ABSTRACT

The evolution of telecommunication networks towards Next Generation Network (NGN) which is equipped with broadband access network enables service providers to give multiservices in a single customer access channels. The consequence of this is the increasing of service management and business processes complexity. Operation Support System (OSS) as one system that plays a role in the overall process chain of services management should be able to bridge the complexity of the process with an increasingly dynamic business needs.

In the OSS design process, we need a methodology and model that is able to map the entire management needs of telecommunications infrastructure and services based on broadband access technologies. In this thesis performed the design of operating models of broadband services using the framework of the TM Forum Frameworx. The results of this thesis documents is the standards design methodology of Operational Support System (OSS) implementation for telecommunications services that use broadband access infrastructure, with a focus on GPON technology in FTTH networks.

Decomposition of eTOM business process framework and the TM Forum SID information framework conducted in this thesis produce a methodology and model-based FTTH service management that allows companies in implementing this model into OSS applications.

Keywords: NGN, Broadband Access, NGOSS, eTOM, Frameworx, TM Forum