

ABSTRACT

In this time, growth of telecommunication is very fast. Not only growth technological beside, but also requirement from service society of telecommunications. One of growth technology which attended is WiMAX as technology access from Broadband Wireless Access (BWA).

This Final exam will study about planning the location of WiMAX BTS in Bandung City area to know the scenario giving amount of cell development an optimal fashion.

This Final exam, the network planning of WiMAX technology implementation using frequency operation 3,3 GHz and channel bandwidth 3,5 MHz for the service fixed access.

The process of the planning is beginning by doing network dimensioning. Dimensioning conducted with approach capacities of traffic and coverage. From calculation with the approach obtained by a first cell requirement in the year is 27 cell for Urban and 5 cell for Sub Urban area. After determining cell requirement, conducted visualisation dimensioning in planning area. For know the amount of cell development in an optimal fashion, at this Final exam conducted with 3 (three) implementation scenario by exploiting of TELKOMFlexi existing tower. While, for to know the accuracy of location BTS from 3(three) scenario implementation, doing analyse the condition link BTS. Condition of link BTS from 3(three) implementation scenario have the LOS (Line-of-sight). So ,skenario of location BTS from this network planning have precisely.