

ABSTRACT

IPTV (Internet Protocol Television) is a system where a digital television broadcast service is delivered using the IP Multicast method over a network infrastructure, which may include delivery by a broadband connection. For residential users, IPTV is often provided in conjunction with VoD (Video on Demand) and may be bundled with Internet services. *IP Multicast* is an IP packet transport mechanism by sending one stream single packet to the multiple receiver that registered in a multicast group.

NG-SDH (*next generation SDH*) is a solution of SDH development. Initially, SDH (*Synchronous Digital Hierarchy*) just optimized to transport voices. Because of development of data traffic, so SDH also forced to transfer data traffic. NG SDH is a transport mechanism that accomodate various data interface into SDH efficiently.

In this final project will be made a minimum system of IPTV over NG-SDH network. This application using IP STB as a user interface in order to access the services. This research held in PT Telekomunikasi Indonesia Tbk. R&D Center Bandung. Based on analysis implementation of *IPTV over Metro NG-SDH*, can be conclude that this application has good performance.

Key words : IPTV, IP Multicast, NG-SDH