

## ABSTRACT

Previously, the number of user telecommunication service is less cover society in middle class to high class and just business only. Nowadays, the number is increase along with expansion of telecommunication technology in globalization era, and to fulfill intercommunication needs.

In fact, number of user is uncontrollable by PT TELKOM as telecommunication provider. In the specific region, DP (*Distribution Point*) be found with maximum capacity (10 – 20 sst). Therefore, to cope with it needs new network install.

However, the new network install needs planning and high cost, so the best solution to handle the number of new user is install a pair gain.

In the fact, present cable network is less optimal to pair gain application, so it needs direct measuring and analyzing to be obtained the best and precise standard.