

ABSTRACT

EvDO Technology (Evolution Data Optimizer/Evolution Data Only) which also known as 1xEvDO is an evolution of CDMA 20001x RTT (1x Radio Transmission Technology).It has standard of revision to develop it higher, especially in access speed. The standard of revision are EvDO Rev.0, EvDO Rev.A and EvDO Rev.B.

The purpose of this Final Task is to make a design of network cellular based on EvDO Rev.A in Landak Regency West Borneo. It is about covering the area of EvDO Rev.A services, make the user estimation, calculate cell or site in the coverage area, calculate the capacity of service and power link budget, and make the visualization of Evdo Rev.A cell in the coverare area.

The cellular network is covering all area of landak Rege ncy, the number user estimation is about 33.114 user until 2015. The network area is consist of suburban area (A,B,C,and D) and rural area (E,F,and G). Each of them have different wide area and different number of user. So the cell calculation is differen t too. Suburban area A and B has cell radius 3 Km, Suburban area C and D has cell radius 4 Km, and rural area E,F and G has cell radius 5 Km. The power of BTS is 1.4 watt and the design realibility is about 95%. The EvDO Rev.A is expected able to the prov ide the data telecommunication service especially in Landak Regency and in order to increase teledensity in Indonesia.