

BAB V

KESIMPULAN

Berdasarkan data dan analisis perhitungan *link* pada sistem komunikasi radio *Cluster* A9800, maka dapat ditarik kesimpulan bahwa :

1. Sistem komunikasi radio *Cluster* di Pasar Pagi Mangga Dua dengan Catuan STO Mangga Besar masih layak untuk dioperasikan sampai saat ini dilihat dari segi level daya penerima minimum sebesar $-51,46$ dBm dan $-51,8$ dBm untuk *uplink* dan *downlink*.
2. Selisih level daya penerima minimum *uplink* dan *downlink* standar A9800 sebesar $0,67$ dBm sedangkan di STO Mangga Besar sebesar $0,34$ dBm untuk itu diperlukan penyetingan daya pada perangkat sistem agar level daya penerima minimumnya sama.

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Chapter 3.- TECHNICAL CHARACTERISTICS OF THE A9800 SYSTEM

3.1 SYSTEM CHARACTERISTICS

- Frequency band 1.5 GHz / 2.4 GHz. Other bands on demand.
(See Radio Unit documentation in RSC/RSN/RST Description Manual)
- Transmission capacity 2.048 Mbit/sec.
- Maximum number of telephone subscribers 512 / 1.024
- Maximum number of Radio Stations (RST/RSN) 64
- Maximum number of telephone subscribers per Radio Station (RST/RSN) 80 (outdoor) / 160 (indoor RSTI)
- Maximum number of RSNs in a series 8
- Traffic channels
 - or up to 30 64-Kbps PCM
 - or up to 60 32-Kbps ADPCM
 - plus 120 Low speed data multiplexed acc. to X.50 div. 3
 - plus 64 Telex subscribers per system
- Access technique
 - From RSC to remote station TDM
 - From remote station (RST/RSN) to RSC TDMA
- Traffic capacity 47 E ($p < 0.01$)
- Modularity

	RST/RSN	XBS
- 2W telephone	8 subscribers	8 subscribers
- 4W + E and M	2 6w subs. + 2 2w subs.	4 subscribers
- 64 Kbit/sec. data	4 subscribers	4 subscribers
- Telex	8 telex subscribers	4 subscribers
- 2 Mbit/sec.	---	
- B.B. data		4 subscribers
- Typical span range 20 + 35 Km
- Additional limits depending on system size:
 - Telex per RST/RSN
 - 8 recommended when $1 < n^{\circ} \text{RST/RSN} \leq 20$
 - 4 recommended when $20 < n^{\circ} \text{RST/RSN} \leq 40$
 - 2 recommended when $40 < n^{\circ} \text{RST/RSN}$

- Rate 2.432 Mbit/sec.
- Level Logical 0 V-0
Logical 5 V-1

.5 Wireless Subsystem Radio Characteristics

DECT Standard Specification is employed in the radio interface. The principal characteristics of this interface are:

- RF allocated band 1880 + 1900 MHz
- Total number of carriers 10
- Carrier spacing 1.728 MHz
- Channels per carrier 12
- Access technique Multicarrier TDM/TDMA
- Duplex TDD
- Modulation 0.5 GFSK
- Transmitted power +24 dBm
- Receiver threshold (10^{-3} BER) -86 dBm
- Speech encoding 32 Kbps ADPCM
- Bit rate 1.152 Kbps
- Channel assignment technique Dynamic channel allocation

TELEPHONE CHARACTERISTICS

All measurable interface characteristics are given for artificial spans and a residual error rate, that is, during their metering time.

.1 General Telephone Characteristics

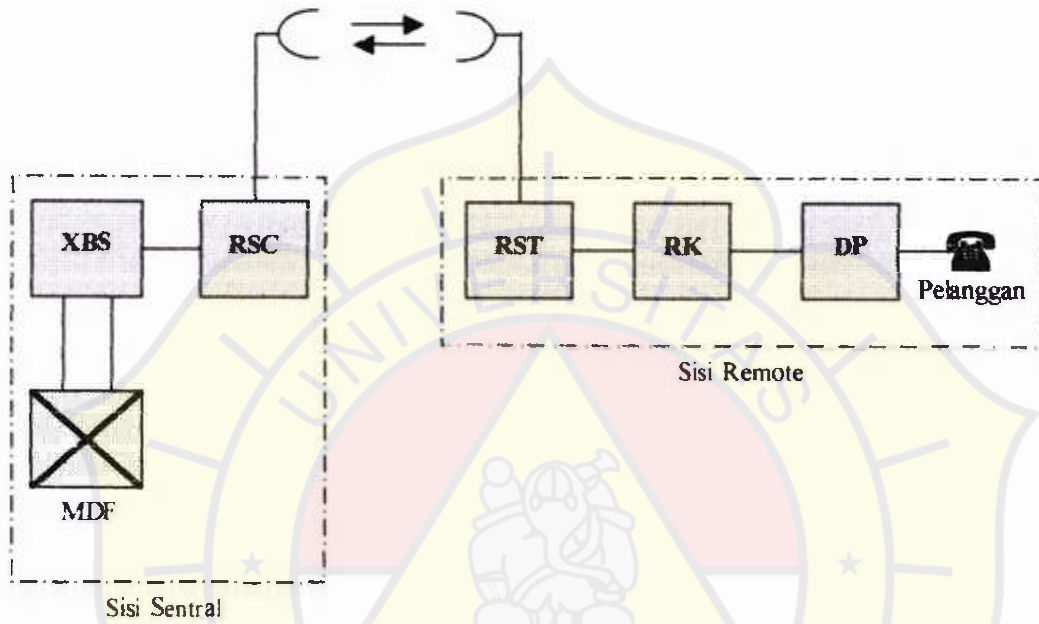
- MFC (multifrequency) device Phonic band transparent
Multifrequency detection in RA-10
- Teletolling From Public Exchange (CP) to subscriber (ABN)
- Service calling General or selective
CP → A9800
A9800 → CP
A9800 → A9800
- Automatic answering service
- Delayed reset
- False ringing
- The link is held until the end of the initial billing quantum



LAMPIRAN B

KONFIGURASI UMUM RADIO WLL ALCATEL CLUSTER A 9800

DIKANDATELJAKARTAUTARA



Sunter Tx : 2332 MHz
Rx : 2426 MHz

Sunter → Sunter Mall Tx : 2426MHz
Rx : 2332MHz
→ Griya Inti Sentosa Tx : 2426 MHz
Rx : 2332 MHz

Tanjung Priok Tx : 2348 MHz

Rx : 2442 MHz

Tanjung Priok → Camat Koja Tx : 2442 MHz

Rx : 2348 MHz

→ Graha Samudra Tx : 2442 MHz

Rx : 2348 MHz

Kota Tx : 2332 MHz

Rx : 2426 MHz

Kota → Gedung BNI 46 Tx : 2426 MHz

Rx : 2332 MHz

Mangga Besar Tx : 2348 MHz

Rx : 2442 MHz

Mangga Besar → Pasar Mangga Dua Tx : 2442 MHz

Rx : 2348 MHz

BIODATA

Nama : ANDRI EKO PUJIANTO
Tempat Lahir : Jakarta
Tanggal Lahir : 4 April 1979
Umur : 23 Tahun
Alamat : Jl. Penggilingan Rt : 015 Rw : 005 No : 22, Cakung,
Jakarta Timur 13940
Agama : Islam
Kebangsaan : Indonesia

PENDIDIKAN

Tamatan SD Negeri Pulo Gebang 19 Tahun 1991 di Jakarta.
Tamatan SMP Negeri Argomulyo Tahun 1994 di Yogyakarta.
Tamatan SIM Negeri 1 Yogyakarta Tahun 1997 di Yogyakarta.
Tamatan Fakultas Teknik Elektro Universitas Darma Persada tahun 2002 di Jakarta.



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Hormat Saya,

Andri Eko Pujianto