased Circuit Database System have one user that staff at Operation & Maintenance Data Kelantan.

For the time being, there is has the system in O&M Data Kelantan Department. At the department have the existing system and had been computerized the system. The current system using the Sidkick software for design the interface and LC based for database. This system is a stand alone.This system just use the keyboard function to select the menu and enter the data. This system cannot use the mouse application to control the system. In this system that not use the button and not user friendly.

For improving the LCMD system, the system must use the both application like use the keyboard and mouse. This application management becomes easier with the application. For develop the Leased Circuit Maintenance Data System for Telekom, use the PHP for interface designing and MySQL for database creation that current version. Besides this application can be expand the database and information more users friendly.

For current system has a login for staff. But not have function to change the username and password. The LCDM system has the function for change the password. For the standby schedule Data Centre will upload the schedule through LCMD System. Standby Schedule most important for technician.

## **1.2 Problem Statements**

The existing system has constraints that can be improved. After research was made, a lot of problem was discovered. These problems were listed below:

### **1.2.1 The system application is not user friendly**

For the existing system, user must insert all of data into the system. Beside that they just used the keyboard application to access the information. For the data input, system not have the list box such as for Exchange, Vendor, NT-U or modem, Date for Order, Date for installation, District, Status for installation, and Type of data. For the Date of Order and Installation user must choose the selection from list menu such as Day, Month and Year. From that it can be a complete date. System also must have function using the button menu.

### **1.2.2 The existing system is not having level for authenticate user.**

The existing systems use the password and not have function to change the password. User must use a password to access the system and the information. For the new system, have the change password function to reduce unauthorized to access the system.

### **1.2.3 The current system is stand alone system**

The existing system is stand alone and can be used at one computer. The user will share a computer to do their task. For the new system will develop in web based and can access at any where.

### **1.3 Project Objectives**

There are few objectives why the system should be developed:

#### **1.3.1 To change the current system to web based system**

Before develop a web based system , department O&M Data Kelantan use the stand alone system.The current system use the sidkick software to design the interface and LD base 3 to database.

#### **1.3.2 To make the system easy to use**

For the current system , the LCMD system not user friendly properly.This system just use the keyboard application in selecting the function.Now to improve use both application that mouse and keyboard.The interface for the system is attractive and easy to use.

#### **1.3.3 To provide the secure staff management systemby using a security system with different level of authorization.**

For the current system have the static username and password,developing the new system have function for systematic change the username and password..The system have different password and username for data centre and manager .For the unauthetication they cannot to access the system.

### **1.3.4 To assist the staff to arrange the circuit's data properly.**

This project was designed just to help or assist the staff to arrange the circuit's data properly without filing the application in the file. This will help to prevent the losing data if the application form missing.

## **1.4 Scope of Project**

This system designed for staff of O&M Data Kelantan at Telekom Malaysia Berhad, Kota Bharu. Leased Circuit Maintenance Data System have main function and scope. These scopes also needed to ensure the system is built consistent with objective and goals of project and to fulfill user's requirement.

Leased Circuit is the Permanent subscriber lines include all fixed, non-switched subscriber lines. These lines are usually referred to as rented lines or leased circuits. Leased circuits are most frequently used to connect subscriber terminal equipment in the "point-to-point" configuration, or for customer access to some network. Leased circuits are used for data transmission, telephone communications, telegraph messages, telephoto, video signals and similar.

The Leased Circuit Maintenance System is to used by Staffs at O&M Data Kelantan in Telekom Kota Bharu such as Data Centre, Technician and Manager. This system will use when receive call from vendor either call for new order or report for PR/Cancel. Beside that customer or vendor will contact the data centre to report their circuit problem.

This system is to use when the technician have circuit data after they install the circuit at customer server. The data for circuit will be inserted into the database system by Data Centre.