

ABSTRACT

The development of CDMA technologies and services have been a new choice for telecommunication customers. CDMA customers are growing so fast, it is caused by government regulation that open business opportunity to the new CDMA operators. Competition in reaching new customers is more competitive because of the new operators existence, so operators try to give the best services for customers satisfaction.

Benchmark is used to measure, compare, and analyze network quality from one CDMA operator to another in Bandung. Benchmark has two methods which is based on customer perception. First method technically use drive test, the measurement of Key Performance Indicator value. Second method use questionnaires. One hundred twenty five questionnaires is distributed to each CDMA provider customers in Bandung.

The result below shows that RF quality from comparison operator II is better than comparison operator I.

NO	KPI	Passing Criteria (AREA)	Test Result		
			Operator yg Diamati	Operator Pemandang I	Operator Pemandang II
1	RSSI : (SUB URBAN)	$\geq 90\%$ (AREA) ≥ -80 dBm	60,40 %	34.15%	88.53%
2	Ec/Io	$\geq 90\%$ (AREA) ≥ -12 dB	98.56%	88.74%	98.52%
3	FER	$\geq 90\%$ (AREA) $\leq 2\%$	68.20%	83.30%	67.46%
4	Tx Power	≤ 20 dBm	95.51%	94.62%	99.56%

Based on the mapping result of data measurement, the areas that have problem: Pungkur, Otista, Gardujati, Veteran, Pelajar Pejuang, Gatsu, Buah Batu, and M Toha street. The problem is caused by emitting power factor that affect overlap in the sites. From the result of measurement and analysis, it can be recommended that there must be change of antenna orientation, and antenna tilting in the sites.