

UNIVERSITI TEKNOLOGI MARA

PERFORMANCE ANALYSIS OF HANDOVER
STRATEGY IN FEMTOCELL NETWORK

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ABSTRACT

Femtocells, as known as HeNB is the tremendous network technology in the Long Term Evolution (LTE) network in order to fulfill the upcoming demand of high data rates. However, Femtocells deployment may cause the incidence of frequent and unnecessary handover due to the movement of the user. As Femtocells coverage area is very small and deployed randomly, there are many possible targets Femtocells for handover. This paper analyze on the performance analysis of handover strategy in Femtocells network under Hybrid Access Mode to minimize the unnecessary handover. The handover strategy for three different threshold stay time with considering the velocity of user equipment's (UEs) in the mobility are analyzed. The simulation results showed that the proposed algorithm minimized the number of handover and decreased the unnecessary handover probability. Simulation results indicate that the proposed algorithm has a better performance as compare with the traditional strategy.

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