

## ABSTRACT

TELKOMFlexi is service telecommunication of voice and data base on wireless with technology CDMA2000 1x. Phone equipment used have to shape of Fixed Wireless Telephone (FWT) or portable/handheld until more than flexible and personalized.

This final project research about planning and analisis of BTS allocation TELKOMFlexi network base on demand at Yogyakarta. The area analysis include: determining subscriber aspirant based demand until year 2009, calculation of voice traffic and data traffic, determining amount and cell radius, amount BTS calculation of link budget capacity. In this planning used software Geography Information System (GIS) for facilitate calculation of planning parameter and BTS allocate.

For planning until year 2009, there are 21.789 potential subscriber and distributed become 95 % for the voice service and 5 % for the data service, until be obtained by a total capacities which in the market is 3.554,496 Kbps and to serve amount of capacity, will be needed by much 21 BTS.