ABSTRACT

Wireless Local Area Network (WLAN) 2,4 GHZ represent one of alternative technology access internet at ISM (industry, scientifical and medicine) band having the character of unlicensed by owning excellence in easier peripheral installation, quickly, flexible to earn to reach just district where and cheaper relative if compared to a cable technology which limited to infrastructure of existing telecommunications company, so the provider of service internet to get subscriber in the form of warnet as much as possible till use booster to increase frequency channel at certain district by getting emittance (EIRP) what specified by government. Target of Planning WMAN using WiMAX technology is for the cell settlement at region of Yogyakarta, so that be formed existence of settlement of more regular coverage district.

The planning estimated so that be got number of cell with maximal coverage so that earn to reach entire of Yogyakarta usher backhaul will use link point to point line of of sight of pursuant to IEEE 802.16a 5,8 GHz and link poin to Point non line of of sight use standart IEEE 802.16a 3,5 GHZ and also for link toward the subscriber we will use link point to multipoint use standart IEEE 802.11.b where excellence from more cheaper peripheral.

Used method cell settlement to reach entire district of Yogyakarta with assumption that] planning district still be slimmest performanced network so that very enable to do settlement so that existence interferensi earn depressed as minimum as possible. For high aktifitas district and make-up of cell capacities by method sektorizing and also cell splitting.

To get more optimal planning result, hence better pentaan cell to reach entire district of Yogyakarta by pursuant to map of prospecting customer which in the form of housing subscriber, industrial, school and college, health facility, and the governmental institution and also and also contour from special region of Yogyakarta