ABSTRACT

General philosophy of the design of telecommunications networks are getting the best performance with minimal implementation costs. EV-DO Rev. B, offering excess data rates consistently higher for data services, both video and audio streaming; faster upload images, videos, and audio files.

This thesis analyzed technology engineering and economic of development planning EVDO REV.B that will implement in Telkom Flexi III Divre area (West Java). Analysis model used, based on the principle of techno-economic by using traffic demand, Capacity and Coverage estimation method. Next step is analyzed the feasibility of the costs incurred for the construction of EVDO Rev.B in Telkom Flexi Divre III area. To simplify calculations, the authors use existing data reference Telkom Flexi Division III West Java area.

From the simulation scenarios performed, the conclusion is the largest NPV obtained under the first scenario with achieving NPV Rp. 185.946.827.012,79 , IRR of 26% and turnover time in year 3 and month 10. From the sensitivity analysis conducted found that the rate factor and the number of customers are greatly affect the achievement, so it can be concluded that the implementation of EVDO Rev.B in the Telkom Flexi Divre III area is feasible to implement.

Key Words : *EVDO Rev. B,Traffic demand, Capacity &Coverage, QoS , Revenue, CAPEX, OPEX, NPV, IRR, PBP*