

ABSTRACTION

CDMA technology that is still developing at present become very attractive because of its benefit. As example for its satisfactory quality that are given through any facilities supporting the system. *Handoff* term is one of the parts from cellular communication system. On CDMA is using *Soft handoff* where the user almost can not feel the handoff process take place.

During the handoff process there are many problem that needs to be considered carefully, such as: channel allocation, power parameter, BTS-MSC coordination and also interference and user characteristic which is possible to fail the handoff process.

This final project will discuss about supporting parameter neither the constraining factor in pursuing *Soft handoff* process on CDMA. Factors that being analyzed are power parameter and system performance during the *Soft handoff*. Study will be focussed on Telkom Flexi Jakarta.

From the obtained from real field measurement also comparing the data with theoretical formulas we will know that the *search window* size, T_ADD and T_DROP value, also types of handover that used will give influence in soft handover performance. With statistic value about success and failure during handoff be able to reach the conclusion of system performance while doing *Soft handoff* process.