

Universiti Teknologi MARA

**THE STUDY AND IMPLEMENTATION OF
COMMON CUSTOMER'S AND NETWORK
DATABASE - NerVeSys**

Sukor Dewa

**Degree of Bachelor (Hons) Electrical Engineering
Universiti Teknologi Malaysia**

An Independent Study is submitted in partial fulfillment of the
Requirement for the Degree of
Master of Science in Information Technology
Faculty of Information Technology and Quantitative Sciences

September 2004

ACKNOWLEDGEMENT

All praises be to Allah, the Most Compassionate, The Most Merciful. First of all special thanks to the Almighty, for giving me the strength and well being to finish up this written assignment. Many thanks to the program's IS Coordinator, **Pn Rogayah Abd Majid** and Supervisor **En Ali Seman** for the advice and guidance throughout the entire program. Special acknowledgements to my families, who are always, concern about my study. I would like to dedicate this outcome to my wife Noor Ashikin bt Ibrahim, my son Haris Eirfan and my daughter Nur Alia Elida, who had stood by me and giving endless support and encouragement during my studies Last but by no means least, to all colleagues and classmates. Your help, assistance, guide will always be remembered. No amount of money would be able to pay and leave it to Allah to reward all of you Last but not least, to my superiors and colleagues in my office for giving some valuable information in finding material for this study.

Sukor bin Dewa

Oktober 30, 2004

TABLE OF CONTENTS

TITLE PAGE	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENT	iii
LIST OF FIGURES	vi
LIST OF APPENDIX	vii
ABBREVIATIONS	viii
ABSTRACT	ix

	PAGE
CHAPTER 1 INTRODUCTION	
1.0 Introduction	1
1.1 Definition	2
1.2 Objective	2
1.3 Problem Statement	3
1.4 Proposed of Study	4
1.4.1 Inactive	4
1.4.2 Reactive	4
1.4.3 Interactive	4
1.4.4 Proactive	4
1.5 Scope of Study	5
1.5.1 Switching Management & Operations (SMO)	6
1.5.2 Operations & Maintenance Team (OMT)	6
1.5.3 Transmission Management & Operation (TMO)	6

ABSTRACT

Telekom Malaysia has many applications and system to help Technician, Executive and Managers in their Telecommunication fieldwork. The NerVeSys is a comprehensive network database system to assist in troubleshooting and reference of the TM network. It is use for all units under Network Operation center (NOC) e.g. : Fault Management (FM), Configuration Management (CM), Performance Management (PM) and technology Management. Up to now, Telekom Malaysia has many computer system applications to help managers, planners, and executives in their work such as PROMPT, CASS, LNMS, FORTEL, NKIS, NIPS, CFMS and etc. Most of these systems hold the information that is needed for almost all sections in Telekom Malaysia. NerVeSys take the concept of interfacing all existing systems into one convenience, fast retrieve, and user friendly online system. It will be implemented on web-based application.

CHAPTER 1

INTRODUCTION

1.0 Introduction

NerVeSys means “Network Inventory System”. Enhancement of existing CaSys (Circuit Advise) database, GlobalSev, NDI, ICIN system which to meet demand for leased circuit services and provide access circuit for domestic network. In a dynamic, high-growth, highly competitive service environment, the ability to grow the network and support increasing customer demands depends on having up-to-date network inventory information available anytime, anywhere.

By maintaining an accurate network inventory system at the core of Operation Support System (OSS), the system can control and track the network diagram. This chapter is review to implement of common customer’s network – NerVeSys in Telekom Malaysia network. This database will be used by TM operations and maintenance (O&M) staff for fault-localizations and fault –restoration purpose of SDH links throughout the country. The objective are base on the company’s 3P (Practice, Performance, Potential) programmed. The details of the objectives are:

- a. Enhance efficiency and operational productivity so as to improve overall quality performance
- b. Emphasize customer needs and customer satisfaction through providing high quality and reliable services to customers in a competitive environment.
- c. Enhance network management, performance and potential.
- d. Provide Network Technology and Network Development with operational expertise and needs to improve planning and implementation process.
- e. Develop operational plans to guide strategy implementation Develop highly motivated and competent personnel with relevant skills and competencies.