ABSTRACT

This research discusses Fiber to the Home (FTTH) as a solution to the problem of low internet access speeds in several areas. FTTH uses optical fiber as a delivery medium, which allows sending optical signals directly to customers' homes, resulting in a fast and stable internet connection. Chapter I introduces the background of the problem, research objectives, and research scope. Chapter II explains the basic concepts of FTTH, FTTH network configuration, and its main components, including optical fiber, feeder cables, distribution cables, drop cables, OLT, and ONU/ONT. Chapter III analyzes the results of work that includes the installation of ODP (Optical Distribution Point) in FTTH. The ODP installation, fiber optic installation, fiber optic splicing, installation of reinforcement and shielding, testing, and documentation. The results of this research provide insight into the importance of fiber optic infrastructure in improving internet access in certain areas and provide practical guidance for ODP installation in the FTTH context.