

Title:  
**THE PERFORMANCE OF ASYNCHRONOUS TRANSFER  
MODE (ATM) IN TELECOMMUNICATION SYSTEM**

By

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## **ABSTRACT**

The performance of ATM in telecommunication system is the project to identify the ATM model network layer and ATM cell structure in telecommunication system network such as Telekom Malaysia Berhad <sup>TM</sup>. Also involved to know the ATM connection types until customer end. Thus, this project also evaluated so that we can discovered how better the performance ATM in actual live. The Network backbone coverage are peninsular Malaysia and East Malaysia ( Sabah & Sarawak) which is involved in various city such as Kuala Lumpur, Ipoh, Johore Baharu, Komtar, TTDI, Shah Alam ,Klang and others.

Since communication such as Asynchronous Transfer Mode (ATM) networks play a vital role, an application's performance depends heavily on the quality of service provider like TM Berhad. In ATM network operation center, we heard complaints about network down due to trunk network connected to ATM equipment node .The Node located are at selected TM Exchange in Malaysia. To assure high performance on the ATM network, on analysis on overall performance should be done. It is important for ATM operation unit/group work together to achieve Total Customer Satisfaction.

This research provides real measurement from ATM TM Berhad network operation center. The analysis clearly shows that the performance of ATM and the analysis of the ATM problems. This paper also proposes some suggestion and recommendation in order to have better performance in the future.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Preface

The goal of network administrators for Asynchronous Transfer Mode (ATM) is to get their network to run efficiently. Efficient network will provide the services that customers or users need, and leave the administrators to do planning and implementing new services as the need arise. Instead one of the hardest jobs for network administrator is to identify the real cause of the network problem that arrives daily on their operation center for ATM. Network traffics or alarms are the part network administrator should take it more seriously. The network operation in TM Berhad is the teams responsible as front liner to capture any problem arise towards customer area.

### 1.2 Objective of Study

The objective of study are:

- (i). To analyze the performance and ability of Asynchronous Transfer Mode (ATM) network system towards customer satisfaction.
- (ii) To get full description on measurement for quality of service, the infrastructure Network ATM at TM Berhad.
- (iii) To analyze the fault in ATM Network.

### 1.3 Scope of study

The study will focus on ATM Network link through TM backbone connection in Malaysia. There are three main factor such as :

- (i) Service availability
- (ii) Data Collection due from trouble ticket
- (iii) Analysis problem category.