

ABSTRACT

The need for communication in Indonesia is growing rapidly, not only voice communications but also data and video communications. Development of this communication also has implications for enough bandwidth needed to host communication services with good quality. Therefore, the Division Access of Telkom should be able to determine which network to use the technology, and provide rapid response to complaints of network disruption experienced by customers as a form of PT Telkom's commitment in providing outstanding service to the customer.

In this thesis, the researcher will design a geographic information system applications by using waterfall method as a method of system development. In addition there is a method of Analytical Hierarchy Process is used in Network Access Recommendation contained in the application of geographic information systems.

The results of this study obtained GPON technology as an alternative access network according to the Kota Baru Parahyangan housing sector R16 with the largest total attenuation is 21.19 dB

With a geographic information system is expected to facilitate the officer in the determination of alternative networks, and network feasibility analysis. Besides handling process disturbances can be done quickly to support visualization in network monitoring functions.

Keywords: Geographic Information Systems, Network Access, Determination Decisions, DSS