

DAFTAR ISI

| | |
|---|------|
| HALAMAN JUDUL | i |
| LEMBAR PENGESAHAN | iii |
| LEMBAR PERSEMBAHAN | iv |
| ABSTRAKSI | vi |
| ABSTRACT | vii |
| KATA PENGANTAR | viii |
| UCAPAN TERIMA KASIH | ix |
| DAFTAR ISI | x |
| DAFTAR GAMBAR | xi |
| BAB I PENDAHULUAN | |
| 1.1 Latar Belakang | 1 |
| 1.2 Tujuan | 1 |
| 1.3 Perumusan Masalah dan Batasan Masalah | |
| 1.3.1 Perumusan Masalah | 2 |
| 1.3.2 Batasan Masalah | 2 |
| 1.4 Metodologi Penelitian | 2 |
| 1.5 Sistematika Penulisan | 3 |
| BAB II JARINGAN GSM | |
| 2.1 Global System for Mobile (GSM) | 4 |
| 2.2 Arsitektur Sistem GSM | 4 |
| 2.2.1 Base Station Subsystem | 5 |
| 2.2.2 Network Switching Subsystem | 6 |
| 2.2.3 Operation Support Subsystem | 7 |
| 2.3 Interface dan Protokol GSM | 7 |
| 2.4 Protokol Pensinyalan GSM | 8 |
| 2.4.1 Radio Resource Management (RR) | 9 |
| 2.4.2 Mobility Management (MM) | 9 |
| 2.4.3 Call Management (CM) | 9 |
| 2.5 Mobility Management | 9 |
| 2.5.1 Location Update | 9 |
| 2.5.2 Authentikasi | 10 |

| | | |
|---|-----------------------------|-----|
| 2.5.3 | Paging | 10 |
| 2.5.4 | Signalling setup | 10 |
| 2.6 | Jenis Kanal pada GSM | 10 |
| 2.6.1 | Traffic Channel | 10 |
| 2.6.2 | Control Channel | 10 |
| BAB III PROSEDUR SIMULASI | | |
| 3.1 | Perancangan | 13 |
| 3.2 | Diagram Alir Program | 14 |
| 3.3 | Rangkaian Program | 15 |
| 3.3.1 | Tampilan Form Awal | 15 |
| 3.3.2 | Tampilan Form Menu Simulasi | 16 |
| 3.3.3 | Tampilan Form Teori Dasar | 17 |
| 3.3.4 | Tampilan Form Simulasi | 18 |
| 3.3.5 | Tampilan Form Bantuan | 19 |
| BAB IV PENGUJIAN DAN ANALISA PROGRAM | | |
| 4.1 | Deskripsi Pengujian | 21 |
| 4.2 | Pengujian Program | 21 |
| 4.3 | Prosedur Pengujian Simulasi | 21 |
| 4.4 | Analisa Simulasi | 39 |
| BAB V PENUTUP | | |
| 5.1 | Kesimpulan | 42 |
| 5.2 | Saran | 42 |
| DAFTAR PUSTAKA | | xii |