

ABSTRACT

In August 2006, the implementation of microwave transmission link was done successfully, that was the second session and expansion which continue the first microwave link transmission implementation in 2005 before. The age of this system is still young, and there are many link troubles, so that's why this paper will analyze the performance of all those microwave transmission link.

This paper was doing a comparing of the transmission parameter in the field with the transmission parameter if they were calculated theoretically which sometimes there were conditions that many factor was not involved. The parameters that will be involved are RSL, BER and pathloss profile. This paper also give a recommendation for all link for keep the link performance well.

From theorytical calculation and analysis, it find that all the equipment are using maximum transmit power +27 dBm and +26 dBm. To avoid decreasing of all link performance, this paper sugest transmit power recommendation about +20 dBm because considering of the rain attenuation. The other result said that almost all transmission link use the antenna size bigger than it should be. Final result found that the East java Police transmission link planning and design was not managed well, and the maintenance for all devices should be periodically controlled because, if not the problems such as RSL not balance, RSL decreasing, and RSL down will always exist.