



PENGANTAR TELEKOMUNIKASI

ANALYSIS A BASE TRANSCEIVER STATION



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INTRODUCTION

A base transceiver station (BTS) is a piece of network equipment that facilitates wireless communication between a device and net-work.

There are 2 places that we analysis : Pedamaran and Tanjung Batu (OI)

Which has 2 services cells that we analysis : Telkomsel and Indosat

Application that we used :

Tanjung Batu Tower



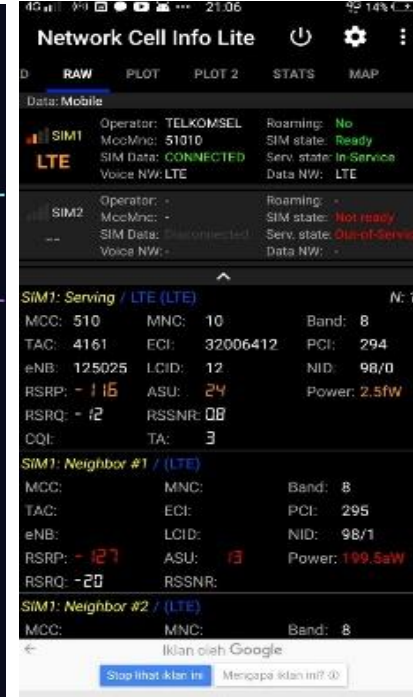
Pedamaran Tower



1 . OOKLA



2 . NETWORK CELL INFO LITE



Serving Cells

: Signal strength of the cell you are currently connected too

Frequency

: Measure the number of oscillation for the data signal per sec. In this case, only Wifi can get the frequency

Strength of signal

: Signal strength refer to te transmitter power output as received by a reference antenna at a distance from the transmitting antenna.

Speedtest

: Measures the **speed** between your device and a test sever, using your devices internet connection

Ping

: Is available on every operating systems, and many online games display a visible ping you can use to understand latency

RSRP

: The LTE power signal received by the user in a certain frequency, the farther the distance between the site and the user, the smaller the RSRP the user will receive

RSRQ

: Parameters that determine the quality of the received signal

Location	Provider	RSRP	Speed (mbps)	Frequency (MHz)	Ping (ms)	RSRQ	RSSNR	Analysis
Tanjung Batu	Indosat Ooredoo	-110	0,25	-	62	-14	24.7	Tanjung Batu, Telkomsel network speed tends to be faster than Indosat
	Telkomsel	-96	69,9	-	51	-10	0.5	
Pedamaran	Telkomsel	-116	4.54	-	54	-12	0.8	Because there is only one provider, Pedamaran is considered to have sufficient speed

CONCLUSION

Each region has its own strength, speed, ping, which is different for one provider. Likewise for other providers, Telkomsel has faster speed and strength specifications when compared to Indosat and other providers. In the network cell lite also can see the maps between the device and the tower. it stated in the picture above under network cell info lite