

## **ABSTRACT**

*The number of internet service users in Indonesia are very large and show a significant increasing trend. East Java as the second most densely city with population of Indonesia has 20% of the total 25 million users of Internet services throughout Indonesia. This is proportional to the number of broadband network assets owned by PT. Telekomunikasi Indonesia Surabaya area West Metro as an Internet Service Provider. As one of the Internet Service Provider, PT. Telekomunikasi Indonesia want to give good services to customers especially in the internet services business. Then one of the indicators of major concern for the company Internet Service Provider are the availability of their network. Broadband network asset management is needed in order to help the realization of the best service for customers.*

*Geographic Information System application design in this research use prototyping as a method of application development. In addition there is Analytical Hierarchy Process method are used in Asset Maintenance Recommendation tools available in the application of Geographic Information Systems.*

*In this Geographical Information System applications remains guideline on the principles of asset management PT. Telekomunikasi Indonesia, which are capable of providing accurate data and information for management purposes in decision making.*

*With this application of GIS in this research is used as a tool in the management of broadband network assets which include the monitoring of assets, asset value calculation and its analysis, the recommendation priority asset maintenance, physical inventory of the primary cable network, RK management, management of the MDF and the recording scheme of primary cable network.*

*Keywords: Geographical Information System (GIS), Broadband Network Assets, Asset Management.*