

ABSTRACT

At network of CDMA2000 1x Telkom Flexi had found the problem of blank spot in condition outdoor and indoor, so that cause of trouble passed service to user. this Blank spot happened because coverage of BTS cell less maximal, thereby it is needed a correct solution to overcome the problem of blank spot. So that to overcoming utilized repeater to continue accepted signal from BTS donor.

At this final project use data of PT. Telkom as operator of Telkom Flexi to analyse to regarding performance reverse link of donor repeater-BTS at network of CDMA2000 1x covering of effective repeater noise figure, push noise and repeater gain. The mentioned aim to know how big influence of implementation repeater passed BTS donor. Then will be analysed also affect implementation of repeater to cell of BTS donor that is hitting dwindling cell radius of BTS, decreasing cell capacities of BTS, and quality of forward link

From this Final Project analysis obtained by parameter of push noise effect of implementation repeater in BTC equal to 2.1 dBm, this matter cause increasing of noise accepted by BTS donor in Sukajadi so that can lessen cell radius equal to 12.95 % from cell radius initialy, that way also with donor cell capacities decreasing 34.268 % from previous capacities. While level of push noise alone determined by level of used repeater gain, ever greater repeater gain that also push noise too. Later; then error effective repeater noise figure got equal to 5.924 dB, this error of indication that forward link and reverse link uneven. Become to get good system of configuraton require to repeater gain of equal value.