

ABSTRACT

At present the use of mobile technology has evolved to a point where very high, so the frequency of use of increasingly limited. To conserve available frequency is used the concept of frequency reuse. This concept allows the reuse of a frequency in a cell, wherein the frequency previously used on one or several other cell. However, in practice in the field often arise problems that make the performance of a site is not a maximum, one of which is the overshoot. This causes overshoot where the coverage area of a site to be not optimal causing call drop, call blocking, and bad coverage. Therefore, the problem of overshoot is to be minimized in order to obtain maximum coverage area, so that the customer service is maintained.

Final analyzing the prevention of the occurrence of inter-cell overshoot on 3G UMTS networks. This overshoot condition occurs such as an error in the tilt antenna and transmit power cell is too large, the difference contour, and traffic so bad menyebabkan coverage. Performance analysis done by web data retrieval performance of data obtained from the test drive. This research was conducted with a case study on PT. XL Axiata in Bandung.

Results of this thesis is able to fix the things that can degrade performance due to overshoot site. After optimization of the site 3G_BBKNSRBYBNDUNG ie from 2 degrees to 4 degrees, and the admission that the power value of 35 dB to 33 dB, and by lowering Tilting Antenna on site 3G_RANDUSARI_PRATISTA_ANTAPANI ie from 4 degrees to 8 degrees, and the admission that the power value of 36 dB to 33 dB. obtained an increase in the value of RSCP by 10 dB.

Keyword : Overshoot, Bad Coverage, Antenna Tilt, Drive Test