

ABSTRACT

CDMA2000 1xEV-DV system is one of cellular technology standardization that accommodate voice and data with up to 3,09 Mbps data rate and ready to implement commercially. CDMA2000 1xEV-DV system is one alternative of IS-95 A/B network and CDMA2000 1x for next generation evolution with more varied and reliable service.

This final project studied CDMA2000 1x base cellular network planning and development process through CDMA2000 1xEV-DV focused on radio core network, that means responsible part of mobile station and base station connection with link forward and reverse link balance, power allocation for overhead channel and cell loading parameter.

The planning step to this network improvement is studied CDMA2000 1xEV-DV system especially traffic channel, potential customer estimation, site and radius site planning that match with BTS capability, coverage, topology, citizen density, forward channel power allocation planning, and estimate the signal quality on edge of coverage. So network output of CDMA 2001xEV-DV is reliable with optimal capacity and good service on voice and data.

Next step is evaluate for important parameter-parameter to get optimal value in CDMA2000 1xEV-DV. Output evaluate this final project is to get optimal CDMA200 1xEV-DV network based on tools they are use.

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