



UNIVERSITI TEKNOLOGI MARA

PERFORMANCE OF CELL BREATHING IN WCDMA

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ABSTRACT

This paper investigates the concept of Cell breathing technique. This technique is commonly used in cellular network to overcome load congestion by expanding or shrinking the cell coverage. Traffic constantly varies due to the behavior of the subscribers and the event of the day. This leads the coverage area of the serving cell also changes. In this project, a Node-B of two different areas is chosen to determine the cell breathing margin. COST 231 Hata propagation model is used to predict the cell coverage for urban environment. The comparison between received signal code power for theoretical and drive test has been analyzed. The energy per chip power density (E_c/N_0) against distance (km) can determine the serving cell. The result shows that, the cell coverage will shrink when the load is higher as compared with light load.

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