## ABSTRACT

We can't ignore the growth of high-speed internet access now. There are many choices to get high-speed internet access service, also on network provider availability and the choice on peripherals. The industry also knew that they will get a lot of profit from this service. Consumer can get this service whenever and wherever they go. The considerations which used in this reconfiguration are existing link with 64Kbps on voice speed, requirement of high speed internet access which exceeded on existing link and adding the ability of existing network, so it will be more optimal for data network without separating the voice network and also for data and voice network all at once. PT TELKOM has been offered the speedy network as choice for broadband access services.

There are three problems which appear from the speedy networks. The first is network performance factor that is the interconnection condition of existing networks until user. The second is peripheral ability factor called BRAS, bandwidth management policy (priority), and the third is the service performance factor that is the speedy service condition which still focused on the internet service.

There are something to do to overcome the problems that are review design of ADSL existing network with network configuration, determine the design parameter and measurement of network performance about power level, attenuation, noise (condition of access copper network), delay and throughput. The purpose of existing speedy network reconfiguration is the ability to handle the service of HSIA, VOIP and triple play on the network.

Result of research from the technique of speedy network access speedy is the speedy infrastructure which support high speed internet access and triple play service (voice, video, and data). And also optimize the speedy network in supply of triple play service. Result of condition of access cooper same with before with after reconfiguration. Average of delay after reconfiguration at peripheral of vendor's A are 58,5 ms, whereas average of delay at peripheral of vendor's S are 58 ms. Average of throughput after reconfiguration at peripheral of vendor's A are 350 kbps, whereas average of throughput at peripheral of vendor's S are 340 kbps. There are 108 DSLAM must be change capacity of bandwidth uplink.

Key word: BRAS, Policy traffic, Triple Play, Speedy, network performances (throughput, delay).