# THE FINAL YEAR PROJECT REPORT ADV. DIPLOMA IN ELECTRICAL ENGINEERING (COMMUNICATIONS) SCHOOL OF ENGINEERING MARA INSTITUTE OF TECHNOLOGY

INTEGRATED SERVICES DIGITAL NETWORK DIGITAL SIGNALLING SYSTEM NO. 1 (DSS1), NETWORK LAYER, USER-NETWORK MANAGEMENT

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NOVEMBER 1992

#### PREFACE

This Industrial project was done during the four months at Syarikat Telekom Malaysia. Berhad.

The purpose of this project is to study layer 3 protocol which is called Digital Subscriber Signalling System No.1 (DSS1) which will enable Telekom Malaysia to standardize the options offered by the different vendors.

### Acknowledgement

In the name of ALLAH the Most Benificient and the Most Merciful.

It is with the deepest sense of gratitude to the Almighty ALLAH for giving us the opportunity, ability and stamina to complete this report.

In the preparation of this report, we have had to draw upon the active help of a large number of persons.

We express our appreciation to our supervisor, Mr Alameddin Sari Kaddoura for his friendly guidance.

We also wish to thank our advisor, Mr Mohammad Roslan bin Mohammad Rashidi for his excellent help through the phases of production of this report.

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## 1.0 WHAT IS ISDN? [Objectives]

The Integrated Services Digital Network (ISDN) is a new-generation telecommunication network based on digitalization of worldwide telephone networks to replace current telephone networks. ISDN transfers digital transparently, between communication users. Also, ISDN unifies user-network interfaces.

These characteristics of ISDN are explained here to provide preliminary knowledge for understanding this project. The history of ISDN standardization is also explained in this chapter.

#### 1.1 INTRODUCTION

The basic idea of ISDN is to provide users with a universal access to various kinds telecommunication services via single network. telecommunications administrations/carriers, the to construct a standardized digital this means network for total telecommunications services; while to the user this implies he will be able to enjoy convenient and economical services through simple facilities according to his needs.

ISDN integrates the various dedicated networks of today, i.e: data, telex, fax and telephony as