

## **ABSTRACT**

Satellite communication system is used for many service applications bargained for customer in urban area even rural area. Certainly it is really profitable from its capacity and simplicity getting reach areas where more difficult to be reached than use wire network configuration.

GEO satellite with 6GHz/4 GHz on its frequency is used to answer problems from signal transmission through using existing network, but not all signal transmission problems can be solved using satellite communication system. For using that satellite communication system is kept attention that link parameter performance. Parameter has influenced transmission performance, capacity needed and prepared, and based on kind of services that is used user on existing network, especially voice services.

Transponder needing at each location or area is different from another, it depends on traffic demand and available device on earth station in which services user there. So value of quality performance based on it is true or false anymore, but also how optimum when it is used.