
ABSTRACT

Aldinan Bani Syafi'i, Planning Project PT2 (installation of ODP) Fiber To The Home (FTTH) Service at PT. Telkom Akses Witel Purwokerto , 2021.

The development of communication technology is increasingly rapid, the growth in the use of communication devices is always increasing, and internet access in the community has become a necessity. The internet is one of the people's needs in everyday life to support certain activities. One of the wired transmission media that is currently widely used is optical fiber. This technology has an increase in the latest cable technology which has more advantages over copper or wireless cable technology. One of the implementations in this technology is Fiber to The Home (FTTH). PT.Telkomkomsel Indonesia, Tbk (PT.Telkom) innovated to make IndiHome products with FTTH technology. The advantages of using FTTH on IndiHome services are: large bandwidth, high speed, thin cable design and durability. In this case, IndiHome has a great opportunity to realize the internet according to the needs of the community. Provisioning type 2 (PT2) work is the installation of a cable network from an optical distribution core (ODC) to an optical distribution point (ODP). From the results of the design work it is known that one optical distribution point (ODP) can serve eight customer houses. for the maximum distance from the ODP pole to the customer's house is 250 meters in order to maintain service quality and facilitate repairs in case of disruption. The maximum number for using cores in a distribution that has a capacity of twenty four cores is twenty-two cores, while for cable the capacity of twelve cores is ten. this is done so that each distribution has a spare core, if at any time a disturbance occurs there is a spare core.

Keywords: FTTH, Fiber Optic, ODP