

ABSTRACT

Short Message Service (SMS) is one of the most customer's favorite application both cellular and fixed phone user. Technology support and variation/integrated services have been developed, so it is easier for the customers to communicate through SMS. Interconnection among operators has become an absolute matter that must be fulfilled by the telecommunication network operators. With this interconnection, SMS communication among customers from different operators can be done. In order to do that, it needs a Gateway which is used to bridge different functions from existing networks, such as PSTN, GSM, and CDMA. The Interconnection between GSM and CDMA (TelkomFlexi) network is using GSMSC and ISMSC. The communication between the 2 gateways is happened through an IP network. The SMS delivery mechanism is not in real time. It can cause a bigger delay.

This final project is concerning about using a gateway (without through an IP network) which implemented a SMS delivery mechanism in real time and analyzing the gateway function to do the translation process and mapping message GSM MAP to IS-41 or otherwise.

From the mapping signalling message result and parameters which have been performed, it is possible for GSM and CDMA network to communicate through a gateway directly without through an IP network.