ABSTRACT

Together with fast technology development is trigged by consumer necessary that wants the best quality from operators in their services. Reason factor from that celluler technology development is demand about spectrum efficiency that is higher, greater capacity, and voice and data services with higher rate. CDMA (*Code Division Multiple Access*) technology is one of the things that support its development.

Each of the telecommunication operators wants to give optimal services to its consumer. To control and know network performance so we need to optimize network. Coverage area is one of the important factors for subscriber satisfied in network performance. Good system performance can increase call success at peak hours. Therefore need exact ways in network optimal.

Based on the result of link budget calculation is obtained the value of cell radius different with measurement result in the field, especially in farthest point . It is caused by occurring PN code change among neighbor BTS. In addition to there is also caused by occurring blank spot (like at the Ibun BTS of sector 0).

From the result of analysis of Telkom Flexi network coverage optimization at Majalaya area is obtained that the quality of reverse and forward coverage is good because of agree with coverage quality standard that suggests in PT. Telkom standard, namely the quality of reverse coverage can be known from Tx level value is relevant with standard ≤ 23 dBm and the quality of forward coverage can be known from Rx level value exceeds MS threshold ($\geq$ -116,47 dBm). Specially for Ibun BTS needs to fix because of blank spot, namely change the position of BTS antenna height and add new BTS for coverage optimalization.