

ABSTRACT

PCS technology applying cells size with smaller radius (micro cell) then cellular system, so cells formed in PCS network is more amounts. Therefore need to have a location management to knowing location position of MS(Mobile Station) in the network.

The Signaling process which not comes from call process in mobile communication network called Non Call Related Signaling and used to observe the location of Mobile Station. This signaling process has a big contribution in network's load. An Efficient database and location management are needed to fulfill user condition which progressively increase and the mobility which excelsior.

Dynamic Location Update is a concept which location update process gone into effect according to user behavior that is user movement and incoming call pattern to user. Distance-Based Location Update is one of the dynamic LU strategies to reach the optimal load in the network. Optimal load is amount of location update and paging load that give the least total cost. Distance-Based method was able to decrease signaling load on the network system, it was shown by improvement 34% if compare by combination of movement and timer method