ABSTRACT

One of priority handoff methode is guard channel sheme. This scheme used to decrease handoff call failure probability in a cell. But in other side this scheme resulting increment in new call blocking probability.

Directed retry take advantage from the condition of overlapping cell between serving cell and neighbouring cell. In this area user can communicate with more than one base station, futhermore with directed retry user can access traffic channel from cell serving and neighbouring cell. Directed retry implemented in a cell to decrease the probability blocking of new call.

In this paper will analyze the perfomance of priority handoff methode with guard channel scheme, and performance directed retry mechanism in a cell that using priority handoff methode with guard channel scheme. The performance focused on new call bloking probability and handoff call failure probability.

The research result show priority handoff methode with guard channel scheme can reduce handoff call failure probability with mean decline as 56.83%, 81.19%, *and 91.68% for number of guard channel allocated in a cell varied as 1,2,and 3 traffic channel. New call blocking probability show increment with mean increment as 69.62%, 88.59%, and 95.34%, for number of guard channel allocated in a cell varied as 1,2,and 3 traffic channel.Using directed retry mechanism in a cell with guard channel scheme reduce the increment of new call blocking probability. It can be show by the mean new call blocking probability increment as 66.26%, 87.34%, and 94.83% for number of guard channel allocated in a cell varied as 1,2, and 3 the overlapping area cell is 0.1, for the overlapping area cell 0.3 the increment are only 56.64%, 83.74%, and 93.38%,and for overlapping area 0.5 show mean of it increment only 39.35%, 77.29%, and 90,78%.*