ABSTRACT

The following research entitling "Sequential Paging Optimalization in Cellular Network by Partition System" that is how to optimize paging activity with sequential paging by dividing location area into some paging zones. By dividing location area, permits a reduction in paging costs at the expense of greater delay. Therefore need analysis about both of the parameter to get optimal condition in paging process.

By increasing demand of telecommunications service will cause cellular network growing rapidly, either service and also system capacities. In high capacities cellular network with restrictively of resources, it is importance to minimize system resources related paging to find location of user mobile.

This research using verification and exploration method, that is verifying the previous researchs and exploring those researchs.

Initial data required for analysis is user location probability in each cell in location area taken as sample / model. The data generated with approach of geometric distribution.

Initial data, user location probability in each cell in location area, compiled in list form with certain conditions and then become input of sequential paging algorithm.

The output of the research is the optimal partition solution , which is paging zona configuration and amount of location area partition yielded represent optimal solution for the sequential paging. And also result paging performance in case average paging cost and average paging delay.