

## ABSTRACT

Based on the needs of the ever increasing internet speeds PT.Telkom will answer this need by presenting indihome services. Indihome is a service provided by PT. Telkom with media-based fiber optic transmission that is able to access triple play services (data, voice and video) simultaneously using GPON technology (Gigabyte Passive Optical Network). With this technology is able to achieve a given speed of 100 Mbps. PT. Telkom is targeting users indihome to Success 3 Million Indihome with Aggressive Home Reached which aims primarily to be closer to customers and facilitate the use of the service indihome. To gain access to the network indihome forming device uses the right network in which the main objective to minimize attenuation of the attenuation maximum limit set by PT. Telkom is 28 dB. Power link budget is the initial calculations that can be used to predict attenuation by attenuation of every component of a device that aims to determine the feasibility of the network quality. Results of the power link budget calculations can affect the performance of the bandwidth that has been allocated. To understand more about the analysis bandwidth throughput (actual bandwidth) were carried out. The result will show the process of transfer of data in a certain condition and more actual. On this occasion performed the analysis for the two locations indihome network users located in West Jakarta.

**Keywords:** Indihome, fiber optics, triple play, the link power budget, bandwidth, throughput.