

## ABSTRACT

*PN Offset represent short code PN Sequence which is used as a sector identity of cell. PN Offset Planning needed in order to not happened mistake of detection pilot channel between cell that using adjacent PN Offset or Co-PN Offset. Length of PN Sequence is 32768 chips and friction one chip is 244 metre. With execute of This PN offset, meaning to avoid interferensi which is became of cell, that is interference adjacent PN Offset and Interference CO-PN Offset.*

*At this Final Project studying desain and method of mapping of PN Offset code at Bandung city and also studying data of exisiting PN Offset of TELKOMFLEXI Bandung Network. Metode of code mapping are adjacent sector and adjacent site.*

*Planning steps of this PN Offset relied on capacities boundary system, where to know wide of area or radius cell needed by a estimate calculation cell capacities from estimation of traffic necessity. Radius cell used to determine PILOT\_INC, but pursuant to recommendation use  $PILOT\_INC = 4$ . Analysis of distance requirement from two BTS which use code to avoid aliasing that is for adjacent PN Offset less than 60,9 Km for urban and 62,3 Km for sub urban, while for Co-PN Offset more than 6,5 Km for urban and 7,9 Km for sub urban. The result of code mapping have fulfilled distance requirement so that be able to avoid aliasing. Relied on data of TELKOMFLEXI Bandung using PN Offset with adjacent sector method but adjacent site method more suggested to used because avaibility to prevent interferensi is bigger.*