

ABSTRACT

The rapid development of technology has triggered an increase in people's need for fast services. The need for long distance telecommunications is not only voice but also video and data. A network using fiber optic cable is a network that has high speed and has a large bandwidth capacity. This was realized by PT. Telkom as a telecommunications operator. The technology used by PT. Telkom to deploy a Fiber To The Home (FTTH) access network, namely GPON technology. Gigabit Passive Optical Network (GPON) is an access technology as broadband access based on fiber optic cables which is an evolution from PON. PT. Telkom Indonesia continues to develop its fiber optic cable network and services. PT. Plasa Telkom Wonosobo is a company supervised by Telkom Indonesia which is located in Wonosobo. Every day he always adds devices to meet customer needs. For example, the addition of Optical Distribution Point (ODP) devices that are used to distribute networks to customers' homes. Apart from adding to the network, network maintenance is also routinely carried out. These treatments include fireplaces in air cables and repair of network outages. Many causes of network disruptions, such as cable breaks caused by external factors. For example, cables that have been hit by fallen trees, cables that have been hit by high-loaded vehicles and others. Apart from interference from external factors there are also disturbances from internal factors such as high attenuation, physical disabilities in cables and others. The equipment used to perform installation or virginity on optical fiber networks, namely fusion splicer, fiber striper, fiber cleaver, tissue, alcohol, stairs and others.

Keywords: Fiber To The Home, network, Optical Distribution Point, optical fiber, network maintenance, glass fiber cable