HIGHER TECHNICAL INSTITUTE
ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DEVELOPMENT OF A TELEPHONE TRAINING SYSTEM

by

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E/1073

JUNE 1997

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Project report
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CONTENTS

CHAPTER - 4 - INTERNAL DISTRIBUTION NETWORK

CHAPTER - 5 - EARTHING

CHAPTER - 6 - WORK ON SITE

CHAPTER - 7 - INSTALLATION OF A PRIVATE AUTOMATIC EXCANGE, ART 624

ABSTRACT

CHAPTER 1: Describes the transmission principles for understanding how the telephone network works.

CHAPTER 2: Describes the analoque and digital telephone systems.

CHAPTER 3: Gives information for the external distribution network of CYTA.

CHAPTER 4: Gives information for the internal distribution network.

CHAPTER 5: Describes the various types of earthing.

CHAPTER 6: Gives general information how the work on site should carried out.

CHAPTER 7: Describes the operation of the Private Automatic Exchange, ARD 624 and the installation of it. And the connection of the ARD624 with an existing modified experiment.

CHAPTER 8: It deals with the installation and operation of the AV - 16/16H KEY Telephone system.

CHAPTER 9: Conclusions drawn from the theoretical and practical part of the project.

CHAPTER 10: Appendices, Tables, References.

INTRODUCTION

Telephone switching systems have been developing from step - by - step systems to common controlled crossbar switching systems, and further to stored program controlled electronic switching systems. The development owes much to progress of component techniques and computer - controlled techniques.

This book introduces basic knowledge of the transmission principles and various systems for understanding how the telephone networks work.

It examines the Analog and digital transmission principles, the switching principles, the analog and digital exchanges and also it makes a comparison of the two types of telephone systems.

When you design and construct a telephone installation, the design and the construction must fulfil CYTA regulations. CYTA regulations are studied in this book.

The most important regulations are: safety, secrecy and forecasting.

a) Safety: the network must be installed in such a way in order to provide safety to every person who come in contact with.

b) Secrecy: The network must be installed in such a way so that there is no possibility of telephone calls being overheard by third persons.

c) Forecasting: When planning the network any future requirements and possible rearrangements in the telephone installation should taken into consideration.