HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DEVELOPMENT OF A STRUCTURE CABLING DEMONSTRATION UNIT

EL/ 1062

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This project is submitted in partial fulfillment of the requirements for award of the

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Table of Contents

APPENDIX

1. Cables
2. Cords
3. Panels
4. Outlets
5. Connectors
6. Spicing
7. Adapters
8. Protectors
9. Testing
10. Tools
11. Miscellaneous
12. Wavelan
13. Systilan

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INTRODUCTION

As today's communication networks become more complex, as more users share peripheral and as the need for faster access to information increases- a good foundation for these becomes increasingly important. The first step toward the adaptability, flexibility and longevity required of today's networks begins with structure cabling – the foundation of any information system.

It is vital that communication cabling be able to support a variety of applications and last for the life of a network. If that cabling is part of a well-designed structured cabling system, it can allow for easy administration of moves, adds and changes and smooth migration to a new network topologies. On the other hand , "worry-about-when-you-need-to" systems will make moves, adds and changes a hassle and make new network topologies too difficult to implement. Networks problems occur more often, and are more difficult and time-consuming to troubleshoot. When communication systems fail, employees and assets sit idle causing a loss of revenues and profits.

The purpose of this project is to present the advantages of using a standard-based structured cabling system for a business enterprise. The project will cover a brief historical perspective of structured cabling, a review of the standards, transmission media, cabling options and also a construction of such a system.(see chapter 6)