

## ABSTRACT

Telecommunication technology has grown by leaps and bounds not only for voice , image (video), but also data with high mobility. User mobility causes dynamic changes of network quality requires maintained continuity of services in telecommunications networks , and therefore needed a reliable Handover mechanism which is expected to improve network performance. Handover is an important aspect in cellular radio systems to ensure the relationship which is established will always held even if user moves from its position. Handover is not only happening in the systems with similar technology, but also in a different system called intersystem Handovers.

In this final project is done an analysis on mechanism process intersystem handover from hsdpa to lte based on user movement. Parameters used on analysis process intersystem handover hsdpa to lte are RSCPmin, RSRPmin, Handover Margin, Time-to-Trigger, dropping probability on intersystem Handover.

The results of the simulation analysis has been done, was found Received Signal Strength in a user which is a good value of RSRP based on the minimum dropping probability between HSDPA and LTE in order to support the development of LTE. From the simulation analysis results obtained RSRPmin value based on the minimum dropping probability with the parameters handover margin = 2 dB, TTT = 0.4 s when RSCPmin = -95 dBm then RSRP = -99 dBm; RSCPmin = -96 dBm then RSRP = -101 dBm, RSCPmin = -97 dBm then RSRP = -98 dBm, RSCPmin = -98 dBm then RSRP = -98 dBm; = RSCPmin = -99 dBm then RSRP = -99 dBm; RSCPmin - 100 dBm then RSRP = -98 dBm.

*Keywords: Intersystem Handover, Dropping Probability, RSCP, RSRP*