ABSTRACT

The level of the user 's mobility that the higher in the using the voice, data and video service give impact in transfer of kanal (handover) of an old Base Station to new Base Station or commonly referred to as handover. Intersystem handover used in cells that have two radio access technologies (Radio Access Technology: RAT) are different.

In this final pr oject have simulated and analyzed about simulated intersystem handover (ISHO) between UMTS and HSDPA network in streaming video service. The number of users that will be observed is the single user, where user will move from cell to cell HSDPA and UMTS in contrast to random. Handover decision parameters using comparison RSCP (Received Signal Code Power), HOM (Handover Margin) and TTT (Time To Trigger). Whereas the parameters to be analysed is the comparison probability values dropping and BER (Bit Error Rate) of input parameters.

From the results of the simulation has been carried out resulting combination optimum threshold of-93 dBm for threshold and UMTS-91 dBm to HSDPA in scenario 1 the threshold with a value ranging between 0 probability of dropping-0.65 at the speed of 10-100 km/h, while the value of the BER (Bit Error Rate) the resulting ranges between 10^{-7} - 10^{-2} . In scenario 2 the optimum combination of available threshold-95 dBm for threshold and HSDPA-93 dBm for threshold values with probability of dropping UMTS ranges between 0-0.35 on the speed of 10-100 km/h, while the value of the BER (Bit Error Rate) the resulting ranges between 10^{-6} - 10^{-3} .

Keyword : *Intersystem handover*, HSDPA, UMTS, TTT (*Time to Trigger*), HOM (*Handover Margin*), dropping probability and BER (Bit Error Rate).