PERFORMANCE AND EVALUATION OF SOFT HANDOVER SYSTEM TOWARDS WCDMA IN 3G NETWORK

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ABSTRACT

This report analyzes the performance of a soft handover algorithm that is the unique features towards WCDMA. In the handover scheme, multiple base stations are involved in the communication to and from one user equipment (UE) to improve the handover performance on the boundaries between two base stations (Node B) by providing channel diversity. On the other hand, there are additional resources used during soft handover. There is, thus a tradeoff between diversity advantage and resources utilization. We present a simulation that provides quantification for this tradeoff. The results can be used to gain insight and help select the appropriate handover thresholds. Matlab is used as the programming language and to display the results.

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