## ABSTRACT

Requirement human for telecommunication is claiming technology to developing of comunication system with flexible, free move and high tecnolgy.High mobility of user demanding the garanty of service continue after end.Efect of mobility causing at handover from an Base Station to new Base Station. Existence of the handover expected do not cause the disconnection.at serving area so dropping will not happen in that network

One of type handover which happen in WCDMA-UMTS is inter-system handover (ISHO). inter-system handover (ISHO) happened between cell which have two different Radio Access Technology : RAT. One of example for handover is inter-system handover GSM to WCDMA.

The result of simulation of inter system handover GSM to WCDMA (better cell), scenario 1 ( user move from inside cell 2G\_1 which it is load some cell 3G to cell 3G\_4) got the smallest values dropping probabilities when threshold parameter GSM=-90dBm is 0.08-0.5, handover margin = 0 dB is 0,08 – 0,25, RSCP minimum = -81 dBm is 0,03 – 0,13. More user increase their speed so the success of ISHO more smallest, so that the values of dropping probability become bigger. it is because interference between cell so big

For scenario 2 (user move from inside cell  $2G_2$  which it is not load cell 3G to cell  $3G_4$ ) the smallest dropping probability when GSM threshold =-90 dBm is 0.26-0.07, handover margin =0 db is 0.05-0.02, RSCP minimum=-82 is 0.07-0.02. more user increase their speed so the success of ISHO more bigger, so that dropping probability become down. It is because interference between cell so small

Keywords : Inter-System Handover, thershold GSM, handover margin, RSCP minimum