

DAFTAR ISI

ABSTRAK	i
ABSTRACT	ii
KATA PENGANTAR	iii
UCAPAN TERIMA KASIH.....	iv
DAFTAR ISI.....	v
DAFTAR GAMBAR	vii
DAFTAR TABEL.....	viii
DAFTAR SINGKATAN	ix
DAFTAR NOTASI.....	x
BAB I	1
1.1. Latar Belakang	1
1.2. Tujuan Penelitian.....	2
1.3. Rumusan Masalah	2
1.4. Batasan Masalah.....	3
1.5. Metodologi Penelitian	3
1.6. Sistematika Penelitian	4
BAB II.....	6
2.1. 3GPP <i>Release 8</i> [7] [8] [9]	6
2.2. 3GPP <i>Release 10</i> [1] [10].....	7
2.3. <i>Carrier Aggregation</i> [7]	8
2.4. <i>Downlink Physical Resource</i> [7]	8
2.5. Algoritma <i>Proportional Fair</i> [11] [4] [6]	9
2.5.1. <i>Independent Scheduling</i>	10
2.5.2. <i>Joint Scheduling</i>	10
2.6. <i>Asymptotic Time Complexity</i> [12]	10
BAB III	13
3.1 Model Sistem.....	13
3.2 Diagram Alir Penelitian dan Diagram Alir Simulasi	14
3.2.1. Penebaran <i>User</i>	16
3.2.2. Pembangkitan <i>Channel Quality Indicator</i> (CQI) [15] [16]	17
3.2.3. Proses Penjadwalan <i>User</i> (<i>Resource scheduling</i>) [17] [13]	18
3.3 Algoritma <i>Proportional Fair</i> [4] [6]	19
3.3.1. <i>Independent Scheduling</i>	20
3.3.2. <i>Independent Scheduling</i> dengan <i>Weight Factor</i>	23

3.3.3. <i>Independent Scheduling</i> Termodifikasi	25
3.4 Parameter Yang Diamati	31
3.4.1. <i>Average User Throughput</i> [16].....	31
3.4.2. <i>Fairness</i> [12] [18]	32
3.4.3. <i>Time Complexity</i>	32
BAB IV	33
4.1. Proses Simulasi dan Parameter Simulasi	33
4.2. Penentuan Tipe <i>User</i>	35
4.3. Proses Kuantifikasi Data	36
4.4. Analisis <i>User Throughput</i>	38
4.4.1. <i>Throughput</i> saat $\alpha = 0,25$	38
4.4.2. <i>Throughput</i> saat $\alpha = 0,5$	42
4.4.3. <i>Throughput</i> saat $\alpha = 0,75$	46
4.4.4. Kesimpulan Analisis <i>Throughput</i>	50
4.5. Analisis <i>Fairness</i>	51
4.5.1. <i>Fairness</i> saat $\alpha = 0,25$	51
4.5.2. <i>Fairness</i> saat $\alpha = 0,5$	53
4.5.3. <i>Fairness</i> saat $\alpha = 0,75$	54
4.5.4. Kesimpulan <i>Fairness</i>	55
4.6. Analisis <i>Time Complexity</i>	56
4.6.1. <i>Independent Scheduling</i>	56
4.6.2. <i>Independent Scheduling</i> dengan <i>Weight Factor</i>	57
4.6.3. <i>Independent Scheduling</i> Termodifikasi	58
4.7. Validasi Model	60
BAB V.....	61
5.1. Kesimpulan.....	61
5.2. Saran.....	61
DAFTAR PUSTAKA	62
LAMPIRAN	65