

## **ABSTRACT**

Consumer of internet increase very quickly from year to year. Society Indonesia enthusiasm to use this technology very big but its problem is limitation in the case of accessing internet, speed access, available bandwidth and problem of expense of which still costly enough to subscribe to internet. Besides requirement of bandwidth also progressively paid attention that way many application of internet requiring big bandwidth like video of conference, video on demand and others. So in this time Indonesia told not yet optimal in socializing its people to use internet. Though internet represent technology which must know by Indonesia youngster for the shake of progress of nation. This problems can overcome by using technology of BWA (Broadband Wireless Access) that is mobile WIMAX (Worldwide Interoperability for Microwave Access).

Result of network planning with specification of frequency 2.3 GHZ, total of canal 15 MHZ divided become 3 canal so that the each canal become as wide as 5 MHZ is 35 cell of mobile WIMAX which consist of 26 cell at area of urban and 9 cell at area of suburban this with condition use antenna 3 sector in one BTS.

Having taken steps visualizing cell use antenna; three sector, got by 29 cell of urban and 10 cell of suburban and of tower property of Government of Provinsi West Java able to wear by counted 6 tower from 21 available tower. Amount of this cell more 4 cell compared to which is planned, this matter because of regional form of town of bandung unique become there are some region which must close over by, although a few/little. Its advantage is can lessen expense, because with existence of tower which have there is hence can lessen the amount of BTS to be build.