

## DAFTAR ISI

<b>PENGANTAR.....</b>	<b>i</b>
<b>DAFTAR ISI.....</b>	<b>ii</b>
<b>DAFTAR GAMBAR.....</b>	<b>v</b>
<b>DAFTAR TABEL.....</b>	<b>vii</b>
<b>DAFTAR LAMPIRAN.....</b>	<b>viii</b>
<b>ABSTRAK.....</b>	<b>ix</b>
<b>BAB I PENDAHULUAN.....</b>	<b>1</b>
1.1 Latar Belakang.....	1
1.2 Rumusan Masalah.....	2
1.3 Ruang Lingkup.....	2
1.4 Tujuan Penulisan.....	3
1.5 Kontribusi.....	3
1.6 Sistematika Penulisan.....	3
<b>BAB II TINJAUAN PUSTAKA.....</b>	<b>5</b>
2.1 Umum.....	5
2.2 LTE ( <i>Long Term Evolution</i> ).....	5
2.2.1 Spesifikasi Teknis LTE.....	6
2.2.2 Arsitektur Jaringan LTE.....	6
2.2.3 Arsitektur RAN ( <i>Radio Access Network</i> ).....	9
2.2.4 Arsitektur Radio Protokol.....	10
2.2.5 Alokasi Spektrum LTE.....	11
2.2.6 Modulasi dan Teknik Modulasi Adaptif.....	12
2.2.6.1 Modulasi.....	12
2.2.6.2 Teknik Modulasi Adaptif.....	15
2.3 <i>Video Conference</i> .....	17
2.3.1 Kompresi <i>Audio</i> .....	17
2.3.2 Kompresi <i>Video</i> .....	18
2.3.3 <i>Coder Decoder</i> (CODEC).....	18
2.3.4 Protokol <i>Video Conference</i> .....	20
2.3.5 Perhitungan <i>Payload Video Conference</i> .....	24



2.4	Perhitungan <i>Link Budget</i> Teknik Modulasi Adaptif .....	25
2.4.1	Perhitungan Rugi-Rugi Propagasi.....	25
2.4.4.1	ECC-33 <i>Path Loss Model</i> .....	26
2.4.2	Perhitungan EIRP.....	26
2.4.3	Perhitungan RSL .....	27
2.4.4	Perhitungan Rss.....	27
2.5	Parameter Performansi <i>Video Conference</i> .....	27
2.5.1	<i>Delay End to End</i> .....	27
2.5.2	Probabilitas <i>Packet Loss</i> .....	39
2.5.3	<i>Throughput</i> .....	42
<b>BAB III METODOLOGI</b> .....		43
3.1	Pengambilan Data .....	43
3.2	Pengolahan Data.....	44
3.3	Pembahasan dan Hasil.....	48
3.4	Pengambilan Kesimpulan dan Saran.....	51
<b>BAB IV HASIL DAN PEMBAHASAN</b> .....		52
4.1	Umum .....	52
4.2	Analisis <i>Link Budget</i> .....	52
4.2.1	Analisis <i>Path Loss</i> .....	53
4.2.2	Analisis RSL ( <i>Receive Signal Level</i> ) .....	55
4.2.3	Analisis Rss ( <i>Receiver Sensitivity</i> ).....	57
4.3	Analisis Performansi <i>Video Conference</i> Pada Jaringan LTE .....	60
4.3.1	Analisis <i>Delay End to End Video Conference</i> .....	61
4.3.1.1	<i>Payload Video Conference</i> .....	61
4.3.1.2	<i>Delay CODEC</i> .....	62
4.3.1.3	<i>Delay Jaringan LTE</i> .....	62
4.3.1.3.1	<i>Delay Proses</i> .....	63
4.3.1.3.2	<i>Delay Transmisi</i> .....	72
4.3.1.3.3	<i>Delay Propagasi</i> .....	74
4.3.1.3.4	<i>Delay Antrian</i> .....	75
4.3.1.3.5	<i>Delay End to End</i> .....	79
4.3.2	Probabilitas <i>Packet Loss Video Conference</i> .....	82



4.3.3	<i>Throughput Video Conference</i> .....	87
<b>BAB V</b>	<b>PENUTUP</b> .....	89
5.1	Kesimpulan.....	90
5.2	Saran.....	90
	<b>DAFTAR PUSTAKA</b> .....	91
	<b>LAMPIRAN</b> ... ..	92

