

ABSTRACT

Desire of human being to have flexible communication gives a challenge for cellular system provider to develop a telecommunication technology. People wants a fast communication, infinite and high technology, to make it happen, CDMA (Code Division Multiple Access) is the answer. The more technologies develop the more people need a higher technology in communication, WCDMA (Wideband CDMA) is the answer to solve all the problem people have in communication.

Because high mobility and traffic intensity, the good soft handover mechanism is so needed that can pushing down blocking probability and dropping for the network, Soft Handover is the one of the factor that can influence performance in wireless network, so user will enjoy the communication and performance of that network will increase.

Using preemptive algorithm can push up the performance by optimizing limitation of service bandwidth, result of handover model using Preemptive algorithm is decreasing voice dropping probability by 11.73 % and decreasing voice blocking probability by 2 % compare to fix channel reservation algorithm, but there are delay in email data that causing decrease of email throughput average equal to 50%, Decreasing of blocking and dropping probability can improve network performance because consumer necessity in voice communication will run comfort, the delay on email data can be tolerate because email is non-real-time data.

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