

ABSTRACT

Based on ICT Development Master Plan 2013-2018 that is owned by The Government of Bandung City, the main priority of ICT development is the provision of communication infrastructure. One of the goal is to increase the availability of an internet connection from 57% to 100% in 2018. The main purposes of implementation of *enterprise* architecture is to create an alignment between the objectives of the organization with the development of information technology for the needs of the organization.

The use of *Zachman Framework* in *enterprise* architecture design is to illustrate the logical structure and to classify and also organize the physical image of an *Enterprise* in various kind of dimensions, where each dimension can be assessed from different angles so that the artifact of information system can be more detailed and intact. *Enterprise Architecture Planning* itself is a series of processes to fill the artifacts that is found in *Zachman Framework* columns systematically. Preliminary analysis that is conducted in this research is defining the business model on Bandung Government Technical Institute using existing processes in the EAP, and after that it will be proceed with the architectural design of technology in the domain of network infrastructure using NDLC.

The design process is started from depiction of existing network condition and analyze the needs of the network in the new network in accordance with the standards of the development of the network that is used. After that, a new network blueprint is produce to suit assessment needs. The result of blueprint is contained of the network topology, the distribution of IP addresses and configuration.

Keywords : *Enterprise Architecture, Zachman Framework, Enterprise Architecture Planning, Government Technical Institute of Bandung City, NDLC.*